IMPORTANT NOTICE

IMPORTANT: You must read the following disclaimer before continuing. The following disclaimer applies to the attached prospectus (the "**Prospectus**") and you are advised to read this disclaimer carefully before reading, accessing or making any other use of the attached Prospectus. In accessing the attached Prospectus you agree to be bound by the following terms and conditions, including any modifications to them from time to time, each time you receive any information from the Issuer, the Guarantors or the Joint Bookrunners (each as defined below) as a result of such access. The attached Prospectus is intended for the addressee only.

NOTHING IN THIS ELECTRONIC TRANSMISSION CONSTITUTES AN OFFER OF SECURITIES FOR SALE IN ANY JURISDICTION WHERE IT IS UNLAWFUL TO DO SO. THE NOTES DESCRIBED IN THE ATTACHED PROSPECTUS HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR OTHER JURISDICTION AND THE SECURITIES DESCRIBED IN THE ATTACHED PROSPECTUS MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES; DIRECTLY OR INDIRECTLY, EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE OR LOCAL SECURITIES LAWS.

THE ATTACHED PROSPECTUS MAY NOT BE FORWARDED OR DISTRIBUTED TO ANY OTHER PERSON AND MAY NOT BE REPRODUCED IN ANY MANNER WHATSOEVER. ANY FORWARDING, REDISTRIBUTION OR REPRODUCTION OF THE ATTACHED PROSPECTUS IN WHOLE OR IN PART IS UNAUTHORISED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS. IF YOU HAVE GAINED ACCESS TO THIS TRANSMISSION CONTRARY TO ANY OF THE FOREGOING RESTRICTIONS, YOU ARE NOT AUTHORISED AND WILL NOT BE ABLE TO PURCHASE ANY OF THE NOTES DESCRIBED IN THE ATTACHED PROSPECTUS.

Confirmation of your Representation: In order to be eligible to view the attached Prospectus or make an investment decision with respect to the securities described in the attached Prospectus, investors must comply with the following provisions. You have been sent the attached Prospectus on the basis that you have confirmed to AO "ALFA-BANK" (acting jointly with Alfa Capital Markets Ltd), Alfa Capital Markets Ltd (acting jointly with AO "ALFA-BANK"), Bank of China Limited, London Branch, Citigroup Global Markets Limited, Commerzbank Aktiengesellschaft, Gazprombank (Switzerland) Ltd, Merrill Lynch International, Renaissance Securities (Cyprus) Limited, Sberbank CIB (UK) Limited and VTB Capital plc (the "**Joint Bookrunners**"), being the senders of the attached Prospectus, that:

(a) you (and each investor that you represent) are either: (A) not investing in the Rule 144A Note and the electronic mail address that you have given to the Joint Bookrunners and to which this electronic transmission has been sent is not located in the United States; or (B) a "qualified institutional buyer" (as such term is defined in Rule 144A under the Securities Act) (a "**QIB**");

(b) you consent to delivery of the attached Prospectus by electronic transmission;

(c) you are a prospective purchaser of the notes referred to in the attached Prospectus (the "**Notes**") and you are a relevant person (as defined below) if in the United Kingdom;

(d) you will not transmit the attached Prospectus (or any copy of it or part thereof) or disclose, whether orally or in writing, any of its contents to any other person except with the consent of a Joint Bookrunner; and

(e) you acknowledge that the attached Prospectus do not constitute an offer of or an invitation to subscribe for or purchase any of the Notes.

By accepting this electronic transmission and accessing the attached Prospectus, you shall be deemed to have made the above representation and that you consent to delivery of such Prospectus by electronic transmission.

This document is only addressed to and directed at persons in member states of the European Economic Area who are "qualified investors" within the meaning of Regulation (EU) 2017/1129 (the "**Prospectus Regulation**") ("**Qualified Investors**"). In addition, the Prospectus is directed solely at (i) persons outside the United Kingdom, (ii) persons with professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 as amended (the "**Order**"), (iii) high net worth entities, or (iv) any other persons to whom an invitation or inducement to engage in investment activities may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons in (i)-(iv) above being "**relevant persons**"). Any investment activity to which this communication relates will only be available to and will only be engaged with relevant persons. Any person who is not a relevant person should not act or rely on this communication.

Manufacturer target market (MiFID II product governance and UK MiFIR product governance) is eligible counterparties and professional clients only (all distribution channels). No EEA or UK PRIIPs key information document has been prepared as the Notes will not be made available to retail investors in the European Economic Area or in the United Kingdom.

The attached Prospectus or information contained therein is not an offer, or an invitation to make offers, to sell, exchange or otherwise transfer securities in the Russian Federation to or for the benefit of any Russian person or entity and does not constitute an advertisement or offering of securities in the Russian Federation within the meaning of Russian securities laws. Information contained in the attached Prospectus is not intended for any persons in the Russian Federation who are not "qualified investors" within the meaning of Article 51.2 of Federal Law No. 39-FZ "On the Securities Market" dated 22 April 1996, as amended (the "**Russian QIs**"), and must not be distributed or circulated into Russia or made available in Russia to any persons who are not Russian QIs, unless and to the extent they are otherwise permitted to access such information under Russian law. The Notes have not been and will not be registered in Russia and are not intended for "placement" or "circulation" in Russia (each as defined in Russian securities laws) unless and to the extent otherwise permitted under Russian law.

The attached Prospectus has been delivered to you on the basis that you are a person into whose possession the attached Prospectus may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not, nor are you authorised to, deliver this Prospectus to any other person.

The attached Prospectus has been sent to you in an electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of electronic transmission and consequently none of SUEK Securities Designated Activity Company (the "**Issuer**"), the Guarantors, the Joint Bookrunners, or any person who controls them, or any director, officer, employee or agent of any of them, or their respective affiliates accepts any liability or responsibility whatsoever in respect of any difference between the attached Prospectus distributed to you in electronic format and the hard copy version available to you on request from the Joint Bookrunners.

You are reminded that no representation or warranty, expressed or implied, is made or given by or on behalf of the Joint Bookrunners, nor any person who controls the Joint Bookrunners or any director, officer, employee or agent of any of them, or their respective affiliates as to the accuracy, completeness or fairness of the information or opinions contained in the attached Prospectus and such persons do not accept responsibility or liability for any such information or opinions.

Neither this electronic transmission nor the attached Prospectus constitute or contains any offer to sell or invitation to subscribe or make commitments for or in respect of any securities in any jurisdiction where such an offer or invitation would be unlawful. If a jurisdiction requires that the offering of the Notes be made by a licensed broker or dealer, and the Joint Bookrunners or any affiliate of the Joint

Bookrunners is a licensed broker or dealer in the relevant jurisdiction, the offering shall be deemed to be made by the Joint Bookrunners or such affiliate on behalf of the Issuer in such jurisdiction.

SUEK SECURITIES DESIGNATED ACTIVITY COMPANY

(incorporated under the laws of Ireland)

as issuer of

U.S.$500,000,000 3.375% notes due 2026

Unconditionally, irrevocably and fully guaranteed on a joint and several basis by

JSC SUEK, LLC SUEK-Khakasia, JSC Tugnuisky Opencast Mine and JSC SUEK-Kuzbass

Issue Price: 100%

SUEK Securities Designated Activity Company is a designated activity company incorporated under the laws of Ireland, having its registered office at 2nd Floor, Palmerston House, Denzille Lane, Dublin 2, Ireland, and registered under number 699061 (the "**Issuer**"). The Issuer is issuing an aggregate principal amount of U.S.$500,000,000 3.375% Guaranteed Notes due 2026 (the "**Notes**"). The Notes will be unconditionally, irrevocably and fully guaranteed (the "**Guarantees**") by JSC SUEK (the "**Company**" and a "**Guarantor**"), LLC SUEK-Khakasia ("**SUEK-Khakasia**" and also a "**Guarantor**"), JSC Tugnuisky Opencast Mine ("**Tugnuisky Opencast Mine**" and also a "**Guarantor**") and JSC SUEK-Kuzbass ("**SUEK-Kuzbass**" and also a "**Guarantor**" and, together with the Company, SUEK-Khakasia and Tugnuisky Opencast Mine, the "**Guarantors**"). The Notes are constituted by, are subject to, and have the benefit of, a trust deed to be dated 15 September 2021 (as may be amended or supplemented from time to time, the "**Trust Deed**") between the Issuer and Citibank, N.A., London Branch as trustee (the "**Trustee**") for the benefit of the Noteholders (as defined in the "*Terms and Conditions of the Notes*").

Interest on the Notes will be payable semi-annually in arrear on 15 March and 15 September in each year (each an "**Interest Payment Date**"), commencing on 15 March 2022.

The Notes mature on 15 September 2026 (the "**Maturity Date**") but may be redeemed before then at the option of the Issuer, in whole but not in part, at any time, but on one occasion only, on giving not less than 30 and not more than 60 days irrevocable notice, at a price equal to the principal amount thereof, plus the Make Whole Premium (as defined in "*Terms and Conditions of the Notes*" herein) plus any accrued and unpaid interest and additional amounts (if any) to (but excluding) the date of redemption. See "*Terms and Conditions of the Notes—Redemption and Purchase—Make-Whole*". The Issuer may also redeem the Notes, in whole or in part, at their principal amount together with any accrued and unpaid interest and additional amounts (if any), if the Issuer (or, if the Guarantees are called, a Guarantor) has or will become obliged to pay certain additional amounts and otherwise as described under "Terms and Conditions of the Notes—Redemption and Purchase—Redemption for tax reasons". The Notes are also subject to redemption, in whole or in part, at their principal amount, together with any accrued and unpaid interest and additional amounts (if any), at the option of the Issuer at any time on or after the date three months prior to the Maturity Date. See "*Terms and Conditions of the Notes—Optional Redemption at Par*".

This prospectus (the "**Prospectus**") has been approved by the Central Bank of Ireland (the "**CBI**"), as competent authority under Regulation (EU) 2017/1129 (the "**Prospectus Regulation**"). The CBI only approves this Prospectus as meeting the standards of completeness, comprehensibility and consistency imposed by the Prospectus Regulation. Such approval should not be considered as an endorsement of the Issuer, the Guarantors or the quality of the Notes that are the subject of this Prospectus and investors should make their own assessment as to the suitability of investing in the Notes. Application has been made to the Irish Stock Exchange plc trading as Euronext Dublin ("**Euronext Dublin**") for the Notes to be admitted to the official list (the "**Official List**") and trading on its regulated market. There is no assurance that a trading market in the Notes will develop or be maintained. This Prospectus will be valid until the date of admission of the Notes to trading on the regulated market of Euronext Dublin. The obligation to supplement this Prospectus in the event of significant new factors, material mistakes or material inaccuracies will not apply when the Prospectus is no longer valid. Any website referred to in this document does not form part of this Prospectus.

The Notes will be in registered form. The Notes may be held and transferred, and will be offered and sold, in the principal amount of U.S.$200,000 and integral multiples of U.S.$1,000 in excess thereof, in each case without interest coupons attached. The Notes that are offered and sold outside the United States of America (the "**United States**" or "**U.S.**") in reliance on Regulation S ("**Regulation S**") under the United States Securities Act of 1933, as amended (the "**Securities Act**"), will be represented by interests in a global registered note (the "**Regulation S Global Note**") deposited with a common depositary (the "**Common Depositary**") for, and registered in the name of, a nominee of, Euroclear Bank SA/NV ("**Euroclear**") or Clearstream Banking, S.A. ("**Clearstream, Luxembourg**") on or about the Closing Date. The Notes which are offered and sold in the United States to qualified institutional buyers ("**QIBs**"), as defined in Rule 144A under the Securities Act ("**Rule 144A**"), in reliance on the exemption from registration provided by Rule 144A will be represented by interests in a global registered note (the "**Rule 144A Global Note**" and, together with the Regulation S Global Certificate, the "**Global Certificates**") deposited with a custodian for, and registered in the name of, a nominee of The Depository Trust Company ("**DTC**") on or about the Closing Date. Interests in the Global Certificates will be shown on, and transfers thereof will be effected only through, records maintained by DTC, Euroclear and Clearstream, Luxembourg and their respective participants. Individual notes in definitive form (the "**Definitive Certificates**") evidencing holdings of Notes will only be available in certain limited circumstances. See "*Summary of the Provisions Relating to the Notes in Global Form*".

AN INVESTMENT IN THE NOTES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY CONSIDER THE RISK FACTORS BEGINNING ON PAGE 9 OF THIS PROSPECTUS BEFORE INVESTING IN THE NOTES.

THE NOTES AND THE GUARANTEES (TOGETHER, THE "SECURITIES") HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE SECURITIES ACT, OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES AND, EXCEPT PURSUANT TO CERTAIN EXEMPTIONS, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES. THE NOTES MAY BE OFFERED AND SOLD (I) WITHIN THE UNITED STATES TO QIBs IN RELIANCE ON THE EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144A (THE "RULE 144A NOTES") AND (II) IN OFFSHORE TRANSACTIONS IN RELIANCE ON REGULATION S (THE "REGULATION S NOTES"). PROSPECTIVE PURCHASERS ARE HEREBY NOTIFIED THAT SELLERS OF THE RULE 144A NOTES MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A. FOR A DESCRIPTION OF THESE AND CERTAIN FURTHER RESTRICTIONS ON OFFERS, SALES AND TRANSFERS OF THE NOTES AND DISTRIBUTION OF THIS PROSPECTUS, SEE "*SUBSCRIPTION AND SALE*" AND "*TRANSFER RESTRICTIONS*".

The Notes are expected to be rated "BB" by Fitch Ratings Ltd ("**Fitch**") and "Ba2" by Moody's Investors Service, Inc. ("**Moody's**"). Fitch is not established in the European Union (the "**EU**") but the rating it has given to the Notes is endorsed by Fitch Ratings Ireland Limited. Moody's is not established in the EU but the rating it has given to the Notes is endorsed by Moody's Deutschland GmbH. Each of Fitch Ratings Ireland Limited and Moody's Deutschland GmbH is established in the European Union and registered under Regulation (EC) No. 1060/2009 on credit rating agencies (the "**CRA Regulation**"). A rating is a not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by the assigning rating agency.

Joint Bookrunners

BANK OF CHINA	**BofA SECURITIES**	**CITIGROUP**	**COMMERZBANK**
GAZPROMBANK (SWITZERLAND) LTD	**RENAISSANCE CAPITAL**	**SBER CIB**	**VTB CAPITAL**

ALFA-BANK

IMPORTANT INFORMATION ABOUT THIS PROSPECTUS

This prospectus (the "**Prospectus**") comprises a prospectus for the purposes of the Prospectus Regulation and has been prepared for the purpose of giving information with regard to the Issuer, the Guarantors, the Company and its consolidated subsidiaries taken as a whole (the "**Group**"), the Guarantees and the Notes which, according to the particular nature and circumstances of the Issuer, the Guarantors, the Company, the Group and to the type of the Guarantees and the Notes, is necessary to enable investors to make an informed assessment of the assets and liabilities, financial position, profit and losses and prospects of the Issuer, the Company, the Guarantors and the Group, the rights attaching to the Notes and the Guarantees and of the reasons for the issuance and its impact on the Issuer, the Company, the Guarantors and the Group. Each of the Issuer and the Guarantors accepts responsibility for the information contained in this Prospectus. To the best of the knowledge of each of the Issuer and the Guarantors the information contained in this Prospectus is in accordance with the facts and does not omit anything likely to affect the import of such information.

THE NOTES ARE OF A SPECIALIST NATURE AND SHOULD ONLY BE BOUGHT AND TRADED BY INVESTORS WHO ARE PARTICULARLY KNOWLEDGEABLE IN INVESTMENT MATTERS. AN INVESTMENT IN THE NOTES IS SPECULATIVE, INVOLVES A HIGH DEGREE OF RISK AND MAY RESULT IN THE LOSS OF ALL OR PART OF THE INVESTMENT.

The Guarantors, and having taken all reasonable care to ensure that such is the case, confirm that (i) this Prospectus contains all information with respect to the Issuer, the Guarantors, the Company and the Group, the Guarantees and the Notes that is material in the context of the issue and offering of the Notes; (ii) the statements contained in this Prospectus relating to the Issuer, the Guarantors and the Group are true and accurate and are not misleading; (iii) the opinions, expectations and intentions expressed in this Prospectus with regard to the Issuer, the Guarantors and the Group are honestly held, have been reached after considering all relevant circumstances and are based on reasonable assumptions; (iv) to the best knowledge of the Guarantors, there are no other facts with respect to the Issuer, the Guarantors, the Group, the Guarantees or the Notes the omission of which would, in the context of the issue and offering of the Notes, make any statement in this Prospectus misleading in any material respect; and (v) all reasonable enquiries have been made by the Guarantors to ascertain such facts and to verify the accuracy of all such information and statements. The Guarantors accept responsibility accordingly.

No representation or warranty, express or implied, is made by the Joint Bookrunners named under "*Subscription and Sale*" (the "**Joint Bookrunners**"), the Principal Paying Agent, the Transfer Agent or the Registrar (each an "**Agent**" and together, the "**Agents**"), the Trustee or any of their respective affiliates or any person acting on their behalf as to the accuracy or completeness of the information contained in this Prospectus. Each person receiving this Prospectus acknowledges that such person has not relied on any Joint Bookrunner, any Agent or the Trustee or any person affiliated with any Joint Bookrunner, any Agent or the Trustee, in connection with its investigation of the accuracy of such information or its investment decision. Each person contemplating making an investment in the Notes must make its own investigation and analysis of the creditworthiness of the Issuer and the Guarantors and its own determination of the suitability of any such investment, with particular reference to its own investment objectives and experience, and any other factors that may be relevant to it in connection with such investment. This Prospectus may only be used for the purpose for which they have been published.

To the fullest extent permitted by law, the Joint Bookrunners accept no responsibility whatsoever for the contents of this Prospectus or for any other statement made, or purported to be made, by the Joint Bookrunners or on their behalf in connection with the Issuer, the Guarantors, the Group or the issue and offering of the Notes. The Joint Bookrunners accordingly disclaim all and any liability whether arising in tort or contract or otherwise (save as referred to above) which they might otherwise have in respect of this Prospectus or any such statement.

In this Prospectus, the Group relies on and refers to publicly available information released by official and unofficial sources other than the Group. These sources include, but are not limited to, the Rosstat, System Operator of the Unified Energy System ("**System Operator**"), U.S. Energy Information Administration, research reports, analyst reports, press releases, securities filings and industry publications. Although the Group believes that this information is reliable, it has not independently verified this information and cannot guarantee its accuracy and completeness. In addition, some of the information contained in this Prospectus has been derived from official data published by the Russian Government. Official statistics and other data published by Russian federal, regional and local governments are substantially less complete or transparent than those of Western countries. Official statistics may also be compiled on the basis of methodologies different from those used in Western countries. The Group accepts responsibility for accurately reproducing such information from the relevant sources. As far as the Group is aware and is able to ascertain from information published by the relevant sources, no facts have been omitted which would render the reproduced information inaccurate or misleading.

This Prospectus includes market data and industry forecasts and projections that have been obtained from internal surveys, market research, publicly available information and industry publications. Industry publications generally state that the information they provide has been obtained from sources believed to be reliable, but that the accuracy and completeness of such information are not guaranteed. The forecasts and projections are based on industry surveys and the preparers' experience in the industry, and there is no assurance that any of the forecasts or projections will be achieved. Similarly, the Group believes that the surveys and market research others have performed are reliable, but the Group has not independently verified this information.

In addition, the Group has included its own estimates, assessments, adjustments and judgements in preparing some market information, which has not been verified by an independent third party. Market information included herein is, therefore, unless otherwise attributed exclusively to a third party source, to a certain degree subjective. Market information or that market information prepared by other sources may differ materially from the market information included herein.

The language of the Prospectus is English. Certain legislative references and technical terms have been cited in their original language, Russian, in order that the correct technical meaning may be ascribed to them under applicable law.

The Prospectus does not constitute an offer of, or an invitation by or on behalf of, the Issuer, the Guarantors, the Group or the Joint Bookrunners to subscribe or purchase any Notes. The distribution of this Prospectus and the offering of the Notes in certain jurisdictions may be restricted by law. This Prospectus may not be used for, or in connection with, and does not constitute, any offer to, or solicitation by, anyone in any jurisdiction or under any circumstance in which such offer or solicitation is not authorised or is unlawful. In particular, this Prospectus is only being distributed to and is only directed at (i) persons outside the United Kingdom, (ii) persons with professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 as amended (the "**Order**"), (iii) all persons falling within Article 49(2)(a) of the Order, or (iv) any other persons to whom an invitation or inducement to engage in investment activities may otherwise be communicated without contravention of Section 21 of the Financial Services and Markets Act 2000 (all such persons in (i)-(iv) above being "**relevant persons**"). The Notes are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such Notes will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

Persons into whose possession this Prospectus comes are required by the Issuer, the Guarantors and the Joint Bookrunners to inform themselves about and to observe any such restrictions. Any consents or approvals that are needed in order to purchase any Notes must be obtained. The Issuer, the Guarantors and the Joint Bookrunners are not responsible for compliance with these legal requirements. The appropriate characterisation of any Notes under various legal investment restrictions, and thus the ability of investors subject to these restrictions to purchase such Notes, is subject to significant

interpretative uncertainties. None of the Issuer, the Guarantors, the Agents, the Trustee, the Group or the Joint Bookrunners or any of the respective representatives is making any representation to any offeree or purchaser of the Notes regarding the legality of an investment by such offeree or purchaser under relevant legal investment or similar laws. Such investors should consult their legal advisers regarding such matters.

None of the Issuer or the Guarantors intends to provide any post-issuance transaction information regarding the Notes or the Guarantees. No person is authorised to provide any information or to make any representation not contained in this Prospectus, and any information or representation not so contained must not be relied upon as having been authorised by or on behalf of the Issuer, the Guarantors, the Group, the Agents, the Trustee or the Joint Bookrunners. The delivery of this document at any time does not imply that the information contained in it is correct as at any time subsequent to its date. Without limitation to the generality of the foregoing, the contents of the Company's or any other member of the Group's website, in addition to any other websites referred to in this Prospectus, as at the date hereof or as at any other date do not form any part of this Prospectus (and, in particular, are not incorporated by reference herein).

Any investment in the Notes does not have the status of a bank deposit and is not within the scope of the deposit protection scheme operated by the CBI. The Issuer is not and will not be regulated by the CBI as a result of issuing the Notes.

This document has been filed with and approved by the CBI.

All references herein to "**Russia**" are to the Russian Federation, all references to "**Ireland**" are to Ireland (exclusive of Northern Ireland) and all references to a "**Member State**" are to a Member State of the European Economic Area.

STABILISATION

IN CONNECTION WITH THE ISSUE OF THE NOTES, CITIGROUP GLOBAL MARKETS LIMITED (THE "**STABILISING MANAGER**") OR PERSON(S) ACTING ON BEHALF OF THE STABILISING MANAGER MAY OVER-ALLOT NOTES OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES AT A LEVEL HIGHER THAN THAT WHICH MIGHT OTHERWISE PREVAIL. HOWEVER, STABILISATION MAY NOT NECESSARILY OCCUR. ANY STABILISATION ACTION MAY BEGIN ON OR AFTER THE DATE ON WHICH ADEQUATE PUBLIC DISCLOSURE OF THE TERMS OF THE OFFER OF THE NOTES IS MADE AND, IF BEGUN, MAY CEASE AT ANY TIME, BUT IT MUST END NO LATER THAN THE EARLIER OF 30 DAYS AFTER THE ISSUE DATE OF THE NOTES AND 60 DAYS AFTER THE DATE OF THE ALLOTMENT OF THE NOTES. ANY STABILISATION ACTION OR OVER-ALLOTMENT MUST BE CONDUCTED BY THE STABILISING MANAGER (OR PERSON(S) ACTING ON BEHALF OF THE STABILISATION MANAGER) IN ACCORDANCE WITH ALL APPLICABLE LAWS AND RULES.

NOTICE TO PROSPECTIVE U.S. INVESTORS

THE NOTES AND THE GUARANTEES HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT. THE NOTES MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES EXCEPT PURSUANT TO AN EXEMPTION FROM, IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT. THE NOTES ARE BEING OFFERED AND SOLD OUTSIDE THE UNITED STATES IN RELIANCE ON REGULATION S AND WITHIN THE UNITED STATES TO QIBS IN RELIANCE ON THE EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT PROVIDED BY RULE 144A. PROSPECTIVE PURCHASERS ARE HEREBY NOTIFIED THAT SELLERS OF THE NOTES MAY BE RELYING ON THE EXEMPTION FROM THE PROVISION OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A. FOR A DESCRIPTION OF THESE AND CERTAIN FURTHER RESTRICTIONS ON OFFERS, SALES AND TRANSFERS OF THE NOTES

AND DISTRIBUTION OF THIS PROSPECTUS, SEE "*SUBSCRIPTION AND SALE*" AND "*TRANSFER RESTRICTIONS*".

THE NOTES AND THE GUARANTEES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE U.S. SECURITIES AND EXCHANGE COMMISSION, ANY STATE SECURITIES COMMISSION IN THE UNITED STATES OR ANY OTHER U.S. REGULATORY AUTHORITY, NOR HAVE ANY OF THE FOREGOING AUTHORITIES PASSED UPON OR ENDORSED THE MERITS OF THE OFFERING OF THE NOTES OR THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE IN THE UNITED STATES.

MIFID II PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPs ONLY TARGET MARKET

SOLELY FOR THE PURPOSE OF EACH MANUFACTURER'S PRODUCT APPROVAL PROCESS, THE TARGET MARKET ASSESSMENT IN RESPECT OF THE NOTES HAS LED TO THE CONCLUSION THAT: (I) THE TARGET MARKET FOR THE NOTES IS ELIGIBLE COUNTERPARTIES AND PROFESSIONAL CLIENTS ONLY, EACH AS DEFINED IN DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL ON MARKETS IN FINANCIAL INSTRUMENTS (AS AMENDED, "**MIFID II**"); AND (II) ALL CHANNELS FOR DISTRIBUTION OF THE NOTES TO ELIGIBLE COUNTERPARTIES AND PROFESSIONAL CLIENTS ARE APPROPRIATE. ANY PERSON SUBSEQUENTLY OFFERING, SELLING OR RECOMMENDING THE NOTES (A "**DISTRIBUTOR**") SHOULD TAKE INTO CONSIDERATION THE MANUFACTURERS' TARGET MARKET ASSESSMENT; HOWEVER, A DISTRIBUTOR SUBJECT TO MIFID II IS RESPONSIBLE FOR UNDERTAKING ITS OWN TARGET MARKET ASSESSMENT IN RESPECT OF THE NOTES (BY EITHER ADOPTING OR REFINING THE MANUFACTURERS' TARGET MARKET ASSESSMENT) AND DETERMINING APPROPRIATE DISTRIBUTION CHANNELS.

UK MiFIR PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET

SOLELY FOR THE PURPOSES OF EACH MANUFACTURER'S PRODUCT APPROVAL PROCESS, THE TARGET MARKET ASSESSMENT IN RESPECT OF THE NOTES HAS LED TO THE CONCLUSION THAT: (I) THE TARGET MARKET FOR THE NOTES IS ONLY ELIGIBLE COUNTERPARTIES, AS DEFINED IN THE FCA HANDBOOK CONDUCT OF BUSINESS SOURCEBOOK ("**COBS**"), AND PROFESSIONAL CLIENTS, AS DEFINED IN THE UK MIFIR; AND (II) ALL CHANNELS FOR DISTRIBUTION OF THE NOTES TO ELIGIBLE COUNTERPARTIES AND PROFESSIONAL CLIENTS ARE APPROPRIATE. ANY PERSON SUBSEQUENTLY OFFERING, SELLING OR RECOMMENDING THE NOTES (A "**DISTRIBUTOR**") SHOULD TAKE INTO CONSIDERATION THE MANUFACTURERS' TARGET MARKET ASSESSMENT; HOWEVER, A DISTRIBUTOR SUBJECT TO THE FCA HANDBOOK PRODUCT INTERVENTION AND PRODUCT GOVERNANCE SOURCEBOOK (THE "**UK MIFIR PRODUCT GOVERNANCE RULES**") IS RESPONSIBLE FOR UNDERTAKING ITS OWN TARGET MARKET ASSESSMENT IN RESPECT OF THE NOTES (BY EITHER ADOPTING OR REFINING THE MANUFACTURERS' TARGET MARKET ASSESSMENT) AND DETERMINING APPROPRIATE DISTRIBUTION CHANNELS.

PROHIBITION OF SALES TO EEA RETAIL INVESTORS

THE NOTES ARE NOT INTENDED TO BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO AND SHOULD NOT BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO ANY RETAIL INVESTOR IN THE EUROPEAN ECONOMIC AREA ("**EEA**"). FOR THESE PURPOSES, A RETAIL INVESTOR MEANS A PERSON WHO IS ONE (OR MORE) OF: (I) A RETAIL CLIENT AS DEFINED IN POINT (11) OF ARTICLE 4(1) OF MIFID II; OR (II) A CUSTOMER WITHIN THE MEANING OF DIRECTIVE (EU) 2016/97 (THE "**IDD**"), WHERE THAT CUSTOMER WOULD NOT QUALIFY AS A PROFESSIONAL CLIENT AS DEFINED IN

POINT (10) OF ARTICLE 4(1) OF MIFID II. CONSEQUENTLY, NO KEY INFORMATION DOCUMENT REQUIRED BY REGULATION (EU) NO. 1286/2014 (AS AMENDED, THE "**PRIIPS REGULATION**") FOR OFFERING OR SELLING THE NOTES OR OTHERWISE MAKING THEM AVAILABLE TO RETAIL INVESTORS IN THE EEA HAS BEEN PREPARED AND THEREFORE OFFERING OR SELLING THE NOTES OR OTHERWISE MAKING THEM AVAILABLE TO ANY RETAIL INVESTOR IN THE EEA MAY BE UNLAWFUL UNDER THE PRIIPS REGULATION.

PROHIBITION OF SALES TO UK RETAIL INVESTORS

THE NOTES ARE NOT INTENDED TO BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO AND SHOULD NOT BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO ANY RETAIL INVESTOR IN THE UNITED KINGDOM ("**UK**"). FOR THESE PURPOSES, A RETAIL INVESTOR MEANS A PERSON WHO IS ONE (OR MORE) OF: (I) A RETAIL CLIENT, AS DEFINED IN POINT (8) OF ARTICLE 2 OF REGULATION (EU) NO 2017/565 AS IT FORMS PART OF DOMESTIC LAW BY VIRTUE OF THE EUWA; (II) A CUSTOMER WITHIN THE MEANING OF THE PROVISIONS OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (THE "**FSMA**") AND ANY RULES OR REGULATIONS MADE UNDER THE FSMA TO IMPLEMENT THE IDD, WHERE THAT CUSTOMER WOULD NOT QUALIFY AS A PROFESSIONAL CLIENT, AS DEFINED IN POINT (8) OF ARTICLE 2(1) OF REGULATION (EU) NO 600/2014 AS IT FORMS PART OF DOMESTIC LAW BY VIRTUE OF THE EUWA.

CONSEQUENTLY NO KEY INFORMATION DOCUMENT REQUIRED BY THE PRIIPS REGULATION AS IT FORMS PART OF DOMESTIC LAW BY VIRTUE OF THE EUWA (THE "**UK PRIIPS REGULATION**") FOR OFFERING OR SELLING THE NOTES OR OTHERWISE MAKING THEM AVAILABLE TO RETAIL INVESTORS IN THE UK HAS BEEN PREPARED AND THEREFORE OFFERING OR SELLING THE NOTES OR OTHERWISE MAKING THEM AVAILABLE TO ANY RETAIL INVESTOR IN THE UK MAY BE UNLAWFUL UNDER THE UK PRIIPS REGULATION.

NOTICE TO RUSSIAN INVESTORS

THIS PROSPECTUS OR INFORMATION CONTAINED THEREIN IS NOT AN OFFER, OR AN INVITATION TO MAKE OFFERS, TO SELL, EXCHANGE OR OTHERWISE TRANSFER SECURITIES IN THE RUSSIAN FEDERATION TO OR FOR THE BENEFIT OF ANY RUSSIAN PERSON OR ENTITY AND DOES NOT CONSTITUTE AN ADVERTISEMENT OR OFFERING OF SECURITIES IN THE RUSSIAN FEDERATION WITHIN THE MEANING OF RUSSIAN SECURITIES LAWS. INFORMATION CONTAINED IN THIS PROSPECTUS IS NOT INTENDED FOR ANY PERSONS IN THE RUSSIAN FEDERATION WHO ARE NOT "QUALIFIED INVESTORS" WITHIN THE MEANING OF ARTICLE 51.2 OF THE FEDERAL LAW NO. 39-FZ "ON THE SECURITIES MARKET" DATED 22 APRIL 1996, AS AMENDED (THE "**RUSSIAN QIS**") AND MUST NOT BE DISTRIBUTED OR CIRCULATED INTO RUSSIA OR MADE AVAILABLE IN RUSSIA TO ANY PERSONS WHO ARE NOT RUSSIAN QIS, UNLESS AND TO THE EXTENT THEY ARE OTHERWISE PERMITTED TO ACCESS SUCH INFORMATION UNDER RUSSIAN LAW.

NOTICE TO INVESTORS IN SINGAPORE

THIS PROSPECTUS HAS NOT BEEN REGISTERED AS A PROSPECTUS WITH THE MONETARY AUTHORITY OF SINGAPORE. ACCORDINGLY, THIS PROSPECTUS OR ANY OTHER DOCUMENT OR MATERIAL IN CONNECTION WITH THE OFFER AND SALE, OR ANY OTHER DOCUMENT OR MATERIAL IN CONNECTION WITH THE OFFER OR SALE, OR INVITATION FOR SUBSCRIPTION OR PURCHASE, OF THE NOTES MAY NOT BE DISTRIBUTED, NOR MAY THE NOTES BE OFFERED OR SOLD OR BE MADE THE SUBJECT OF AN INVITATION FOR SUBSCRIPTION OR PURCHASE, WHETHER DIRECTLY OR INDIRECTLY, TO ANY PERSON IN SINGAPORE OTHER THAN (I) TO AN INSTITUTIONAL

INVESTOR (AS DEFINED IN SECTION 4A OF THE SECURITIES AND FUTURES ACT (CHAPTER 289) OF SINGAPORE, AS MODIFIED OR AMENDED FROM TIME TO TIME (THE "**SFA**")) PURSUANT TO SECTION 274 OF THE SFA, (II) TO A RELEVANT PERSON (AS DEFINED IN SECTION 275(2) OF THE SFA) PURSUANT TO SECTION 275(1) OF THE SFA, OR ANY PERSON PURSUANT TO SECTION 275(1A) OF THE SFA, AND IN ACCORDANCE WITH THE CONDITIONS SPECIFIED IN SECTION 275 OF THE SFA, OR (III) OTHERWISE PURSUANT TO, AND IN ACCORDANCE WITH THE CONDITIONS OF, ANY OTHER APPLICABLE PROVISION OF THE SFA.

SINGAPORE SFA PRODUCT CLASSIFICATION: IN CONNECTION WITH SECTION 309B OF THE SFA AND THE SECURITIES AND FUTURES (CAPITAL MARKETS PRODUCTS) REGULATIONS 2018 OF SINGAPORE (THE "**CMP REGULATIONS 2018**"), THE ISSUER HAS DETERMINED, AND HEREBY NOTIFIES ALL RELEVANT PERSONS (AS DEFINED IN SECTION 309A(1) OF THE SFA), THAT THE NOTES ARE 'PRESCRIBED CAPITAL MARKETS PRODUCTS' (AS DEFINED IN THE CMP REGULATIONS 2018) AND EXCLUDED INVESTMENT PRODUCTS (AS DEFINED IN MAS NOTICE SFA 04-N12: NOTICE ON THE SALE OF INVESTMENT PRODUCTS AND MAS NOTICE FAA-N16: NOTICE ON RECOMMENDATIONS ON INVESTMENT PRODUCTS).

ADDITIONAL INFORMATION

None of the Issuer or the Guarantors is required to file periodic reports under Section 13 or 15 of the U.S. Securities Exchange Act of 1934, as amended (the "**Exchange Act**"). For so long as none of the Issuer or the Guarantors is a reporting company under Section 13 or 15(d) of the Exchange Act, or exempt from reporting pursuant to Rule 12g3-2(b) thereunder, each of the Issuer or the Guarantors, as the case may be, will, upon request, furnish to each holder or beneficial owner of Notes that are "restricted securities" (within the meaning of Rule 144(a)(3) under the Securities Act) and to each prospective purchaser thereof designated by such holder or beneficial owner or to the Trustee for delivery to such holder, beneficial owner or prospective purchaser, in each case upon request of such holder, beneficial owner, prospective purchaser or Trustee, the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act.

The language of the Prospectus is English. Certain legislative references and technical terms have been cited in their original language in order that the correct technical meaning may be ascribed to them under applicable law.

FORWARD-LOOKING STATEMENTS

Certain statements in this Prospectus are not historical facts but constitute "forward-looking statements" within the meaning of section 27A of the Securities Act and Section 21E of the U.S. Exchange Act of 1934. Forward-looking statements include statements concerning the Group's plans, objectives, goals, strategies and future operations and performance and the assumptions underlying these forward-looking statements. The Guarantors use the words "anticipates", "estimates", "expects", "believes", "intends", "plans", "may", "will", "should" and other similar expressions to identify forward-looking statements. These forward-looking statements are contained in "*Risk Factors*", "*Operating and Financial Review*" and "*Business*" and other sections of this Prospectus. The Guarantors have based these forward- looking statements on the current views of its management with respect to future events and financial performance. These views reflect the best judgment of the management of the Guarantors but involve uncertainties and are subject to certain risks, the occurrence of which could cause actual results to differ materially from those the Guarantors predict in their respective forward-looking statements and from its past results, performance or achievements.

Although each of the Guarantors believes that the estimates and the projections reflected in its forward-looking statements are reasonable, if one or more risks or uncertainties were to materialise or occur, including those which the Guarantors have identified in this Prospectus, or if any underlying assumptions prove to be incomplete or inaccurate, its results of operations may vary from those it expected, estimated or projected.

Forward-looking statements that may be made by the Guarantors from time to time (but that are not included in this document) may also include projections or expectations of interest income, net interest income, operating income (or loss), net profit (or loss) (including on a per share basis), dividends, capital structure or other financial items or ratios.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that the predictions, forecasts, projections and other forward-looking statements will not be achieved. You should be aware that a number of important factors could cause actual results to differ materially from the plans, objectives, expectations, estimates and intentions expressed in such forward looking statements. These factors include:

- cyclical nature of the international coal industry and export-oriented logistics business;
- demand and/or prices of coal, coal fired energy, capacity and transshipment;
- reserves and resources and production and the remaining life of the Group's mines and open-pits;
- risks in the Group's mining operations;
- railroad and other transportation performance and costs;
- inflation, interest rate and exchange rate fluctuations;
- the Group's future expansion plans and capital expenditure;
- the Group's ability to fund its future operations and capital needs through borrowing or otherwise;
- the Group's ability to service its existing indebtedness;
- the effects of changes in laws, regulations, taxation or accounting standards or practices;
- the effects of, and changes in, the policy of the government of the Russian Federation (the "Government" or the "Russian Government"), in particular with respect to the regulation of the Group's core business;
- changes in political, social, legal or economic conditions in Russia or the Group's export markets;
- the impact of general business and economic conditions in Russia and abroad;
- technological changes; and
- the Group's success at managing the risks associated with the aforementioned factors.

This list of important factors is not exhaustive. When reviewing forward-looking statements, you should carefully consider the foregoing factors and other uncertainties and events, especially in light of the political, economic, social and legal environment in which the Group operates. Such forward-looking statements speak only as at the date on which they are made. Accordingly, but subject to the requirements of the CBI, none of the Guarantors is obliged to, and does not intend to, update or revise any forward-looking statements made in this Prospectus whether as a result of new information, future events or otherwise. All subsequent written or oral forward-looking statements attributable to the Guarantors, or persons acting on any Guarantor's behalf, are expressly qualified in their entirety by the cautionary statements contained throughout this Prospectus. As a result of these risks, uncertainties and assumptions, a prospective purchaser of the Notes should not place reliance on these forward-looking statements.

CAUTIONARY NOTE REGARDING RESERVES

SRK Consulting (UK) Limited ("**SRK**") has undertaken an independent technical review and economic evaluation of the Group's principal coal assets in the Russian Federation, as at 1 January 2019, the results of which are included in "A Competent Persons' Report on the Coal Mining Assets of SUEK" (the "**SRK CPR**" as published on the Company's website www.SUEK.com). The "**SRK's Consent Letter**" which outlines the basis upon which the SRK Executive Summary is included in this Prospectus is Appended to this Prospectus as Appendix A. "**SRK Executive Summary**" of the SRK CPR is Appended to this Prospectus as Appendix B. Specifically, SRK notes that the SRK Executive Summary comprising Coal Resource and Coal Reserve Statements reported as at 1 January 2019 (the "**2019 Statements**"), the Mine Closure Costs, the Economic Evaluation and all accompanying technical opinion and related conclusions are historical in nature and are not deemed to be current within the context of the publication of the Prospectus. Furthermore, in considering any references to SRK, the 2019 Statements, the SRK Executive Summary or the SRK CPR, the cautionary statements as outlined in SRK's Consent Letter must be reviewed in detail, specifically given the following salient points:

1. SRK has not acted as an independent expert in the context of the publication of the Prospectus.

2. SRK has not undertaken any further technical due diligence subsequent to publication of the 2019 Statements.

3. SRK cannot confirm whether the 2019 Statements would remain valid as of the date of publication taking into consideration any changes, which may have occurred from 2019 through July 2021. Consequently, SRK cannot provide a no material change statement as of the date of publication of the Prospectus.

4. SRK cannot provide any express warranties in respect of the validity of the SRK Executive Summary, the SRK CPR, the 2019 Statements, the Mine Closure Costs, the Economic Evaluation and all accompanying technical opinion and related conclusions other than at the effective date of the 2019 Statements, that being 1 January 2019.

5. SRK's Consent for inclusion of the SRK Executive Summary in the Prospectus is provided on a no-reliance basis and in not being current SRK cannot accept any responsibility for any technical information contained in the Prospectus save for the reproduction of the SRK Executive Summary as a matter of historical fact.

6. SRK cannot accept any liability implied or otherwise for the reproduction of the non-current and historical 2019 Statements in this Prospectus.

7. SRK, expressly notes that only Coal Resources and Coal Reserves reported in accordance with a defined reporting code which has been aligned with the Committee for Mineral Reserves International Reporting Standards ("**CRIRSCO**") reporting template are considered to be valid and aligned with on-market practice, specifically the rules and regulations governing public disclosure of Coal Resources and Coal Reserves. Accordingly, the only statements which conform with this practice are the historical 2019 Statements as reported in the SRK Executive Summary and the SRK CPR referenced herein which also include the following key elements:

    - The sub-divisions of confidence categories for Coal Resources and Coal Reserves.

    - The names and professional registrations of the relevant Competent Persons relating to each of the Coal Resource and Coal Reserve statements.

    - A summary of the accompanying additional information including assumed commodity price assumptions, qualities, yield assumptions and other modifying factors.

8. SRK cannot and does not take any responsibility or liability for any of the other estimates of coal quantity presented by the Company as "reserve estimates" and referenced as "Management

and/or Company Estimates".

Glossary – Coal Resources and Coal Reserves

Coal Resource: A 'Coal Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Coal Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Coal Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

Measured Coal Resource: A 'Measured Coal Resource' is that part of a Coal Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered. A Measured Coal Resource has a higher level of confidence than that applying to either an Indicated Coal Resource or an Inferred Coal Resource. It may be converted to a Proved Coal Reserve or under certain circumstances to a Probable Coal Reserve.

Indicated Coal Resource: An 'Indicated Coal Resource' is that part of a Coal Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered. An Indicated Coal Resource has a lower level of confidence than that applying to a Measured Coal Resource and may only be converted to a Probable Coal Reserve.

Inferred Coal Resource: An 'Inferred Coal Resource' is that part of a Coal Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. An Inferred Coal Resource has a lower level of confidence than that applying to an Indicated Coal Resource and must not be converted to a Coal Reserve. It is reasonably expected that the majority of Inferred Coal Resources could be upgraded to Indicated Coal Resources with continued exploration.

Coal Reserve: A 'Coal Reserve' is the economically mineable part of a Measured and/or Indicated Coal Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Reserves are defined, usually the point where the coal is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

Proved Coal Reserve: A 'Proved Coal Reserve' is the economically mineable part of a Measured Coal Resource. A Proved Coal Reserve implies a high degree of confidence in the Modifying Factors.

Probable Coal Reserve: A 'Probable Coal Reserve' is the economically mineable part of an Indicated, and in some circumstances, a Measured Coal Resource. The confidence in the Modifying Factors applying to a Probable Coal Reserve is lower than that applying to a Proved Coal Reserve.

Coal Resource and Reserve Statement

Information contained in the body of this Prospectus relating to estimates of the Group's historical Coal Reserves and Coal Resources as of 1 January 2019 was derived from the SRK CPR.

The estimates of the Group's 'reserves' as at 30 June 2021 and 31 December 2020 and 31 December 2019 presented in this Prospectus were prepared by the Company's management taking into account the production volumes during the respective periods and were not reviewed or certified by qualified competent persons in accordance with any defined reporting code which has been aligned with CRIRSCO reporting template including the JORC Code. As a result, the Group cannot be certain that its estimated 'reserves' are either accurate, valid or reported in accordance with the terms and definitions of any international reporting standards (see "*Risk Factors—Risk Factors Relating to the Coal Division and the Logistics Division—The Group's mining operations may yield less coal under actual production conditions than indicated by the Group's coal reserve estimates*").

Each prospective investor should be aware that the 'reserves' the Group declares are estimates (undertaken by the Company's management) of the material it believes it will be able to profitably mine taking into account the economic, legal and technical factors in its extraction and sale, whereas the resources classification is primarily based on geological factors (although such a declaration implies that there are reasonable prospects for the eventual economic extraction of the resource).

Estimates of 'reserves' depend significantly on the interpretation of geological data obtained from drill holes and other sampling techniques, which is extrapolated to produce estimates of the size, shape, depth and quality of coal deposits. In addition, to calculate 'reserves', the Group makes estimates and assumptions regarding a number of economic and technical factors, such as production rates, coal quality, production and transportation costs and prices. These economic and technical estimates and assumptions may change in future in ways that affect the quantity of the Group's 'reserves'. The Group generates additional geological data as it mines, which may not be consistent with the data on which it based its reserves estimates, resulting in changes to those estimates. No assurance can be given that the 'reserves' presented in this Prospectus will be recovered at the quality or yield presented.

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OVERVIEW

This overview may not contain all the information that may be important to prospective purchasers of the Notes and, therefore, should be read in conjunction with this entire Prospectus, including the more detailed information regarding the Group's business and the financial statements and related notes included elsewhere in this Prospectus. Certain statements in this Prospectus include forward-looking statements that also involve risks and uncertainties as described under "Forward-Looking Statements". Prospective purchasers of the Notes should also carefully consider the information set forth under "Risk Factors".

The Group is a leading vertically integrated energy and coal producer with diversified businesses spanning the energy value chain that are supported by complimentary logistics operations and infrastructure. The diversification of operations and the development of synergies between business lines that was undertaken by the Group in the last several years, as well as the Group's investments in research and development and product innovation, has strengthened its resilience to market downturns and positioned it to capture domestic economic growth and global economic recovery opportunities as they arise. The Group's mission is to provide affordable and reliable energy to customers across the world whilst adhering to the best in class principles of corporate governance, sustainability, health and environmental safety.

In the six months ended 30 June 2021, the Group's total revenue and net profit amounted to U.S.$4,202 million and U.S.$613 million compared to U.S.$3,327 million and U.S.$132 million, respectively, in the six months ended 30 June 2020. For the year ended 31 December 2020, the Group's total revenue and net profit amounted to U.S.$6,683 million and U.S.$194 million compared to U.S.$7,638 million and U.S.$749 million for the year ended 31 December 2019 and U.S.$8,296 million and U.S.$1,164 million for the year ended 31 December 2018, respectively. The Group's Adjusted EBITDA for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018 amounted to U.S.$1,437 million, U.S.$1,973 million, U.S.$2,168 million and U.S.$2,541 million, respectively. The Group's Adjusted EBITDA margin was 34.2%, 29.5%, 28.4% and 30.6% for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively.

The Group's operations comprise three main divisions: (i) the Energy Division; (ii) the Coal Division; and (iii) the Logistics Division.

Energy Division

The Energy Division represents the Group's activities in the energy sector which include: (1) the generation and sale of electricity, (2) the sale of electricity capacity, and (3) the generation, transmission and sale of heat. These activities are conducted by Siberian Generating Company LLC ("**SGC**"), a leading producer of electricity and heat in Siberia, which the Group acquired in 2018.

The Group operates TPPs across eight Russian regions with a combined installed electricity capacity of 17.6 GW and combined installed heat capacity of 26,500 kGcal/h. The Group's heat transportation and distribution network consists of approximately 11 thousand kilometres of double pipelines. The Group has expanded the installed electricity capacity and geographical coverage of the Energy Division's operations with the acquisition of Reftinskaya GRES in 2019, Krasnoyarskaya GRES-2 and Primorskaya GRES in 2020.

Since the majority of the Group's power plants are located in Siberia, where central heating is consumed nine months a year due to harsh weather conditions, the Group's power plants primarily operate in a combined heat cycle (as co-generation power plants with combined production of electricity and heat or "**CHPPs**") which increases the production efficiency of energy consumed by customers in Siberia.

The Energy Division sells electricity and electricity capacity on the wholesale and retail electricity and capacity markets and provides a stable distribution channel for the Coal Division. The Energy Division purchased 21.8 million, 37.1 million, 33.7 million, and 30.2 million tonnes of coal supplied by the Coal

Division, or 37.0%, 33.0%, 29.0% and 26.0% of the Coal Division's sales volumes during the six months ended 30 June 2021, and the years ended 31 December 2020, 2019 and 2018, respectively.

In addition, the Energy Division operates ELSIB, a producer of turbine generators for hydroelectric, nuclear and thermal power plants in Russia and other countries. ELSIB is one of the key players in the Russian market for the production of turbine generators from 60 to 130 MW.

In the first half of 2021, the Group produced 20.7% of the total electricity generated in the Siberian Integrated Energy System ("**Siberian IES**") compared to 21.2% in the same period in 2020, according to the System Operator. The Group provides heat to more than 5.5 million people living in the Novosibirsk Region, the Krasnoyarsky Krai, the Altaisky Krai, the Kemerovo Region, the Republic of Khakasia and the Republic of Tuva.

In the six months ended 30 June 2021 and 2020, the Group generated 36.5 TWh and 31.9 TWh of electricity and 28.4 million GCal and 22.4 million GCal of heat, respectively. In the years ended 31 December 2020, 2019, and 2018, respectively, the Group generated 63.7 TWh, 51.5 TWh and 46.2 TWh of electricity and 43.7 million GCal, 43.5 million GCal, and 46.0 million GCal of heat, respectively. The Group was the sixth largest producer of electricity in Russia and the third supplier of heat in Russia, according to data published by Russian energy companies. See "*Business – Energy Division*".

For the six months ended 30 June 2021 and the year ended 31 December 2020, the Energy Division's revenue accounted for 33.5% and 35.5% of the Group's total revenues, respectively. For the six months ended 30 June 2021 and the year ended 31 December 2020, the Energy Division's Adjusted EBITDA accounted for 33.4% and 38.0% of the Group's Adjusted EBITDA, respectively. The Energy Division's Adjusted EBITDA margin was 33.3% and 30.8% for the same periods.

Coal Division

The Coal Division represents the Group's coal mining, processing, sale and distribution business. The Group operates nine underground and 19 open-pit large-scale mines in Siberia and the Russian Far East. The Group also has ten washing plants and processing facilities which allow it to process all of the coal designated for export and to access premium coal markets.

As at 30 June 2021, the Group was the largest Russian coal producer and the largest supplier of thermal coal to the Russian market by volume, according to the Central Dispatching Department of the Fuel Energy Complex ("**CDU TEK**"). The Group was also the world's fourth largest coal exporter by volume as at 30 June 2021, according to data published by major coal companies, with supplies of high quality thermal, sized and metallurgical coal to a diversified customer base across 48 countries. See "*Business – Coal Division*".

As at 1 January 2019, the Group had proved and probable reserves of 7.7 billion tonnes, as audited by SRK, which ranked the Group as the fifth largest coal miner globally, according to data published by major coal companies. According to the Group's internal estimates, its estimated reserves amounted to 7.46 billion tonnes as at 30 June 2021.

The Group sells coal on the domestic market and on the export markets of the Asia-Pacific region, Europe and other countries through a global sales and distribution network of representative and marketing offices located in countries of strategic importance for the Group such as China, Taiwan, South Korea, Japan, Vietnam, Lithuania, Indonesia, Australia, the U.K. and the USA. In Russia, the Group primarily supplies coal to power generating companies, including its Energy Division, industrial consumers, state agencies and communal utilities. In export markets, the Group sells coal primarily to direct consumers through its global distribution network.

The Coal Division profitability is largely dependent on the cost of coal transportation and transshipment. Since most of the coal produced by the Coal Division is transported and transshipped by

the Logistics Division, the Group has better control over such costs through the value chain, which enables it to improve the Coal Division's margin.

In the six months ended 30 June 2021 and 2020, respectively, the Group sold 58.9 million and 51.7 million tonnes of coal (including to the Group's Energy Division) of which the Group exported 47% and 50%, respectively. In the years ended 31 December 2020, 2019, and 2018, respectively, the Group sold 112.7 million, 113.7 million and 113.8 million tonnes of coal (including to the Group's Energy Division) of which the Group exported 47.0%, 47.0% and 48.0%, respectively. Approximately 67% and 33% of the Group's coal production in the first half of 2021 was hard and brown coal, respectively (compared to 69% and 31% of hard and brown coal, respectively, in the first half of 2020).

For the six months ended 30 June 2021 and the year ended 31 December 2020, the Coal Division's revenue (including corporate segment revenue) and Adjusted EBITDA accounted for 59.9% and 60.7% of the Group's total revenues and 44.4% and 32.4% of the Group's total Adjusted EBITDA, respectively. The Coal Division's Adjusted EBITDA margin was 21.5% and 13.2% for the same periods.

Logistics Division

The Logistics Division represents the Group's high-capacity railcar transportation and port transshipment business. The operations of the Logistics Division were consolidated under National Transportation Company ("**NTC**") in 2021, which manages the Logistics Division and provides transportation and transshipment services to the Group's other divisions and third parties. The Logistics Division assets include Tuapse Bulk Terminal, Murmansk Commercial Seaport and Murmansk Bulk Terminal in the western regions of Russia and Vanino Bulk Terminal and Maly Port in the Far East with a combined 58.6 million tonnes transshipment capacity and an extensive railway infrastructure comprising 56 thousand rolling stock, over 300 locomotives, approximately 1 thousand kilometres of railway tracks, 16 internal loading stations and other ancillary assets.

The Logistics Division underpins the vertically integrated business model of the Group by ensuring cost-efficient and reliable supplies between the divisions, including, in particular, supplies of coal from the Group's coal assets to the Group's power plants and other customers in Russia and abroad. In addition to the intra-Group supplies, the Logistics Division generates external revenue by transporting and transshipping coal, iron ore, fertilisers and other bulk cargo for third parties.

As at 30 June 2021, the Group was the second largest bulk port operator in Russia by transshipment capacity and the fourth largest Russian gondola car operator, according to the Group's calculations based on published data (see also "*Business – Logistics Division*"). In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the Group transshipped 23.7 million tonnes, 50.3 million tonnes, 48.2 million tonnes and 45.8 million tonnes of cargo, respectively, and transported 62.9 million tonnes, 109.9 million tonnes, 104.7 million tonnes and 100.3 million tonnes of cargo by railcars, respectively.

For the six months ended 30 June 2021 and the year ended 31 December 2020, the Logistics Division's revenue and Adjusted EBITDA accounted for 6.6% and 3.8% of the Group's total revenues and 22.2% and 29.5% of the Group's total Adjusted EBITDA, respectively. The Logistics Division's Adjusted EBITDA margin was 27.1% and 30.4% for the same periods. See "*Operating and Financial Review – Factors Affecting Results of the Group's Logistics Operations – Acquisitions and Disposals*".

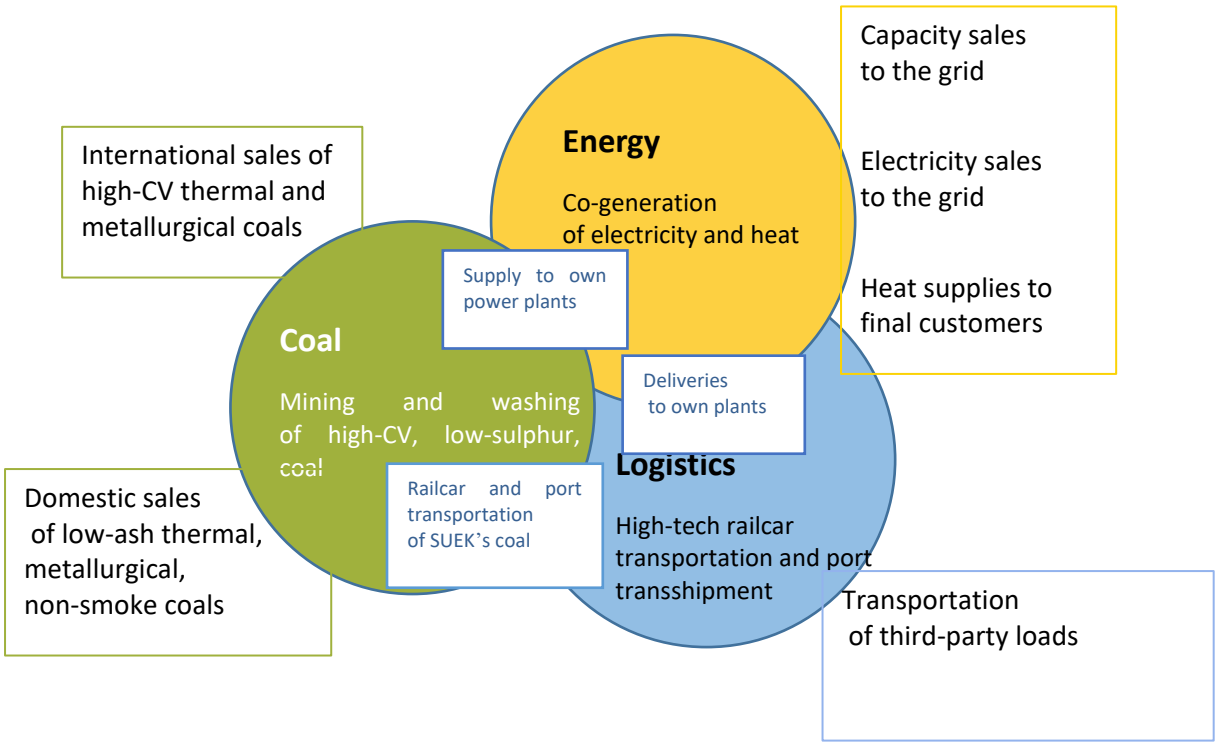
Key Strengths

The Group believes that the following strengths and, in particular, their combination, distinguish it from its competitors and provide the Group with competitive advantages in its key businesses:

A strong multi-product fully vertically integrated business model enabling the Group to achieve both significant cost efficiencies and control of the entire value chain

The Group relies on a strong multi-product, vertically integrated business model, comprised of energy, coal and logistics businesses. The Group believes that the integration between its energy, coal and logistics businesses fosters stability of its operations across all stages of the market cycle, enhances its operational synergies, improves flexibility and planning latitude in production and enables the Group to better control both the costs and the quality of its end-products as well as environmental and industrial safety performances throughout the value chain, from production to customer delivery.

The following is a simplified illustration of the Group's vertically integrated business operations:



During the first six months of 2021, the Coal Division provided 67% of the coal demand of the Energy Division compared to 79% in the same period of 2020. As coal production (including its mining and washing) involves use of significant volumes of electricity, the Group benefits from reliable and affordable supplies of electricity provided by its Energy Division.

The majority of the Group's power plants have been designed to burn the coal supplied primarily from the Group's coal assets located in relative proximity to such power plants (between 150 kilometres and 328 kilometres away), which allows to reduce coal transportation costs. Certain of the Group's power plants supply electricity to the Group, which allows the Group to satisfy approximately 34% of its needs in energy.

The Logistics Division underpins the vertical integration of the Group's operations by ensuring cost-efficient and reliable supplies between the Group's divisions and to other customers in Russia and abroad. The Group is substantially self-sufficient in terms of transportation needs as it is able to satisfy approximately 80% of its demand for transportation and transshipment capacity through the Logistics Division. The Group also benefits from the operational synergies produced by its integrated procurement function, reporting, information technology and other administrative and managerial

functions. The Group believes that this level of self-sufficiency and synergies gives its businesses a significant competitive advantage. Furthermore, from an operational perspective, since the Group is able to utilize its established logistics infrastructure, it is less dependent on third-party providers and less susceptible to logistics bottlenecks.

The Group's power plants use coal produced by the Coal Division not only as a hedge against potential supply interruptions, but as a hedge against market volatility. From a financial perspective, this means that if the market prices of coal rise, putting pressure on Energy Division margins, the margins of the Coal Division will tend to increase. Similarly, while decreases in commodity prices tend to reduce margin of the Coal Division, they also create an opportunity for higher profitability in the Energy Division.

In 2020, coal segment revenues to the Atlantic region and the Pacific region accounted for 53.4% of the Group's revenue in 2020, coal segment revenues in the Russian Federation accounted for 7.3% of the Group's revenue in 2020. Energy segment and logistics segment revenues accounted for 35.5% and 3.8% of the Group's revenue in 2020, respectively.

Diversified energy, coal and logistics operations with leading market positions supported by logistical infrastructure and sales networks

The Group holds leading market positions in various highly attractive markets, including:

On the international coal market:

- As at 31 December 2020, the Group was the world's fourth largest coal exporter by volume, according to the Company's data (see also "*Business – Coal Division*"), with a growing presence in the Asia-Pacific region, in particular Japan, South Korea, and China, and an established presence in Europe and Mediterranean. In 2020, the Group's coal exports (particularly high-CV coal, which is in high demand in the region) to the Asia-Pacific region amounted to 37.1 million tonnes and accounted for 67% of the Group's revenues from international coal sales. In the Atlantic region, the Group supplies high-CV coal and metallurgical coal across many markets, including Germany, the Netherlands Morocco and Turkey.

On the Russian energy and logistics markets:

- As at 31 December 2020, the Group was the largest Russian coal producer by production volumes and the largest coal supplier to the Russian market by supply volumes, according to the CDU TEK.

- As at 31 December 2020, the Group was the sixth largest producer of electricity in Russia and the third largest supplier of heat in Russia, according to data published by Russian energy companies. See "*Business – Energy Division*".

- As at 31 December 2020, the Group was the second largest bulk port operator in Russia by transshipment capacity and the fourth largest Russian gondola car operator, according to the Group's calculations based on published data. See also "*Business – Logistics Division*".

The Group believes that it has been able to gain and maintain these leading market positions through its high-quality products and services that differentiate it from its competitors. The Group has close relationships with its domestic and international customers, which are fostered by the Group's knowledge of customers' needs, its global distribution network in key markets, well-established logistical infrastructure and close proximity of its assets to the relevant customer locations.

In 2020, the Group supplied coal to customers in 48 countries (see "*Business – Coal Division*"), provided central heating to more than 5.5 million people in Russia and supplied over 68.2 TWh of electricity to its customers from the Urals to the Far East. The Group's diversified products and services are often critical to its customers' functions, and its strong technology base enables it to provide

expertise and value-added services in addition to its products, while its track record of reliability has helped to cement its long-term customer relationships and the Group's reputation in Russia and abroad.

Proven track record of value creation through efficient co-generation of heat and power and stable capacity sales

The majority of the Group's power plants are CHPPs which allows the Group to use a number of synergetic opportunities. Over 90% of heat produced by the Group is supplied by CHPPs, which allows the Group to save up to 50% of fuel on heat generation compared to separate production of electricity and heat and to reduce carbon emissions by 32% per unit of energy production. The Group's power assets work in a combined cycle for nine months a year and have a utilisation rate of approximately 48%. Furthermore, co-generation of heat and electricity allows the Energy Division to remain profitable and generate stable cash flow even during periods of reduced demand for electricity.

The Group regularly invests in upgrading generation capacities of its power plants to secure reliable supplies of capacity on the wholesale electricity market. As at the date of this Prospectus, approximately 12% of the Group's capacity (2.1 GW from 17.6 GW) has already been renovated or rebuilt under the DPM-1 (a Russian state programme aimed at modernisation of generating facilities in the period from 2010 to 2020, see "*Regulation of Coal, Electricity and Transportation Industries–DPM-1*"), which allows the Group to supply its capacity at a price 4-5 times higher than normal price for capacity until 2024. The Group expects to further renew approximately 16% of its capacity as part of the DPM-2 (a Russian state programme aimed at the modernisation of generating facilities in the period from 2022 until 2031, see "*Regulation of Coal, Electricity and Transportation Industries–DPM-2*") until 2027 to improve operational efficiency.

Broad coal portfolio with some of the largest coal reserves globally, strategically located to key growth markets

As at 1 January 2019, the Group's proved and probable coal reserves amounted to 7.7 billion tonnes, as audited by SRK, which made the Group the fifth largest coal producer globally by coal reserves, according to data published by major coal companies. According to the Group's internal estimates, its estimated reserves amounted to 7.46 billion as at 30 June 2021. The Group anticipates that this resource base will provide it with high-quality raw materials for over 30 years into the future.

Coal mined by the Group has a low nitrogen and sulphur content. Its processing significantly reduces ash content and increases the calorific value and environmental friendliness of the Group's products. This allows the Group to meet the requirements of consumers with highest standards, for example in Japan, South Korea and Taiwan. The Group's broad range of coal product offerings includes high-thermal coal, seized and metallurgical coal. The Group believes that its diversified product mix provides it with a competitive advantage in both Russian and international markets as its substantial degree of sales flexibility allows it to adapt to changes in customer demand and economic conditions for different products and regions over sustained periods of time. For more information, see "*Business—Coal Division—Coal mining, processing and quality*".

The Group's coal assets in Kuzbass and Khakasia are located close to railway infrastructure which allows the Group to deliver coal to seaports in western and eastern Russia. The Group's coal assets in Buryatia and Khabarovsk regions are located closer to sea ports in Russia's Far East than its competitors, which allows easy and cost-efficient shipments to the Asian markets. Approximately 32% of high-quality coal is mined and processed in close proximity to the Asian markets. The Group believes that this asset base positioning provides the Group with strategical and competitive advantage compared to its competitors and allows the Group to expand its presence in markets with significant growth potential. The Group's brown coal assets in Krasnoyarsk, Zabaikalye and Primorye regions are also located in close proximity to its energy company customers, including the Energy Division.

Prudent financial policy and resilient financial performance

The Group believes that its strong focus on business diversification, operating efficiencies and prudent financial policy has supported its ability to continue to deliver strong and stable financial performance. In 2018, 2019 and 2020, the Group's Net debt to Covenant Adjusted EBITDA ratio amounted to 1.6x, 3.1x and 3.3x, respectively, and its Adjusted EBITDA margin was 30.6%, 28.4% and 29.5%, respectively. For the twelve months ended 30 June 2021, the Group's Net debt to LTM Covenant Adjusted EBITDA ratio amounted to 2.56x. For the six months ended 30 June 2021, the Group's Adjusted EBITDA margin was 34.2%. The Group manages its exposure to market risks by entering into a variety of derivative financial instruments for purposes of hedging coal price risk, foreign currency risk, interest rate risk and risk of changes in the price of freight. In addition, the Group's strategy has been to maintain consolidated cash balances of between U.S.$100 million and U.S.$200 million, plus bank facilities, and maintain a debt structure with a balanced maturity profile.

The Group believes that its position as a low cost energy and coal producer in Russia, as well as its consistent focus on cost controls across the Group, make it well-positioned to succeed in a market environment of lower coal prices and more intense pricing pressures.

Due to the Group's comparatively resilient business model, strict cost-control and cash management initiatives, the Group has been able to generally limit the impact of the economic downturns, including the COVID-19 pandemic, upon its business. For further information, see "*Operating and Financial Review —Certain Factors Affecting the Group's Results of Operations—COVID-19*".

Strong and focused management team

The Group's management team in aggregate has more than 50 years of experience in the coal mining, energy and logistics businesses as well as accounting, financial and treasury management, and mergers and acquisitions. The Group believes that its management team was instrumental in leading the Group's successful transformation from a single-product company into a vertically integrated energy, coal and logistics business. For more details see "*Business— History and Development*". The Group's heads of divisions also have long-tenured experience in coal, energy and logistics industries.

Effective and transparent ESG programme

The Group is committed to ensuring that its environmental, social and governance ("**ESG**") systems comply with the best international standards. To achieve this, the Group's approach to sustainability and disclosure of ESG developments is guided by key international principles and standards including: UN Global Compact, SO 26000 (Guidance on Social Responsibility) and the Global Reporting Initiative ("**GRI**") Standards.

An international audit of the Group's environmental and social responsibility and corporate governance practices, conducted by S&P in 2020, showed that the Group positively compares to industry and local averages, with "good" environmental and social profiles and "strong" corporate governance practices. The Group's operations are systematically audited (internally and externally) for compliance with ISO standards including, amongst others, for occupational health and safety, environmental, anti-bribery and compliance. In 2020, the Group was certified for compliance with the requirements of ISO 55001 for the asset management systems which confirmed the Group's measures aimed at ensuring asset reliability and performance and achieving the maximum return throughout the entire life cycle. In terms of industry safety, the Group has one of the lowest Loss Time Injury Frequency Rates ("**LTIFR**") in Russia and the mining industry globally with LTIFR of 0.55, 0.50, 0.48 and 0.62 in 2018, 2019, 2020 and in the six months of 2021, respectively.

In February 2021, the Group established a dedicated Board-level health, safety and environment ("**HSE**") committee to oversee the Group's sustainability initiatives, environmental and industrial safety and formalise existing oversight with these issues and approved a new position of the Group's HSE Officer, directly reporting to the Chief Executive Officer. Furthermore, ESG-linked key performance indicators, such as the contribution to certain environmental and social aspects, along with

industrial safety performance have now been established as key variable parts in determining staff remuneration. The Group believes that this is an important step in ensuring that its ESG policies and practices are aligned at the highest level within the Group and will allow its businesses to achieve the highest levels of environmental and social responsibility and corporate governance practices that its customers, shareholders, suppliers, and other counterparties would expect.

Strategy

The Group's strategy is targeted at achieving further growth by developing high-margin segments, realizing the full potential of its vertical integration and maximizing synergies between its business lines, as well as improving operational efficiency and profitability, whilst adhering to the best in class principles of corporate governance, sustainability, health and environmental safety.

As part of its overall strategy, the Group is focused on achieving certain targets and goals in respect of its financial and operational performance, including the following:

- becoming one of the top five electricity producers in the Russian market;
- increase of the Group's production in co-generation mode by 25%;
- reduction of the Group's greenhouse gas emissions by 1 million tonnes per annum starting from 2025 by replacing old boilers with heat produced by combined heat and power plants;
- increase of the Group's coal sales to Asia by 16%;
- maintaining the position at the lower end of the global coal production cost curve;
- increase of the Group's port capacity by 55%;
- expanding operations of Vanino Port to accelerate growth of the Group's coal shipments to Asia; and
- increasing transportation of third-party bulk-cargo to optimise asset utilisation and reduce transportation costs.

The Group's strategy comprises:

Focus on efficient growth and strengthening of the Group's market positions

The Group aims to strengthen its presence in resilient, margin-attractive international coal markets. Specifically, the Group seeks to increase its presence in the Asia-Pacific region, which has been identified by the Group as a continuing growth market. The Group plans to accomplish this by developing its portfolio of key customers in Japan, South Korea, China, Taiwan and other key markets in the region through its global sales and distribution network and by expanding production and logistics infrastructure in the Buryatia and Khabarovsk Regions, which are oriented to Asian regions.

In Russia, the Group is focused on continuing to maximize synergies between its energy, coal and logistics businesses and the co-generation of heat and electricity and to increase capacities in order to remain a cost-efficient and reliable energy producer.

Specifically, the Group intends to focus on efficient growth and further strengthening of its market positions across its energy, coal and logistics businesses through several key strategic initiatives:

- In the Energy Division, the Group aims to increase its supplies of co-generated heat and electricity, to improve operational efficiency and continue to focus on achieving sustainability targets throughout the energy generation cycle. In particular, the Group is participating in the DPM-2 Programme (a Russian state programme aimed at the modernisation of generating facilities in the period from 2022 until 2031, see "*Regulation of Coal, Electricity and*

Transportation Industries–Regulation of Electricity Industry–Investment Projects in Electricity Market–DPM-2" for details) which provides for the construction and upgrade of 25% of the installed capacity at the Group's power plants (including Krasnoyarsk power plants 1, 2, 3, Tom-Usinskaya GRES and Primorskaya GRES). These investments are aimed at enhancing operational and fuel efficiency and reducing pollutant and carbon emissions per unit of energy produced. Further, the Group systematically renovates heat networks to reduce heat loss and is currently constructing heating mains to connect Belovskaya GRES with Belovo and Abakanskaya CHPP with Chernogorsk in order to replace old boiler houses with efficient co-generating CHPPs.

- In the Coal Division, the Group's strategy is focused on continuing to develop its existing coal reserves, while increasing the output of high-calorific coal at the assets located closer to Asia to targeted Asian export markets. In particular, the Group is planning to increase mining and washing in the Khabarovsk Region at Urgal from 7 million tonnes per annum to 14 million tonnes per annum by 2025. The Group also intends to continue various investment projects to improve coal mining and production safety and to expand the Group's capacities whilst investing in measures aimed at reducing its carbon footprint. For example, the Group plans to continue introduction of geo-referencing systems in its underground mines and development of its mining assets, such as the Pravoberezhny open-pit mine, the Yalevsky, Taldinskaya Zapadnaya-2, November 7th New and Severnaya underground mines;

- In the Logistics Division, the Group plans to continue developing its logistics assets by increasing their operational efficiency and diversify the cargo products transported and transshiped by the Group and expanding the customer base of the Group's Logistics Division beyond the Coal Division. The Group specifically plans to further invest in the development of technology to accelerate the turnaround of railcars together with Russian Railways, reduce downtime, use more high-capacity cars on routes to Far Eastern ports to maximise port loading, transport third-party cargo to reduce empty mileage, transport third-party cargo to reduce empty mileage. With respect to its port assets, to support growing coal exports to the Asia-Pacific region, the Group is expanding the annual transshipment capacity at Vanino Bulk Terminal from 24 to 40 million tonnes. In order to meet the growing demand for transshipment of mineral fertilisers, the Group plans to expand the annual transshipment capacity at Murmansk Bulk Terminal from 8.5 million tonnes to 13.5 million tonnes and the annual transshipment capacity at Tuapse Bulk Terminal from 2.3 million tonnes to 4 million tonnes by 2025. As part of its strategic goals, the Group plans to develop the transportation and transshipment of third-party cargo using its railcar fleet and stevedoring infrastructure, expanding its customer base and attracting additional types of cargo traffic, as well as developing its system of long-term contracts to enhance revenue and margins.

The Group is using its research and development expertise to drive innovation in areas such as mine planning and mine design, turbine generators production and new product research. Through its development of new products, solutions and technologies, the Group believes it is well positioned to benefit from future growth and gain further customers, which will help to strengthen its competitive position. The Group also intends to build on and strengthen its close and long-standing customer and supplier relationships through collaboration in the development of new products and solutions. The Group believes that the combination of its existing customer and supplier relationships and its research and development capabilities can make a significant contribution to its future growth.

The Group may also continue to seek growth through selective acquisitions and partnerships complementary to the Group's production process to ensure that the Group remains competitive, innovative and at the forefront of the industry. Over the next few years, the Group will continue to identify and may from time to time act upon market opportunities with the goal of selectively broadening the Group's existing operations and enhancing synergies with existing businesses.

Further improve operational efficiency and productivity through process optimisation and technological advancements

As part of its strategy, the Group intends to continue focusing on operational efficiency and productivity across its business lines, which it expects will allow the Group to remain competitive in any rapidly changing macroeconomic and operating environment. Specifically, the Group intends to continue improving its operational efficiency through upgrading its existing facilities and implementing new technologies. The Group believes that this will allow it to reduce costs of its power generation, mining equipment and logistics which, in turn, will further contribute to its profitability, employee safety and reduce its environmental footprint.

More specifically, in the energy business the Group's plans to increase operational efficiency of the Energy Division by increasing the share of co-generated energy, improving the energy efficiency and utilisation rate of production machinery and equipment, substituting old standalone boilers with heat supplies from co-generating power plants, including the introduction of innovations and the best available technologies, reducing the Group's fuel consumption for production needs, lowering heat losses by repairing heat networks and restoring pipe insulation and other measures. These measures are aimed at increasing cost savings, energy efficiency and reducing the Group's carbon emissions and negative environmental impact.

The return on the Group's investments in this modernisation will be secured through state-supported programmes, including DPM-2 Programme and transition of cities to the heat pricing zones. DPM-2 guarantees return on investment through higher pricing for capacity and heat generated by newly built or upgraded power plants. The Group is participating in the DPM-2 Programme and is upgrading its power plants. For more information, see "*Business–Energy Division*" and "*Regulation of Coal, Electricity and Transportation Industries–Regulation of Electricity Industry–Investment Projects in Electricity Market–DPM-2*".

The Group also plans to implement a number of measures aimed at improving operational efficiency, including speeding up the work of sinking crews and relocation work, increasing the working face load during underground mining and raising the efficiency of mining and transportation activities during open-pit mining, optimising equipment during downtime and increasing the load and speed of dump trucks and excavators at open-pit mines. In addition, digitalisation of the Group's operations is one of its core initiatives to increase commercial and operational efficiency, as well as employee safety. In this respect, the Group has invested and will continue to invest in digitalisation and develop automation technologies with the goal of creating a uniform information landscape that ensures effective management of production processes, decision making based on real-time data, risk management and digitalised monitoring of compliance with industrial and environmental safety requirements. The Group will focus on being at the forefront of robotising production processes by continuing to test and develop unmanned locomotives and dump trucks and robotics-aided drilling rigs for open-pit mining.

In addition, the Group aims to continue centralizing certain functions among the Group companies, including the information and technology management systems for all of its business lines, and implementing standardized supply chain management guidelines and procedures in order to increase cost efficiency.

Continue to exercise prudent financial management with a focus on maintaining stable cash flow and a robust balance sheet

The Group will continue to prioritize financial management and focus on maintaining healthy cash flows and a robust balance sheet to allow the Group to continue financing its diversification, investments in production assets and HSE initiatives, as well strategic acquisitions and debt service.

For this purpose, the Group plans to actively engage in balance sheet and capital structure management by, among other things, prudent selection of funding sources between internally generated cash and external financing and maintaining target leverage levels. In 2018, 2019, 2020 and the twelve months

ended 30 June 2021, the Group's Net debt to Covenant Adjusted EBITDA ratio amounted to 1.6x, 3.1x, 3.3x and 2.56x, respectively. The Group intends to continue to proactively manage the maturity profile of its debt portfolio, including by seeking opportunities to refinance its existing shorter-term indebtedness on commercially reasonable terms (including through the issuance of the Notes).

The Group plans to maintain relationships with international and Russian financial institutions to ensure the Group can promptly respond to changes in the operating environment and react to business opportunities and fund growth and expansion. In addition, the Group aims to maintain a conservative dividend policy, and generally consider its future operations and earnings, development plans, and capital requirements, before making any dividend payments. The Group believes that its prudent financial management and robust performance will underpin its commitment to maintain public credit rating not lower than "BB-" category.

Achieving high safety standards and invest in human capital

While all of the Group's facilities comply with leading international standards in occupational and industrial safety, the Group's fundamental aims are to have zero injuries and accidents. Furthermore, the Group aims to position itself as an employer of choice in the Russian mining, energy and logistic sectors. To achieve this goal, the Group will continue to maintain international standards of risk management and maintain effective mechanisms in place to evaluate, anticipate and mitigate operational and health, safety and environmental risks. The Group will continue developing the awareness and motivation of personnel for safe occupational conduct and training personnel about health and safety at work and measures aimed at preventing occupational incidents.

The international indicator of health and safety, lost time injury frequency rate, is a key performance indicator for all members of senior management. While the Group has one of the lowest LTIFR's in Russian and global mining with 0.55, 0.50, 0.48 and 0.62 LTIFR in 2018, 2019, 2020 and the six months of 2021, respectively, the Group's aim is to continue to further improve its performance. In 2020, the Group spent U.S.$83.0 million on occupational health, safety and environment (8% of its total capital expenditures). The Group plans to also continue its investment and work in talent development and knowledge management through a number of its established and new initiatives. For further description, see "*Business—Health, safety, environment and community— Health, safety, environment, climate projects, local communities and corporate governance—Personnel development*".

Further the Group's commitment to sustainable development and upholding best in class environmental, social and corporate governance practices

The Group aims to contribute to global energy security through the sustainable supplies of electricity, capacity, heat and solid fuels for the benefit of all stakeholders. The Group plans to accomplish its sustainability goals, in part, through development and introduction of new technologies for coal-fired generation and coal mining that will meet the demand for affordable energy, while reducing environmental impact and optimising energy consumption.

The Group's strategy to reduce its carbon footprint and solid particles emissions also includes: (i) maximising the generation of heat and electricity in a combined mode to reduce emissions per unit of energy (including through replacement of oil boilers with new CHPP units that are equipped with electrostatic precipitators), (ii) increasing the share of washed coal to lower the ash content and increase the calorific value of its coal, which reduces emissions during transportation and burning, (iii) introducing technologies for low-emission production and use of coal, including mine methane utilisation; and (iv) delivering carbon offset projects.

Furthermore, the Group is committed to upholding responsible and sustainable business practices and has implemented comprehensive environmental, social and corporate governance policies and initiatives. The Group will continue to maintain strong environmental practices at its operations and promote green initiatives in the respective communities. The Group has also implemented environmentally-friendly technologies in its operations, including the instalment of electrostatic

precipitators at its power plants which will complement the existing battery cyclone installations for collecting particulate emissions, the increase in the share of water used in the recycling cycle and improvement of water treatment facilities and the use of best available technologies for coal dust suppression in ports, power plants, washing plants and mines. The Group is involved in various corporate social responsibility programmes, with a focus on supporting long-term economic growth and improving the quality of life in the regions where it operates and will continue to act as a leader in social responsibility through education, health, safety and community empowerment initiatives.

OFFERING STRUCTURE

Overview of the Offering

The Notes	Issue of U.S.$500,000,000 3.375% Guaranteed Notes due 2026
Issuer	SUEK Securities Designated Activity Company, a designated activity company incorporated under the laws of Ireland whose registered office is at 2nd Floor, Palmerston House, Denzille Lane, Dublin 2, Ireland.
Guarantors	JSC SUEK, a company organised as a joint-stock company established under the laws of the Russian Federation whose registered office is at Dubininskaya Street 53/7, Moscow 115054, Russia. LLC SUEK-Khakasia, a company organised as a limited liability company established under the laws of the Russian Federation whose registered office is at Sovetskaya Street 40, Chernogorsk, Republic of Khakasia, 655162, Russia. JSC Tugnuisky Opencast Mine, a company organized as a joint-stock company established under the laws of the Russian Federation whose registered office is at 70 years of October Avenue 49, Sagan-Nur, Republic of Buryatia, 671353, Russia. JSC SUEK-Kuzbass, a company organized as a joint-stock company established under the laws of the Russian Federation whose registered office is at Vasilieva Street 1, Leninsk-Kuznetsky, Kemerovskaya Region – Kuzbass, 652507, Russia.
Joint Bookrunners	AO "ALFA-BANK" (acting jointly with Alfa Capital Markets Ltd), Alfa Capital Markets Ltd (acting jointly with AO "ALFA-BANK"), Bank of China Limited, London Branch, Citigroup Global Markets Limited, Commerzbank Aktiengesellschaft, Gazprombank (Switzerland) Ltd, Merrill Lynch International, Renaissance Securities (Cyprus) Limited, Sberbank CIB (UK) Limited and VTB Capital plc
Trustee	Citibank, N.A., London Branch
Principal Paying Agent and Transfer Agent	Citibank, N.A., London Branch
Registrar	Citibank Europe plc. A copy of the register of the Notes shall be kept at the registered office of the Issuer.
Closing Date	15 September 2021
Issue Price	100% of the principal amount of the Notes
Maturity date	15 September 2026
Interest	Interest on the Notes will be payable semi-annually in arrear on each Interest Payment Date (being 15 March and 15 September in each year commencing on 15 March 2022 and ending on the Maturity Date).

Risk Factors	An investment in the Notes involves a high degree of risk. See "*Risk Factors*".
Use of proceeds.....	The Issuer will use the proceeds received from the issue and sale of the Notes to make a loan (or loans) to a Group company (or Group companies), a tax resident (or residents) of the Russian Federation, which will use the proceeds for refinancing of the Group's outstanding indebtedness. See "*Use of Proceeds*"
Status of the Notes and Guarantees.....	The Notes constitute direct, unsubordinated and unsecured obligations of the Issuer and shall at all times rank *pari passu* and rateably without any preference among themselves. The Guarantees constitute direct, unsubordinated and unsecured obligations of each Guarantor. The Issuer and each Guarantor shall ensure that at all times the claims of the Noteholders against them under the Notes and the Guarantees, respectively, rank in right of payment at least *pari passu* with the claims of all their other present and future unsecured creditors, save those whose claims are preferred by any bankruptcy, insolvency, liquidation or similar laws of general application or any other mandatory provisions of applicable law.
Form and Initial Delivery of Notes	The Notes will be issued in fully registered form in the denominations of U.S.$200,000 and higher integral multiples of U.S.$1,000. Notes which are offered and sold outside the United States in reliance on Regulation S will be represented by interests in the Regulation S Global Note deposited with, and registered in the name of, a nominee for the common depository for Euroclear or Clearstream, Luxembourg on or about the Closing Date. Notes which are offered and sold in the United States to U.S. persons that are QIBs in reliance on Rule 144A will be represented by interests in the Rule 144A Global Note deposited with a custodian for, and registered in the name of DTC on or about the Closing Date. The Global Notes will only be exchangeable for Definitive Certificates in the limited circumstances described under "*Summary of the Provisions Relating to the Notes in Global Form*".
Optional redemption for tax reasons.....	Subject to the Conditions and as further described in "*Terms and Conditions of the Notes*" herein, the Notes may be redeemed at the option of the Issuer in whole, or in part, at any time, on giving not less than 25 nor more than 60 calendar days' notice to the Noteholders (which notice shall be irrevocable) at the principal amount thereof, together with interest accrued and unpaid to the date fixed for redemption and additional amounts (if any) but otherwise without premium or penalty, if (i) the Issuer satisfies the Trustee immediately prior to the giving of such notice that it (or if the Guarantees were called, a Guarantor) has or will become obliged to pay certain additional amounts as provided or referred to in Condition 8.1 as a result of any change in, or amendment to, the laws, treaties or regulations of the Russian Federation (in the case of a payment by a Guarantor) or Ireland (in the case of a payment by the Issuer) or, as the case may be, the applicable jurisdiction for any of the Issuer or the Guarantors if different from the aforementioned, or of any constituent part or political sub-division thereof or any authority having power to tax therein

	or a change in the application or official interpretation of such laws or regulations (including as a result of a judgment of a court of competent jurisdiction), which change or amendment has become or becomes effective on or after the Closing Date; and (ii) such obligation cannot be avoided by the Issuer (or the relevant Guarantor, as the case may be) taking reasonable measures available to it.
Make-whole call option	At any time prior to the date falling three months prior to the Maturity Date, the Issuer may, at its option, redeem the Notes, in whole but not in part, at any time, but on one occasion only, on giving not less than 25 and not more than 60 days irrevocable notice, at a price equal to the principal amount thereof, plus the Make Whole Premium (as defined in "*Terms and Conditions of the Notes*" herein) plus any accrued and unpaid interest and additional amounts, if any, up to but excluding the date of redemption. See "*Terms and Conditions of the Notes—Redemption and Purchase—Make-Whole*".
Optional Redemption at Par.....	The Issuer may, at any time on or after the date three months prior to the Maturity Date, on giving not less than 30 nor more than 60 days' irrevocable notice to the Noteholders, redeem the Notes in whole or in part, at the principal amount thereof, together with interest accrued and unpaid and additional amounts (if any) to but excluding the Par Optional Prepayment Date (as defined in "*Terms and Conditions*" of the Notes herein). See "*Terms and Conditions of the Notes—Redemption and Purchase—Optional Redemption at Par*".
Amendments/Waiver	As long as any of the Notes remain outstanding, the Issuer will not, without the prior written consent of the Trustee, agree to any amendment to or any modification or waiver of, or authorise any breach or proposed breach of, the terms of the Guarantees, except as otherwise expressly provided in the Trust Deed or the Guarantees.
Negative pledge and other Covenants.....	Condition 4 of "*Terms and Conditions of the Notes*" herein contains, *inter alia*, a negative pledge in relation to the creation of Liens (as defined in the "*Terms and Conditions of the Notes*" herein) by the Issuer, the Guarantors and the Issuer's or the Guarantors' Subsidiaries (as defined in the "*Terms and Conditions of the Notes*" herein) and covenants limiting, *inter alia*, mergers and disposals by the Issuer and the Guarantors, transactions between the Issuer, each Guarantor and their Subsidiaries and financial covenants by each of the Issuer and the Guarantors. In addition, the Notes contain a non-petition provision relating to the Issuer. See "*Terms and Conditions of the Notes*".
Events of Default	If an Event of Default (as defined in the "*Terms and Conditions of the Notes*" herein) shall have occurred and be continuing, the Trustee may, subject as provided in the Trust Deed, declare the Notes immediately due and payable with, or for the benefit of any Affiliate (as defined in the "*Terms and Conditions of the Notes*" herein). See "*Terms and Conditions of the Notes*".

Rating.....	The Notes are expected to be rated "BB" by Fitch and "Ba2" by Moody's. Fitch is not established in the EU but the rating it has given to the Notes is endorsed by Fitch Ratings Ireland Limited. Moody's is not established in the EU but the rating it has given to the Notes is endorsed by Moody's Deutschland GmbH. Each of Fitch Ratings Ireland Limited and Moody's Deutschland GmbH is established in the European Union and registered under the CRA Regulation. Credit ratings assigned to the Notes do not necessarily mean that the Notes are a suitable investment. A rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time by the assigning rating organisation. Similar ratings on different types of notes do not necessarily mean the same thing. The ratings do not address the marketability of the Notes or any market price. Any change in the credit ratings of the Notes, the Issuer or any Guarantor could adversely affect the price that a subsequent purchaser would be willing to pay for the Notes. The significance of each rating should be analysed independently from any other rating.
Withholding Tax	All payments in respect of interest and principal on the Notes or under the Guarantees will be made free and clear of, and without deduction or withholding for, or on account of, any present or future taxes, duties, assessments or governmental charges of the Russian Federation or Ireland, save as required by law. If any such taxes, duties, assessments or governmental charges are payable, the Issuer or, as the case may be, the relevant Guarantor, shall (subject to certain exceptions) pay such additional amounts as will result in the receipt by the Noteholders of such amounts as would have been received had no such deduction or withholding been required. See "*Terms and Conditions of the Notes*".
Listing and Trading.....	Application has been made to Euronext Dublin for the Notes to be admitted to the Official List and trading on its regulated market.
Selling Restrictions	The Notes have not been, and will not be, registered under the Securities Act and, subject to certain exceptions, may not be offered or sold within the United States. The Notes may be offered and sold (i) within the United States to QIBs in reliance on the exemption from registration provided by Rule 144A; and (ii) in offshore transactions in reliance on Regulation S. The Notes may be sold in other jurisdictions (including the United Kingdom, Russia and Ireland) only in compliance with applicable laws and regulations. See "*Subscription and Sale*".
Governing Law	The Notes, the Trust Deed and the Guarantees and any non-contractual obligations arising out of or in connection with them, shall be governed by, and construed in accordance with, English law.

Security Codes	Regulation S ISIN: XS2384174228
	Regulation S Common Code: 238417422
	Rule 144A ISIN: US78486MAA80
	Rule 144A Common Code: 238417899
	Rule 144A CUSIP: 78486M AA8
Legal Entity Identifier of the Issuer	635400WACQ1BCYSYZS41
Legal Entity Identifier of the Company	98450068F4EBA751BA19
Legal Entity Identifier of SUEK-Khakasia.....	984500BR65BO82BDVE37
Legal Entity Identifier of Tugnuisky Opencast Mine	9845007D476B5137BA95
Legal Entity Identifier of SUEK-Kuzbass	98450048073EOC1CCB48

RISK FACTORS

An investment in the Notes involves a high degree of risk. Potential investors should carefully consider the following risks described below, as well as other information contained in this Prospectus before making any investment decision. Any of the following risks, individually or together, could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, in which case, the trading price of the Notes could decline and investors could lose part or all of their investment.

The Group has described the risks and uncertainties that its management believes are material, but these risks and uncertainties may not be the only ones the Group faces. Additional risks and uncertainties, including those the Group currently is not aware of or sees as immaterial, could also have a material adverse effect on the Group's business, financial condition, results of operations and prospects, which could result in a decline in the value of the Notes.

The risks below have been classified into the following categories: (i) Risk Factors Relating to the Group's Business and Industry; (ii) Risk Factors Relating to the Russian Federation; (iii) Risk Factors Relating to the Russian Legal System and Russian Legislation; (iv) Tax Risks; (v) Risk Factors Relating to the Issuer; and (vi) Risks Factors Relating to the Notes and the Trading Market. This categorisation is provided for convenience only, and any particular category should not be assumed to contain all the risks related to that category.

Risk Factors Relating to the Group's Business and Industry

Demand for electricity in Russia depends on economic activity and is subject to fluctuations, and the Group may be unable to obtain expected levels of revenue and/or address daily, seasonal or yearly fluctuations in demand for electricity and heat

Electricity consumption has a strong correlation with the level of economic activity in a country. The Russian economy returned to recovery and growth in GDP terms in 2017, expanding by 2.8% in 2018 and 2.0% in 2019 following a significant recession between 2014 and 2016. In the first quarter of 2020, the Russian economy continued strengthening with a GDP growth of 1.6% (as compared with the first quarter of 2019). However, in the two subsequent quarters, Russia experienced an economic slowdown largely in response to the worldwide shutdowns resulting from the COVID-19 pandemic (see "*—The global COVID-19 pandemic and the disruption caused by various countermeasures to reduce its spread, could have a material adverse effect on the Group's business, financial condition and results of operations*") and the substantial decline in crude oil prices since early March 2020, which was driven by concerns regarding the potential impacts of the COVID-19 pandemic outbreak and the anticipated increases in oil production from the OPEC+ countries. Russia's GDP contracted by 3.0% in 2020 according to Rosstat.

According to the System Operator, electricity consumption in Russia in 2020 decreased by 2.3% as compared to 2019, whilst electricity production decreased by 3% as compared to 2019. In 2020, Russian thermal power plants produced 555.5 billion kWh of electric power which was a decrease of 9.9% as compared to electricity produced by thermal power plants ("**TPPs**") in 2019. In the six months ended 30 June 2021, Russian thermal power plants produced 304.9 billion kWh in the European part of Russia and in Siberia, representing a 8.4% increase compared to the same period in 2020.

Furthermore, should the conditions of the Russian economy worsen, remain unstable or economic recovery is weak in the long-term, the Group may become subject to higher counterparty risk and an increase in payment defaults by customers which will negatively impact its revenues and cash flow, as well as increase costs required to manage bad debt. Any of the above factors may have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

In addition, the demand for electricity in the Russian Federation may vary on a daily, seasonal and yearly basis due to weather conditions and other factors. Demand for electricity and heat is usually

higher during the period from October to March due to longer nights and colder weather, and it is generally lower in the period from April to September due to longer days and warmer weather. In addition, demand for electricity is usually higher during normal business hours during the day and for a longer duration during the period from October to March due to fewer daylight hours. Demand may also fluctuate from year to year due to changes in weather patterns. Therefore, the generation capacities of the Group may be fully utilised during certain parts of the day or during certain months, and under-utilised during other parts of the day and year.

If the Group fails to obtain its expected levels of revenue during the periods when its generation capacities are operating at their maximum loads for example in the areas of high electricity consumption such as Southern Kuzbass area, it may be unable to compensate for lost revenues during periods when the demand for electricity and heat is lower. If the Group is unable to address or forecast these daily, seasonal and yearly fluctuations in demand for electricity and heat, its business, financial condition, results of operations and prospects may be materially adversely affected, and its financial condition and results of operations may vary significantly from year to year.

Certain operations on the power and heat market are subject to tariff regulation

The Group operates in both the retail and wholesale markets and sells electricity and capacity in certain regions under contracts where the price is determined by the state authorities (the "**Regulated Contracts**"). Sales under the Regulated Contracts comprised 20% of the Group's electricity sales volumes and 25% of the Group's capacity sales volumes in the year ended 31 December 2020 and 20% of electricity sales volumes and 24% of capacity sales volumes for the six months ended 30 June 2021.

The volumes of electricity and capacity sold under Regulated Contracts are established for each respective power generator in accordance with the consolidated forecast balance of electricity production and supply prepared by the Federal Antimonopoly Service of the Russian Federation (the "**FAS**"). Such volumes to be supplied under Regulated Contracts shall not exceed 35% of the total volume of electricity (capacity) which shall be supplied by such power generator in the wholesale market according to the balance resolution for such power generator.

In calculation of tariffs in accordance with the projected economic development of the Russian Federation for the relevant year and period approved by the Russian Government, the federal authority in the area of the state regulation of tariffs applies consumer price index ("**CPI**") as well as the index of the change of prices of industrial products manufacturers. Regulated tariffs are set at levels which do not meet the investment and maintenance costs, which would have a negative effect on the Group. Also, the Russian Government may make changes to the electricity and capacity trading rules that are not favourable to the Group. Russian electricity transmission and distribution companies are also subject to tariff regulation. At present, the tariffs in this sub-sector of the Russian power industry are determined on the basis of economically justified expenses.

Sales of heat are subject to tariff regulation by regional regulating authorities and the FAS which have historically based tariff calculations on economically reasonable expenses. Pursuant to this method heat tariffs are calculated on the basis of the costs incurred by a power generator to generate heat for the relevant period, including the cost of fuel, raw materials, equipment repairs, employee wages and social disbursements, depreciation and amortisation, income taxes and other expenses. Tariffs, which are adjusted annually, may not reflect actual or increased costs during the year to which they apply.

If tariffs established by Russian regulatory authorities fail to provide adequate economic returns to the Group's companies or are set at rates that are not sufficient to cover related expenses due to social or political reasons, or if the Group is required to sell a higher portion of planned output of electricity under Regulated Contracts in the future, the Group's business, financial condition, results of operations and the value of the Notes may be materially adversely effected.

Customers may delay or fail to make payments to the Group for the electricity, capacity and heat supplied by it and, in the case of electricity and capacity supply contracts on the wholesale market

entered into by the Group, only limited sanctions apply to such customers

The Group sells a portion of its electricity and capacity on the wholesale market under Regulated Contracts. See "*Industry—Overview of the Electricity Market in Russia*". The customers under these Regulated Contracts are assigned by ATS to certain generators on the basis of several factors, including forecasts of electricity generation and consumption. ATS is entitled to terminate the electricity supply to a non-paying customer only if the Market Council decides to deprive it of the status of a participant of the wholesale market, for example, for a repetitive breach of payment obligations under supply contracts.

Many of these non-paying customers are regional electricity retail companies, which resell the electricity that they receive from an electricity generation company to end-consumers. As a result, regional electricity retail companies are highly vulnerable to the ability or willingness of their end-consumers to pay. Some of these end-consumers, including individuals or state and municipal enterprises and institutions, have in the past been late with payments, or have failed to pay at all, for the electricity supplied to them, in part due to their poor financial condition and also as a result of regulatory and technical constraints.

Payment delays and failures at the end-consumer level or the regional retail company level could continue to increase in the future. If the Group is faced with any such payment delays or failures, and, in particular, if such payment delays or failures continue for a protracted period due to the inability of the Group to terminate or suspend its supply of electricity unilaterally, its business, financial condition, results of operations, prospects and the value of the Notes may be materially adversely affected.

The Group has historically sold, and will continue to sell in the near future, the majority of the Group's heat through utilities and housing and communal enterprises. Even if customers do not pay for the heat provided, the Group may not be able to suspend or terminate the provision of heat, given the severe winter weather conditions in the regions where the Group operates and its social obligation to maintain adequate supplies of heat during such cold weather. The Group may therefore face difficulties in collecting overdue accounts receivable, which could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

There remains uncertainty with respect to the further liberalisation of the Russian power sector, including as to the extent and continued availability of tariffs in some areas of operation

The Russian power industry has undergone substantial restructuring since 2001. See "*Industry—Overview of the Electricity Market in Russia—Generation Companies*". This restructuring aimed to achieve, among other things, changes in the regulatory framework of the power industry, the development of competitive electricity and capacity markets, and the gradual expansion of those competitive markets, with the goal of reducing the percentage of output subject to regulated prices (tariffs).

From 1 January 2011, the liberalisation of the Russian wholesale electricity and capacity markets, in which electricity and capacity prices are established on the basis of supply and demand, was deemed to have been completed. However, a substantial geographical part of the wholesale capacity market (the second pricing zone) remained subject to certain pricing regulation until the introduction of full liberalisation of pricing starting from 1 May 2016. Furthermore, certain exceptions exist with respect to the Republic of Komi, Arkhangelsk and Kaliningrad Regions, Republic of Karelia, regions of North Caucasus, the Republic of Tuva, Buryatia and the Far East, which remain subject to tariffs. Also, the process of liberalisation did not extend to household electricity prices, which remain subject to tariffs, nor is the creation of a free market for transmission, distribution and dispatch services currently contemplated.

In addition, capacity and electricity are treated as separate products and may be sold under unregulated contracts at unregulated prices and/or under Regulated Contracts. According to current regulations, Regulated Contracts must be concluded for the sale of electricity and capacity to suppliers whose

customers are individuals or entities that are treated as individuals. The Group is bound by these rules to enter into agreements for the sale of electricity and capacity at tariffs. Although a relatively small portion of the Group's revenue is derived from sales of electricity under tariffs (14% of revenue from electricity sales for the year ended 31 December 2020), such sales may not provide adequate economic returns to cover related expenses incurred by the Group. Furthermore, the scale of the competition has increased significantly in recent years as a result of the reduction in the volumes of electricity and capacity covered by Regulated Contracts in the course of the power sector reform (see "*Industry— Overview of the Electricity Market in Russia*" and "*Industry— Overview of the Electricity Market in Russia—Generation Companies*"). As a result of these significant changes and notwithstanding the substantial completion of the restructuring, the Russian power market continues to operate in conditions of relative uncertainty and price volatility, including as to the extent and impact of the continued operation in some areas of tariffs. The Group may, therefore, be subject to a large number of operational, business, technical, managerial, regulatory and other risks, which are currently difficult or impossible to predict and which are not within its control. The changes described above and the uncertainty associated with them may have a material adverse effect on the business, financial condition, results of operations and prospects of the Group and the value of the Notes.

Tariff setting will continue to apply to certain markets and regions in which the Group operates and no assurance can be given that social and other factors will not cause such tariffs to be set at rates that are not sufficient to cover some of the Group's expenses or that the Group will be able to obtain Government subsidies to cover its losses, which could have a material adverse effect on the business, financial condition, results of operations, prospects of the Group and the value of the Notes.

Some of the Group's assets are ageing and, therefore, are more costly to maintain, susceptible to technical accidents or emergencies, and require modernisation

A number of the Group's generating assets were commissioned before 1991. While virtually all of the Group's installed capacity is operational, some of its boilers and turbines have reached the end of their planned useful life (i.e., the period during which plants and equipment can be used before requiring capital overhaul). Approximately 57% of the Group's heating pipelines are beyond their useful life after 30 years of use. The principal cause of damage to the Group's heat pipeline networks is internal corrosion caused by a high proportion of dissolved oxygen and the low pH level in the delivery and make-up of water used in the Group's pipelines. In addition, the automation and control systems in the Group's generation facilities are outdated.

Ageing generating assets require increased maintenance expenditures and related costs, and may be more likely to fail. As a result, the Group's power operations may be subject to partial or total interruption caused by equipment failure or accidents. Such events would lead to additional expenses associated with unplanned and often urgent repairs to the Group's generating assets, the depletion of available spare parts which may be difficult to produce or obtain given the age of the Group's equipment, and the reduced efficiency of the Group's generating assets. The Group is also responsible for supplying heat and, indirectly, electricity to residential customers and any interruption or failure to supply electricity and especially heat to such customers during the winter season may have a negative impact on the Group's reputation. In addition, as a result of operating such outdated facilities, the Group may incur increased environmental, health and safety expenses. Any unplanned faults or damages requiring repair, or the Group's inability to implement the Group's modernisation programme effectively or any delays or additional costs incurred in the Group's modernisation programme could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

Some of the Group's coal processing plants are over 50 years old and have been frequently upgraded. These coal processing plants are operating beyond their original expected lives and will have to be replaced in the near future. In addition, some of the Group's coal mining equipment is from the 1960s and requires modernisation and regular maintenance in order to be kept in good operating condition and to meet environmental and safety requirements. As a result of their age, the Group's coal processing plants and coal mining equipment may be particularly susceptible to operational failures and accidents,

which, should they occur, could lead to disruptions in the Group's operations and injury to workers and the environment as well as necessitate the incurrence of additional expenses in connection with repairs. For example, in April 2021, equipment breakdown at Yalevsky Mine resulted in decrease of coal production by 157 thousand tonnes. Upgrading of machinery and equipment requires substantial capital expenditures (see "*—The Group's operations require substantial capital expenditures and inability to obtain additional financing or receive approvals and permits for, or otherwise to successfully implement, the Group's main capital investment projects could affect the Group's financial condition and results of operations*"). In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, Coal Division's capital expenditures incurred amounted to U.S.$201 million, U.S.$723 million, U.S.$972 million and U.S.$802 million, respectively. Although the Group will continue to modernize its assets base, there can be no assurance that the Group will not experience any material operational failures or accidents in the future, which could have a material adverse effect on the Group's business, results of operations, financial condition and the value of the Notes.

As at 30 June 2021, the average age of the Group's railcar fleet was 7.3 years, with the useful life of railcars between 22 and 36 years. Although the Group's railcar fleet is relatively new, the Group's railway assets require regular maintenance and modernisation. In particular, the Group is required to regularly upgrade its railcar fleet by purchasing new railcars and performing the maintenance repairs. The prices for railcars are variable, for example, due to the change in the prices for principal components and materials used in the manufacture of rolling stock. The Group may not be able to arrange for sufficient supplies of new rolling stock on commercially acceptable terms, which could adversely affect the Group's business, results of operations, financial condition and the value of the Notes. In addition, the maintenance and modernisation of the railway assets entails many potential risks, including work stoppages and interruptions resulting from adverse weather conditions, unforeseen engineering difficulties, environmental and geological problems, unanticipated cost increases and claims, any of which could give rise to delays or cost overruns. If the Group is unable to make expenditures required for the maintenance and modernisation of its railcars and other railway assets at an acceptable cost or at all, its operations may be adversely affected by equipment failures and accidents attributable to insufficient modernisation of the rail infrastructure and related assets which in turn could have a negative impact on the Group's business, results of operations, financial condition and the value of the Notes.

Unregulated prices for electricity and capacity may fluctuate or be subject to limitations

The gradual deregulation of Russia's power market has been for the most part completed, except for household (retail) electricity consumption, which is priced at regulated tariffs. Power generators are obliged to supply electricity to guaranteeing suppliers, in amounts that match household electricity consumption, at regulated prices, and they are able to sell the rest of the electricity they generate and their available capacity at unregulated prices that are set using marginal pricing principles. These pricing principles aim to ensure that all producers sell their products at a margin. Market prices for capacity are set at six-year ahead capacity auctions based on, among other factors, a capacity demand curve set by the FAS and projected capacity demand. There can be no assurance, however, that unregulated market prices will be sufficient to cover the Group's electricity generation costs or its costs incurred in the maintenance of its capacity.

Further, price fluctuations on the wholesale electricity market are monitored by the state authorities. If the magnitude of a price increase exceeds predetermined levels within specified periods of time (three and seven days), a protective price limiting mechanism may be applied. At the first stage of this procedure, the price smoothing mechanism is applied by Joint-Stock Company "Trading System Administrator of Wholesale Electricity Market Transactions" ("**ATS**") for a period of seven days. In such cases, the ATS does not take into account price bids exceeding a certain level determined by the ATS for the calculation of the competitive market price. As a result, the average weighted price is set at a lower level but generators are paid a price no lower than that indicated in their bids. If this does not lead to the required decrease in pricing levels, state regulation of prices is introduced in individual price zones of the wholesale electricity market for a period of up to 30 days. During such period, marginal

pricing is temporarily substituted by the payment for electricity at prices capped at pre-approved, regulated price levels. Upon the expiration of the 30 day period, pricing on the wholesale electricity (capacity) market returns to the general procedure. Although the protective price limiting mechanism has been rarely applied historically, should it be introduced in the electricity industry, the financial results of the Group may be adversely affected by the lower realised electricity prices that the Group will have to apply. If unregulated prices for electricity or capacity are not sufficient to cover electricity generation or capacity maintenance costs, including as a result of the application of the price smoothing mechanism or the introduction of state regulation, the Group's business, financial condition, results of operations and the value of the Notes may be materially adversely affected.

Increased regulations associated with climate change and greenhouse gas emissions may give rise to increased costs and may adversely impact demand for the Group's products, the Group's business and markets

Through the Group's Coal Division, the Group is a major producer of carbon-related products such as coal. A major by-product of the underground mining of coal is methane (CH_4) and a major by-product of coal burning in power generation is carbon dioxide (CO_2), both of which are considered to be greenhouse gases and generally a source of concern in connection with global warming and climate change.

In December 2015 at the Paris climate conference, 196 countries adopted the United Nations Framework Convention on Climate Change (the "**Paris Agreement**"). The agreement sets out a global action plan to avoid climate change. Russia ratified the Paris Agreement and it came into force on 6 November 2019. Russia's target as part of the Paris Agreement is to reduce greenhouse gas emissions to 70-75% of 1990 levels by 2030, provided that the maximum absorption capacity of forests is reached. Furthermore, the Russian Federation shall develop a long-term plan to reduce greenhouse gas emissions and shall establish a strategy on adaptation to climate change. In 2015-2017, the Ministry of Natural Resources and Environment has approved a number of methodology guidelines for the quantification of the amount of greenhouse gas emissions in Russia. As part of implementation of the Paris Agreement, in 2021, the Russian Parliament adopted a new law on state regulation of greenhouse gas emissions, which will become effective from 30 December 2021. This law has established target limits for greenhouse gas emissions, general rules and guidelines for emitters and introduce permits for greenhouse gas emissions.

Further Russia's steps on implementation of the Paris Agreement could restrict the Group's operations and/or impose significant costs or obligations on the Group, including requiring additional capital expenditures, modifications in operating practices, and additional reporting obligations. These regulatory programmes may also have a negative effect on the Group's production levels, profit and cash flows and on the Group's suppliers and customers, which could result in higher costs and lower sales. Finally, the Group notes that even without further legislation or regulation of greenhouse gas emissions, increased awareness and any adverse publicity in the global marketplace about the greenhouse gasses emitted by companies in the power generation industry could harm the Group's reputation and reduce customer demand for the Group's products. See also "*—The Group's business and prospects will be materially adversely affected if the Group is not able to maintain its competitive position in the domestic and international coal industry*".

In 2020, the European Union also launched the "European Green Deal", which is a set of policy initiatives by the European Commission with the overarching aim of making Europe climate neutral in 2050. As part of the "European Green Deal", the EU is deliberating a carbon border tax, which would be imposed on greenhouse-gas pollution produced by manufacturers outside the region that export products into the EU. In July 2021, European Commission presented a legislative proposal on introduction of new EU carbon adjustment mechanism, which, *inter alia*, contemplates introduction of a carbon border tax with effect from 2026, which will be paid by EU importers purchasing products with high-risk of carbon leakage such as iron, steel, cement, fertilisers, aluminium and electricity. Once implemented, this regulation could adversely affect demand for EU exports of the in-scope products by major Russian industrial groups and could drive them to reduce carbon intensity of their products. As a

result, they may choose to consume less coal and/or electricity for industrial use from carbon-intensive producers such as the Group. In addition, the EU carbon adjustment mechanism regulation may drive other countries, including Russia, to adopt carbon pricing policies requiring local producers to pay for carbon leakage in its activities. Additional regulations that drive industrial producers to lower their carbon emissions may drive down demand for coal and high-carbon electricity, which could adversely affect the Group's business.

Strengthened global response to the threat of climate change and further measures and policies introduced by governments to target the reduction of greenhouse gas emissions will likely reduce local demand for fossil fuels in the long-term, thus negatively affecting global demand for coal, oil and natural gas. The business of the portfolio companies in mining and natural resources depends on the demand for minerals, oil and gas. If existing or future laws, regulations, treaties, or international agreements related to greenhouse gas and climate change, including incentives to conserve energy or use alternative energy sources, technological breakthrough in the field of renewable energies or mass-adoption of electric vehicles trigger a structural decline in the worldwide demand for coal, oil and natural gas, the results of operations and business prospects of the portfolio companies in mining and natural resources may be significantly and adversely affected. As of result of these trends, climate-related risks could have a material adverse effect on the Group's business, financial conditions, results of operations and the value of the Notes.

Risks arise for the Group's business from technological changes in the energy sector

The energy market is subject to far-reaching technological changes, both on the supply side and on the demand side. For example, with respect to energy generation, the development of energy storage devices (battery storage in the megawatt range) or facilities for the temporary storage of power through conversion to gas (so-called "power-to-gas technology"), as well as other new technological applications, could lead to an increase in energy supply.

New technologies that increase energy efficiency and improve heat insulation (for example, through the direct generation of power at the consumer level) or enable improved refeeding (for example, by using power storage for renewable generation) or improve cost efficiency of power generation (for example, by using renewable sources) may lead to structural market changes. Such structural market changes may, for example, favour energy sources with low or zero CO_2 or, on the demand side, decentralised power generation (i.e., small-scale power plants within or close to residential areas or industrial facilities). See also "*—The Group's business and prospects will be materially adversely affected if the Group is not able to maintain its competitive position in the domestic and international coal industry*".

If the Group is unable to react to changes caused by new technological developments and any associated changes to the structure of the market, could result in decreased demand for the coal-fired energy, loss of customers and declining sales volumes, which in turn may have a material adverse effect on the Group's business, financial condition, results of operations and the value of the Notes.

The Group relies on forecasts and estimates in making its business decisions, including the Russian Government's forecasts of growth in electricity consumption in the Russian Federation

The Group's current investment programme for the Energy Division is generally based on the Russian Government's forecasts of growth in electricity consumption in the Russian Federation, including the forecasts of the Ministry of Energy, which in turn impacts the Group's programmes of commissioning of new facilities and decommissioning of obsolete ones. The formulation of this programme also involved the use of long-term forecasting models, which necessarily contain a number of assumptions, including assumptions relating to future electricity consumption patterns and prices. As a result of a high risk of inaccuracy that is inherent in these models, as well as practical difficulties in attempting to revise the investment programme once significant progress has been made in implementing investment decisions, the Group may be unable to generate expected returns on its investments.

In particular, if the actual growth in demand for electricity in the Russian Federation is lower than has

been forecasted, the load factor (a measure of the output of a power plant compared to the maximum output it could produce) for the Group's existing and newly commissioned capacity may not increase in line with current expectations. A low load factor amongst Russian power companies could lead to overcapacity in the market resulting in lower electricity prices. As a result, the Group may be unable to realise expected returns on its investments in facilities and infrastructure, which may materially adversely affect the Group's business, financial condition, results of operations, prospects and the value of the Notes.

Moreover, the power market is dependent on various factors that may significantly influence levels of generation, consumption, supply and demand, tariffs, market prices and other power market dynamics. The Group is required to make short-term and long-term forecasts and estimates regarding these power market dynamics in order to formulate certain of its business decisions. Any inaccuracy in these forecasts or estimates could have a material adverse effect on the Group's business, financial condition, results of operations, prospects and the value of the Notes.

The Group is dependent upon services provided by, and the assets and infrastructure of, third parties

The Group is dependent upon services provided by third parties, including the System Operator, to which the functions and assets of regional dispatch administrations of energy networks have been transferred as a result of the electricity sector reforms, and ATS, which manages the trading system within the electricity wholesale market. Many of these third parties are monopolies and alternative providers are not available. For a further description of the System Operator and ATS, see "*Regulation of Coal, Electricity and Transportation Industries—Regulation of Electricity Industry—Overview—Legal Structure of the Electricity Market*". A failure by the System Operator or ATS to provide the relevant services to the Group for any reason, or delays in providing their services, could result in a reduction in the amount of electricity generated or actually delivered by the Group, which could have a material adverse effect on the Group's business, financial condition, results of operations, prospects and the value of the Notes.

In addition, the Group depends on the electricity transmission and distribution services provided by PJSC "Federal Grid Company of Unified Energy System" ("**Federal Grid Company**") and regional distribution grid companies. The operation and maintenance of electricity transmission and distribution grids is very capital intensive and until recently the tariffs for the provision of electricity distribution and transmission services did not generate sufficient income to enable investment in the modernisation and development of the grids. This lack of investment, particularly when combined with the continuing increase in the electricity loads that the grids carry, may result in a decrease in the reliability of electricity supply and, in certain circumstances, in electricity outages. Also, the Group's ability to maximise its generation capacity and increase its electricity production depends on the ability of the transmission and distribution grids to handle greater volumes of electricity. In the past, the electricity transmission and distribution grids' carrying capacity in certain regions of the Russian Federation have proved to be insufficient, and there have been cases of delays and rejections of new requests made by customers for connection to the power supply system. Any disruption to electricity distribution or transmission, including forced outages affecting any of the transmission or distribution grids that the Group relies upon, as well as constraints on the ability of the transmission and distribution grids to handle greater volumes of electricity were to continue in the future, could result in decreased production volumes and sales, and therefore decreased revenues of the Group.

Furthermore, the Group may from time to time engage external contractors and it may not be able to monitor adequately whether its contractors are in full compliance with all applicable environmental, industrial, health and safety and licensing requirements, or obtain complete information about such contractors' actual operations. If any of the Group's key contractors terminates or is unable to perform its obligations, the Group may find it difficult or time- consuming to replace that contractor with an equally qualified contractor. Implementation of the Group's projects may be also affected by increases in the cost of equipment and materials and the availability of supplies of equipment. As a result, the implementation of the Group's investment programme may be materially adversely affected. Any such failure could have a material adverse effect on the Group's business, financial condition, results of

operations, prospects and the value of the Notes.

The international coal industry and export oriented logistics business are of cyclical nature, and the profitability and viability of the Coal Division and the Logistics Division, and the cash flows generated by these divisions, are largely vulnerable to fluctuations in the international market price and demand for coal

A significant part of the Group's revenue is derived from the sale of thermal and other types of coal and coal products. In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the Group's revenue from sales of coal amounted to U.S.$2,330 million, U.S.$3,799 million, U.S.$4,877 million and U.S.$5,706 million. As a result, the Group's business and operating results are substantially dependent on domestic and international demand and market prices for coal.

Due to their cyclical nature, coal markets experience alternating periods of increased demand coupled with insufficient production and infrastructure capacity leading to higher prices and margins and periods of excess supply leading to lower prices and margins. The Group's business may be affected by a decline in demand for coal and a reduction in coal prices in the export or local markets due to oversupply or a rise in demand for other types of fuel and abnormal weather conditions.

The primary consumer of thermal coal is the power industry, both domestically and on the international coal market. The level of coal consumption by power companies, in turn, depends largely on the demand for electricity from key power consumers which include, among others, producers of steel, aluminium and heavy machinery, and the oil and gas production and refining industry as well as residential consumers in the countries to which the Group exports its coal.

Furthermore, the demand for coal is also affected by the cost of alternative fuel such as natural gas and the existing trend towards removing coal fired energy generation in order to reduce carbon emissions. See also "*—The Group's business and prospects will be materially adversely affected if the Group is not able to maintain its competitive position in the domestic and international coal industry*" and "*—Increased regulations associated with climate change and greenhouse gas emissions may give rise to increased costs and may adversely impact demand for the Group's products, the Group's business and markets*".

Any slowdown in the construction of coal-fired power plants, shutdowns of existing power plants and/or any increase in the investment in, or use of, power plants fuelled other than by coal could have a material adverse effect on the Group's future prospects.

Coal prices are also subject to numerous other factors beyond the Group's control, including, but not limited to (i) the stability of the economies in major coal importing and exporting countries; (ii) fluctuations in demand for coal fired power; (iii) increasing use of alternative fuel sources (as well as the availability and price of alternative fuels) or reliance on clean power generation; (iv) unseasonably warm or cool temperatures or other weather conditions; (v) production cost levels in major mining regions; (vi) governmental programmes for the construction of additional coal-fired generation facilities; (vii) strengthening of environmental regulations, including those aimed to combat anthropogenic climate change ("**global warming**"), and coal quality requirements; (viii) the access and proximity to transportation infrastructure, and capacity and cost of transportation; and (ix) domestic and foreign governmental policies, development strategies, including those related to energy, coal and logistics industries, regulations and taxes.

Discoveries of coal resources of low-ash, low-sulphur coal in closer proximity to the Group's customers could create price competition for the Group and result in downward pricing pressures or the loss of customers. In addition, an economic downturn in China, India or Asia as a whole or a change in the Chinese government policy restricting coal exports and the operational time of local coal mines, lower ocean freight rates that improve the overall price competitiveness of U.S. coal or increased distribution of Australian, South African or U.S. coal can further reduce world coal prices and thus adversely affect the Group's business, financial condition, results of operations and the value of the Notes.

The price of coal is also affected by macro-economic factors such as currency volatility, inflation rates, interest rates, global and regional supply and demand dynamics as well as economic conflicts, such as trade wars and economic sanctions, and general global economic and political conditions. Thermal coal prices have experienced significant fluctuations over the past decade. As a result of a five-year period of growing supply between 2011 and 2016, thermal coal export prices started declining gradually. Coal prices spiked in late 2016 and remained strong through 2018. This was primarily driven by higher than expected exports of coal to China and India due to domestic supply constraints. However, international prices for coal started declining in 2019 amid falling gas prices and weakening demand for coal in the US and Europe due to reduced coal generation and warmer weather.

In 2020, global coal demand fell by 5% from 2019 levels which was the most since the Second World War, according to the International Energy Agency (the "**IEA**"). The largest fall in demand was attributable to the power sector and industrial applications. Measures to slow the spread of COVID-19, notably in the first half of 2020, resulted in an unusual drop in electricity demand. This in turn significantly affected the use of coal for power generation – a trend that was compounded by low natural gas prices. Amidst lockdowns across the globe imposed in response to the COVID-19 pandemic, as well as extended coal-to-gas switching and protectionist measures, coal prices hit historical lows for the first time since late 2015. By the end of 2020, amid revival of economic activity following the lifting of lockdown restrictions and increasing gas prices, coal prices recovered and were record high by July 2021. See "*—The global COVID-19 pandemic and the disruption caused by various countermeasures to reduce its spread, could have a material adverse effect on the Group's business, financial condition and results of operations*" for more details.

Approximately 50% of the Group's coal export agreements are index linked and therefore coal price fluctuations affect the Group's results of operations. An extended or substantial decline in global and domestic prices of coal and, in turn, the prices for the Group's coal, may adversely affect the Group's business, financial condition, results of operations and the value of the Notes.

Furthermore, in the past, the Group was subject to certain antitrust measures imposed by the FAS aimed at restricting the ability of the Group to affect pricing in Russian thermal coal market. If the Group will be recognised by the FAS as having a dominant position in the domestic thermal coal market, it will have to obtain the FAS approval prior to increasing domestic prices for thermal coal, however, there is no assurance that such approval will be granted. Inability of the Group to increase the prices for thermal coal in domestic market could adversely affect the Group's revenues from coal.

Due to the cyclicality of the industry, markets may further experience renewed downward pressure on prices due to a reduction in demand for coal or other factors affecting coal prices. In addition, given that a substantial portion of the Group's coal sales are international, if global economic conditions were to worsen or, in particular, if economic growth in the Asia-Pacific or Atlantic regions were to decline significantly, the Group's business, prospects, results of operations, financial condition and the value of the Notes would be materially adversely affected.

The Group's operations may also be adversely affected by a decrease in the load (or commissioning) of thermal power plants and a drop in electricity prices in the wholesale market due to market (lower demand, excess supply), environmental (high water level, average annual temperature) and regulatory factors. See also "*—Any downturn in demand from the Russian power generation industry or other factors affecting the Russian power industry may have a material adverse effect on the Group's business, financial condition, results of operations and future prospects*" and "*More stringent environmental laws and regulations or more stringent enforcement of these laws and regulations may decrease demand for coal, result in fines and increase the Group's operating costs*".

Any downturn in demand from the Russian power generation industry or other factors affecting the Russian power industry may have a material adverse effect on the Group's business, financial condition, results of operations and future prospects

Approximately 53% and 52% of the Group's volumes of coal sold for the six months ended

30 June 2021 and the year ended 31 December 2020 was sold to domestic power generation companies, including approximately 37% and 33% to the Energy Division. Any sustained downturn in the Russian power industry could have a material adverse effect on the Group's business and results of operations.

Any slowdown in the modernisation or construction of coal-fired power plants or any increase in the investment in, or use of, power plants fuelled other than by coal could have a material adverse effect on the Group's future prospects. In addition, any decrease in demand from Russian power generation companies may require the Group to sell its coal to other industries in Russia or to decrease production of brown coal at some of the Group's mines, which may lead to a decrease in revenues, which would have a material adverse effect on the Group's business, future prospects and the value of the Notes.

The Group's business and prospects will be materially adversely affected if the Group is not able to maintain its competitive position in the domestic and international coal industry

The Group competes with other domestic and international thermal coal producers primarily on price, production capacity, coal quality and characteristics, transportation capability and costs.

The environment for thermal coal sales is competitive. The Group faces competition from other thermal coal mining companies in all areas of its operations, including the acquisition of mining licences. The Group also face varying degrees of competition in each of its markets from providers of alternative fuels, such as oil, natural gas and clean energy sources.

Some of the Group's international competitors have significantly greater financial, marketing, distribution and other resources than the Group. In addition, any form of cooperation among the Group's competitors may represent a threat to the Group's operations to the extent they are larger, better-capitalised, benefit from economies of scale and/or better relationships with state and local authorities than the Group or have access to larger coal reserves than the Group. The international trade environment has also seen a recent tendency towards state support for domestic producers.

There can be no assurance that the Group will continue to compete successfully with any improvements in the quality or quantity of coal sold by the Group's competitors in the coal industry or that the Group will be able to ameliorate any deterioration in the quality or quantity of its own coal reserves. In addition, no assurance can be given that the Group will be able to compete effectively with global providers of alternative fuels. Furthermore, the development of renewable energy market globally and in Russia supported by international and local regulations and policies as well as a change in consumers' attitudes to coal-fired power generation, could lead to increased use of green energy in Russia and globally. Moreover, the renewable energy is gradually becoming more cost efficient and, thus, more competitive compared to more traditional sources of energy. If these trends continue, they could result in lower demand for coal and coal-fired energy and, accordingly, the loss of customers and declining sales volumes. See also "*—Increased regulations associated with climate change and greenhouse gas emissions may give rise to increased costs and may adversely impact demand for the Group's products, the Group's business and markets*".

These and other competitive factors could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

A significant reduction in purchases by the Group's largest customers could adversely affect the Group's coal revenues

The Group's largest customers include mostly power generation companies and industrial companies. For example, the Group sells coal internationally to Formosa Plastics Group, TNB Fuel Services, Tohoku EPC, Zhejiang Energy International, ArcelorMittal Sourcing, Vin Tan 4 TPP, KOWEPO and many other consumers and the Group also sells coal domestically to its Energy Division and third-party large power generation companies such as RusHydro, Unipro (owned by Uniper SE), Inter RAO and TGK-14.

For the six months ended 30 June 2021, the Group's five third-party domestic power generation

customers accounted for approximately 50% of the Group's external domestic sales volumes and 10 of the Group's largest export customers accounted for approximately 32% of the Group's external international sales volumes. No assurance can be given that the Group will be successful in extending existing coal supply contracts or entering into new contracts with these and other customers. Moreover, the Group's customers may choose to develop facilities that do not rely on coal for power generation. See "*—More stringent environmental laws and regulations or more stringent enforcement of these laws and regulations may decrease demand for coal, result in fines and increase the Group's operating costs*". If one or more of the Group's largest export customers were to significantly reduce their coal purchases from the Group, or if the Group is unable to sell coal to them on terms as favourable to the Group as currently set forth in the Group's existing coal supply contracts, its total revenue and profitability could be materially adversely affected, particularly as the revenues the Group receives per tonne of coal it exports are higher than for its domestic coal.

In addition, the Group's coal supply agreements generally contain provisions that allow the Group's customers to suspend or terminate the agreement if the Group is unable to deliver the quantity and quality of coal specified or is affected by events beyond the Group's reasonable control, including strikes, riots, machinery breakdowns and changes in governmental regulations. Most of the Group's coal supply agreements provide that the Group is obligated to supply coal in the quantities specified by the customer up to the maximum contractual commitment. These agreements also contain provisions requiring the Group to deliver coal meeting quality thresholds for certain characteristics, including calorific value, moisture content, sulphur content and ash content. The Group's failure to meet these specifications could result in economic penalties, including price adjustments, rejection of deliveries or termination of the contracts. In such event the Group's business, financial condition, results of operations and the value of the Notes may be materially and adversely affected.

JSC "Russian Railways" cannot fully satisfy Russia's coal transportation requirements. Insufficient railway capacity, significant increases in tariffs and the disruption of transportation services could materially reduce the profitability of the Group's operations

The Group principally transports coal by rail from its mines to domestic customers or ports for onward seaborne deliveries to export customers. The Group, as the operator of one of the largest railcar fleets in Russia, uses railroads for providing transportation services to third parties through its Logistics Division.

The Group's production assets focused on the domestic market are primarily located close to the Group's key customers whilst those focused on exports are located nearby the key railways leading to seaports. In 2020, the volume weighted average distance of rail deliveries to the Group's domestic customers was approximately 674 kilometres. During the same period, the volume weighted average distance of the Group's deliveries to export destinations travelled by rail was 4,350 kilometres. Although the Group satisfies approximately 80% of its requirements for rolling stock through the Logistics Division, it uses third party railcar operators for the remainder of rolling stock and, most critically, relies on the Russian rail freight network in order to reach its sales markets. The Russian federal railway system, which is owned and operated by the state-owned company JSC "Russian Railways" ("**Russian Railways**"), from time to time cannot fully satisfy Russia's eastward coal transportation requirements, and shortfalls between the capacity and demand for transportation services, particularly during seasonal periods when preferential access to railway capacity may be granted to other industries, exist in certain areas of the Russian Federation. The Group has at times experienced delays in securing necessary capacity or railcars from Russian Railways. No assurance can be given that the Group will be allocated an adequate number of railcars, or that the Group will not experience any delay or interruption in transporting the Group's coal as a result of insufficient railway transport capacity or railcars. Any such occurrence could adversely affect the Group's business and results of operations.

Railway services, which mostly consist of fees payable to Russian Railways for access to the federal railway system, represented 59%, 59% and 60% of the Group's total distribution costs in the years ended 31 December 2020, 2019 and 2018, respectively, and 56% and 60% in the six months ended

30 June 2021 and 2020, respectively.

The Russian Government sets domestic rail freight prices and the terms of transportation, including the terms related to the type of rolling stock to be used for transportation of certain types of cargo and the estimated minimum tonnage for the purposes of determining applicable tariffs. These rail freight prices are subject to annual adjustment based on, among other factors, inflation and the funding requirements of Russian Railways' capital investment programme, which is in turn affected by the acute need to upgrade track infrastructure and passenger- and cargo-handling facilities. Increases in rail transportation costs, or the Group's inability to manage the Group's rail requirements to secure discounts that have otherwise been available to the Group, may adversely affect the Group's ability to compete successfully in the market, and may affect the competitive position of the Group's thermal coal as compared to other suppliers of thermal coal or alternative fuel sources. Higher rail transportation costs may also lower the profitability of transportation services offered to third parties by the Logistics Division. Railway tariffs in Russia are set by the FAS and are implemented by Russian Railways. In 2020, railway tariffs were indexed by 3.5%. Starting from 1 January 2021, railway tariffs have increased by an additional 3.7%.

The Government provides subsidies and other support to the Group to compensate it for the adverse effects of tariff regulation. If the Government ceases to subsidize the cost of freight transportation in Russia in the future, any resulting increase in the Group's railway transportation costs could have a material adverse effect on the Group's results of operations.

The failure of other cargo shippers to comply with the numerous and often complicated rules and technical conditions set by Russian Railways, particularly, with respect to maintaining railcars in working condition, seasonal bottlenecks resulting from frozen cargo in railcars and the timing for uploading and delivering railcars, may substantially delay deliveries of the Group's coal and adversely impact the transportation services of the Logistics Division. Furthermore, the underdevelopment of the railway transportation infrastructure in certain regions of the Group's operations and on a number of the Group's transportation routes has in the past adversely affected and may in the future limit the Group's ability to transport coal and third-party loads. In addition, Russian Railways' ageing assets may be subject to an increased likelihood of failure. Slowdown in train movements in the winter months has a negative impact on the state of bulk cargo as freezing occurs due to low temperatures, which further reduces the rate of discharge in ports and leads to congestion of railcars in the railway network. As a result, the deliveries of the Group's coal products and third party loads may be subject to interruptions and delays caused by Russian Railways' equipment failure or accidents for which the liability of Russian Railways may be limited. Such events could lead to additional costs associated with the payment of fines for late deliveries or a need to secure alternative, often more expensive, transportation methods. Any such transportation service interruptions or additional costs incurred could adversely affect the Group's business and results of operations.

Furthermore, the limited capacity of the railways leading to the key ports in the Russian Far East is a critical impediment to the further development of port infrastructure and the entire transportation system in the Russian Far East. Increasing the capacity of the ports in the Russian Far East is one of the key issues identified in the "Transportation Strategy of the Russian Federation up to 2030". According to this programme, existing railway sections must be reconstructed, the logistics structure must be improved and the actions of the cargo owners, the ports' management, Rosmorport, a state-owned enterprise established for seaports management, and Russian Railways, must be coordinated in an efficient manner. In 2019, Russian Railways announced the beginning of the second phase of the railway infrastructure development programme, the purpose of which is to increase the capacity of the Baikal-Amur and Trans-Siberian Mainlines located in the Russian Far East by 2024. However, there can be no assurance that the development projects by Russian Railways will proceed according to existing plans, particularly in light of international sanctions against Russian companies and individuals. In addition, there is acute competition among Russian coal exporters for rail access to seaports.

In May 2020, the Russian Government introduced direct quotas for the volume of export shipments of coal by rail from the Kuzbass deposits in the direction of seaports and land border points in the Russian Far East. The Ministry of Energy of the Russian Federation approves on a monthly basis the volume of

quota for each coal shipper from the Kuzbass deposits according to a formula that takes into account the current capacity of the Baikal-Amur and Trans-Siberian Mainlines, ports and border points of the Russian Far East, as well as the volume of coal shipments that each of the shippers effected in prior periods towards the west from Kuzbass. The new procedure affects, among other things, the shipments of coal produced by the Group. Despite the fact that the introduction of this procedure has not led to a reduction in the Group's ability to ship coal, there can be no assurance that future changes in the parameters of the procedure, such as total capacity of the Baikal-Amur Mainline, the Trans-Siberian Mainline and the ports of the Russian Far East, which are beyond the Group's control, will not lead to a reduction in ability to ship coal, which will result in the need to search for alternative volumes to fully load the capacities of the Group's ports, any of which may have a material adverse effect on the Group's revenues, results of operations, prospects and the value of the Notes.

Insufficient port capacity and service disruptions could materially reduce the profitability of the Group's operations

The Group's export sales are predominantly seaborne. Any limitations on, or disruption of, the port services the Group uses, whether as a result of limited port capacity or other events, could impair the Group's ability to supply coal to the Group's export customers and thus adversely affect the Group's results of operations. Furthermore, severe weather conditions may force the seaports of the Group rely on to suspend operations, thereby adversely affecting the Group's ability to deliver coal to the Group's customers in a timely manner or increasing the Group's transportation costs, all of which could adversely affect the Group's business and results of operations.

The Group's export sales to the Asia-Pacific region are made, and are expected to continue to be made in the future, primarily via the Group's bulk coal terminal at Vanino Port and Maly Port. As a result, the Group is dependent on the successful operation of these ports, weather conditions at their location, the ability of Russian Railways to provide sufficient railroad transmission capacity in the direction of these ports and other factors. Severe weather conditions and any failure to operate the Group's terminals at Vanino Port and Maly Port successfully may substantially undermine the Group's ability to use the Group's terminal at Vanino Port and would adversely affect the Group's business and results of operations.

The Group cannot assure investors that such transportation services will not continue to be disrupted, or that transportation costs will not increase in the future, and a prolonged or significant disruption in, or increase in the costs of, the transportation services that the Group relies on may materially and adversely affect the Group's business, financial condition, results of operations and the value of the Notes.

The Group's coal operations are subject to mining production risk

The exploration, development and production of coal involve a significant degree of uncertainty and risk, both in terms of operational performance and costs. The effect of this degree of uncertainty and risk on the Group's operations can be difficult to predict and is often influenced by factors outside the Group's control.

The Group's operations are subject to hazards and risks normally associated with the exploration, development and production of natural resources, such as (i) a deterioration in the quality or thickness of coal seams; (ii) geological uncertainties and unanticipated ground and water conditions, including unexpected rock formations and abnormal pressures; (iii) the presence of water inflow and the risk of flooding; (iv) methane content, the likelihood of spontaneous combustion and underground fires; (v) environmental hazards, including the discharge of pollutants; (vi) accidents associated with the operation of large mining and rock transportation equipment, including the risk of collapse of an opencast wall or underground mine; (vii) accidents associated with the preparation and ignition of large-scale opencast blasting operations; (viii) industrial accidents, electricity stoppages, equipment or asset failures and risks associated with the use of explosive materials; (ix) labour disputes or the failure of suppliers and contractors to fulfil their obligations; (x) uncertainty surrounding the process for obtaining

necessary permits and authorisations (e.g., environmental, land use and fire safety permits); and (xi) seismic activity, ground subsidence and the impact of natural disasters, including earthquakes, droughts, floods and/or extreme weather conditions.

The occurrence of one or more of these events may result in the death of, or personal injury to, miners, the loss of mining equipment, damage to or the destruction of mineral properties or production facilities, the closure of mines, additional expenses (including as a result of clean-up costs) and monetary losses, delays and unanticipated fluctuations in production, environmental damage, administrative fines and potential legal liabilities.

Should any of these events occur, they may have a material adverse effect on the Group's business, prospects, results of operations, financial condition or the value of the Notes.

The Group's licences may be suspended, amended or terminated prior to the end of their terms or may not be renewed

The Group's business depends on the continuing validity of its licences and permits, its compliance with the terms of its licences and permits and the Group's ability to secure new licences and permits should this be required by its operations. The licences that provide the Group with the right to use or mine natural resources currently expire at various times over the next 20 years. See "*Business*" for the dates of expiry of the Group's mining licences.

The acquisition of a licence for a new mine and for an extension in area or depth of an existing licence requires interested parties to participate in an open auction for the assets. Regulatory authorities exercise considerable discretion in respect of the issuance and renewal of licences and permits and, in certain circumstances, state authorities in Russia may seek to interfere with the issuance of licences, for example by initiating legal proceedings alleging that the issuance of a licence may violate the civil rights or legal interests of a third party. The licensing process may also be influenced by outside commentary, political pressure and other extra-legal factors. In the case of subsoil licences, unsuccessful applicants may bring direct claims against the issuing authorities that the licence was issued in violation of applicable law or regulation. If successful, such proceedings and claims may result in the revocation or invalidation of the licence. Moreover, legislation on subsoil rights is inconsistent, and the acts and instructions of licensing authorities and the procedures by which licences are issued are often inconsistent with existing legislation. Accordingly, licences that the Group requires may be invalidated or may not be issued or renewed. Licences that are issued or renewed may not be issued or renewed in a timely fashion or may impose conditions that restrict the Group's ability to conduct its operations or to do so profitably, which could have a material adverse effect on its business or results of operations.

The Russian Government and other authorised bodies periodically review the Group's compliance with the terms of its licences. In particular, the Group is required under licensing regulations and the terms of its licences to comply with numerous industrial standards, maintain production levels, recruit qualified personnel, maintain necessary equipment and a system of quality control, and make appropriate regulatory filings. In most cases, a licence may be suspended or terminated if the licensee does not comply with the "significant" or "material" terms of the licence. However, the Ministry of Natural Resources and Environment of the Russian Federation (the "**Ministry of Natural Resources and Environment**") has not issued any interpretive guidance on the meaning of "significant" or "material" terms of licences. These deficiencies result in the regulatory authorities, prosecutors and courts having significant discretion over the enforcement and interpretation of the law, which may be used arbitrarily to challenge the rights of subsoil licensees. As a result, while the Group seek to comply with the terms of its subsoil licences and believe that it is currently in material compliance with the terms of such licences, there can be no assurance that the Group's licences may not be suspended or terminated by a Russian court of law. In the event that the licensing authorities in Russia determine that the Group have failed to comply with a material term of a licence or licences, the Group may be required to suspend or cease its operations or to incur substantial costs in eliminating or remedying the violation, any of which could have a material adverse effect on the Group's business or results of operations.

In addition, any future changes in Russia's regulation of the coal industry may cause the Group or require the Group to incur additional costs. The current regulatory framework of the coal mining industry imposes certain costs on the Group, and any future regulations or legislation with respect to the coal mining industry could increase such costs or limit the Group's ability to produce or sell coal, and any such additional costs or failure to comply with any such regulations or legislation could have a material adverse effect on the Group's financial condition, results of operations and the value of the Notes.

The Group's mining operations may yield less coal under actual production conditions than indicated by the Group's coal reserve estimates

Coal reserves and resources data as of 1 January 2019 presented in this Prospectus was derived from the SRK Report. The estimates of the coal reserves as at 30 June 2021 and 31 December 2020 and 2019 were prepared by the Company's management taking into account the production volumes during the respective periods and were not reviewed and certified by qualified competent persons in accordance with the JORC Code and were not subject to any audit or verification by independent mining engineers. As a result, the Group cannot be certain that its estimated coal reserves are completely accurate. The accuracy of the Group's reserve estimates depends on the quality and reliability of available data, engineering, geological interpretation, subjective judgment and a number of assumptions. Such assumptions relate to, among other items, mining and recovery factors, production costs and coal prices, any of which may prove to be inaccurate.

Changes in such assumptions, as well as any subsequent mining, extracting and production, may result in material revisions to the Group's coal estimates. These estimates represent the amount of coal that the Group estimates can be mined, processed, transported and sold at prices at least sufficient to recover the Group's estimated total costs of production, any remaining investment and anticipated additional expenditures. Reserve engineering is a subjective process that involves estimating underground deposits of minerals that cannot be measured in an exact manner, and the accuracy of any reserve estimate is a function of the quality of available data and engineering and geological interpretation and judgment. The estimates of different engineers may vary.

Reserve estimates may require revisions based on actual production results. In addition, a sustained decline in the market price of coal may render mineral resources uneconomical to recover and ultimately result in a restatement of reserves. In the Group's analysis, the Group rely on third-party forecasts for coal prices which in turn depend on a number of assumptions that may prove to be inaccurate.

The Group undertakes periodic revisions to its reserve estimates based upon actual exploration and production results, depletion, new information on geology and fluctuations in production, operating and other costs and economic parameters such as coal prices. These factors may result in reductions in the Group's coal reserve estimates. If the actual amount of coal the Group recovers proves to be significantly less than indicated by the Group's technical mining plans, the total value of its mining asset base could be materially adversely affected, which would, in turn, have a material adverse effect upon the Group's business, prospects, results of operations, financial condition and the value of the Notes.

The Group's business and results of operations could be adversely affected if the Russian Government enacts protective trade restrictions on the export of the Group's coal products or the governments of countries in which the Group's export customers are located enact protective trade restrictions on the import of coal products

The Group currently exports its coal products to 48 countries, with the Asia-Pacific region and to a lesser extent the Atlantic Region being the Group's main export markets. The Group's business strategy contemplates increasing its market share principally in the Asia-Pacific region. The lack of Russian trade restrictions with respect to the export of coal products allows the Group to easily access such export markets. However, there can be no assurance that the Russian Government will not enact legislation that may prohibit or restrict or impose duties on the export of Russian coal to all or certain

foreign countries. Any such future protective trade measures may have a material adverse effect on the Group's business and results of operations.

Further, the global protectionism has grown in recent years and may have negative impact on global industry competitiveness and the development of international trade. Increasing trade barriers are transforming the dynamics of the global coal market, with global coal trade routes adjusting, growing localisation of trade within regions rather than international markets, as well as pressure on coal producers that rely on exports. The imposition of new or strengthening existing trade restrictions or import duties on coal by the governments of the countries in which the Group's export customers are located, in particular China, may have a material adverse effect on the Group's business and results of operations.

Trade barriers affect the demand for the Group's coal products by effectively increasing the prices for those products compared with domestically available supplies or fuel from other countries. An increase in existing trade barriers, or the imposition of new trade barriers, could cause a significant decrease in the demand for the Group's coal products in its principal export markets and force it to seek other markets which may be less profitable or have high entry costs, any of which could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects or the value of the Notes.

The Group's ability to raise financing to finance its investment and maintenance plans or to refinance its existing debt may be limited

The Group has ongoing operations requiring regular maintenance as well as investments to increase or support the current levels of production. Funding the investment and maintenance projects and refinancing the debt may be done from resources generated from operating activities or may require raising financing from external sources, such as capital and banking markets. See also "*—The Group's substantial indebtedness or the enforcement of certain provisions of its financing arrangements could have a material adverse effect on the Group's operational and financial condition*". There can be no assurance, however, that the external sources of financing may be available or available at an acceptable cost.

Market volatility similar to that which occurred in recent years may occur in the future and adversely impact the ability of the Group to borrow from banks or obtain financing through capital markets and may increase the cost of such borrowing or financing. See "*—The Russian banking system remains underdeveloped with a limited number of creditworthy Russian banks, and another banking crisis could place severe liquidity constraints on the Group's business*". Moreover, any escalation of geopolitical tensions could result in either a lack of liquidity or confidence by investors in the international markets, limiting the Group's ability to raise or refinance debt. In addition, any extension of existing sanctions programmes against Russia or the introduction of new sanctions may severely limit or shut down access to external financing for it. See also "*—The current political instability and related sanctions imposed by the U.S., the U.K., the EU and other countries, or the imposition of additional sanctions may have a material adverse effect on the Group's financial condition, results of operations and prospects".*

Furthermore, certain banks and financial institutions are becoming less willing to engage in financing of coal projects in connection with international agreements and climate change goals such as the Paris Agreement, which in turn restricts the ability of coal mining companies such as the Group to raise financing from such banks and financial institutions. See "*—Increased regulations associated with climate change and greenhouse gas emissions may give rise to increased costs and may adversely impact demand for the Group's products, the Group's business and markets*".

The Company is currently rated BB (stable) by Fitch, Ba2 (stable) by Moody's and ruAA- (stable) by Expert RA. However, it cannot be excluded that in the future, due to the factors and circumstances detailed above and/or further internal considerations by the rating agencies, negative rating actions may be taken against the Group thus restricting its ability to raise funds on reasonable terms. Any inability to raise financing at acceptable terms or at all could have a material adverse effect on the Group's

business, financial condition, results of operations, future prospects, the value of the Notes and ability to refinance existing indebtedness, including the Notes.

As at 30 June 2021, the Group had U.S.$6,354 million of borrowings (including bank borrowings and other loans received, and Russian bonds issued) and Net debt to LTM Covenant Adjusted EBITDA ratio of 2.56x. Among other things, the Group's indebtedness could potentially (i) limit its ability to fund its strategic capital expenditure programme; (ii) limit its ability to obtain additional financing; (iii) limit its flexibility in planning for, or reacting to, changes in the markets in which it competes; (iv) place it at a competitive disadvantage relative to its competitors with less indebtedness; (v) render it more vulnerable to general adverse economic and industry conditions; and (vi) require it to dedicate a substantial part of its cash flow to service its debt.

The Group's ability to make payments on its indebtedness depends upon its ability to maintain its operating performance at a certain level, which is subject to general economic and market conditions and to financial, business and other factors, many of which the Group cannot control. If the Group's cash flow generated from operating activities becomes insufficient to service its debt, the Group may be required to take certain actions, including delaying or reducing capital or other expenditure in an attempt to restructure or refinance its indebtedness, selling its investment property or other assets or seeking external financing. The Group may be unable to take any of these actions on favourable terms or in a timely manner.

Furthermore, such actions may not be sufficient to allow the Group to service its debt obligations in full and, in any event, may have a material adverse effect on its business, financial condition, results of operations and prospects. The Group's inability to service its debt through internally generated cash flow or such other sources of liquidity may put the Group in default of its obligations to its creditors.

In addition, certain of the Group's material loan agreements include financial covenants, such as in relation to the level of financial indebtedness that can be incurred by the Group. See "*Operating and Financial Review — Borrowings*". If the Group is unable to comply with these covenants in the future, it could be required to renegotiate the credit facilities, request waivers or replace them in order to prevent a default. There can be no assurance that the Group would be able to take any such action on terms that are acceptable to it, if at all. If the Group is unable to comply with the terms of its debt, this could have a material adverse effect on the Group's business, financial condition, results of operations and prospects.

The Group is exposed to credit risks with respect to collection of trade and other receivables from its customers

The Group is exposed to certain credit risks with respect to timely payments by its customers for products that the Group provides to them on extended payment terms.

While the Group has robust credit policies, if any of the Group's large customers to whom it sell products on extended credit terms face financial difficulties, including, but not limited to, fewer financial resources caused by any economic downturn or fiscal constraints or otherwise, the Group may be unable to receive full or partial payment of uncollected sums or enforce any judgment debts against such customers. In addition, if the Group's customers' financial condition deteriorates, it may need to make greater provisions for receivables.

If the Group fails to collect its past due trade receivables or if there is any event or change in circumstances that renders its trade receivables impaired or uncollectible, its business, financial condition, results of operations, prospects and the value of the Notes could be materially and adversely affected.

The global COVID-19 pandemic and the disruption caused by various countermeasures to reduce its spread, could have a material adverse effect on the Group's business, financial condition and results of operations

The novel coronavirus disease ("**COVID-19**") was first reported in China in December 2019 and has subsequently spread throughout the world, with the World Health Organisation (the "**WHO**") declaring it a pandemic on 11 March 2020. The governments of more than 80 countries across the world, including Russia, introduced measures aimed at preventing the further spread of COVID-19, including, amongst others, travel restrictions, closed international borders, enhanced health screenings at ports of entry and elsewhere, quarantines and the imposition of both local and more widespread "work from home" measures. For example, in March 2020, to slow the spread of the COVID-19 pandemic, the Russian Government placed a country-wide lockdown, introducing several "non-working weeks", bans on public events, closures of public places, border controls and travel and other restrictions.

Since May 2021, Russia and a number other countries have been experiencing the third wave of the COVID-19 pandemic associated with the more virulent Delta variant first identified in India, as evidenced by a rise in the number of COVID-19 cases and deaths. In Russia, infection rates have accelerated sharply from late spring and into summer 2021, with infections rate rising at a faster pace than in the first and second waves experienced in 2020. In response, the Russian Government's coronavirus vaccination programme launched in December 2020 continues to offer free vaccination to the whole population. Vaccination is mandatory for most public service workers and civil servants, and many private employers have also required their employees to be vaccinated. Nonetheless, overall uptake has been relatively low, with only 22.7% of the Russian population fully vaccinated as at 17 August 2021, according to the Ministry of Healthcare of the Russian Federation. There remains significant uncertainty regarding the impact and duration of the COVID-19 pandemic in Russia and globally, which could be exacerbated by disruptions or delays in the rollout of COVID-19 vaccines and by vaccine-resistant or more virulent mutations of COVID-19. If the spread of COVID-19 persists for a significant period of time or the infection rates stagnate or further increase, this could lead to renewed nationwide lockdowns and other restrictions, which could have a material negative impact on the Russian economy and other economies worldwide.

The COVID-19 pandemic has disrupted the normal flow of travel and business operations both globally and locally, affected global supply chains, manufacturing, consumer spending and asset prices, as well as led to general concern and uncertainty. Specifically, in Russia, the COVID-19 pandemic has adversely affected revenues in most sectors of the economy and was primarily responsible for the drop in GDP by 3% in 2020. Falling prices for oil and gas, coal and other commodities have had a negative impact on the income of commodity exporters and related industries, including the Group.

Economic activity in several countries around the world and, in turn, international trade and demand for coal, continues to be affected by the COVID-19 pandemic. The demand and prices for coal and, in turn, the Group's financial performance in 2020 were adversely impacted by the COVID-19 pandemic, which preserves conditions of uncertainty and does not exclude any potential lockdowns. See "*Operating and Financial Review —Certain Factors Affecting the Group's Results of Operations— COVID-19 and — Results of Operations for the Years Ended 31 December 2020, 2019 and 2018*".

The continuing COVID-19 pandemic may affect the Group's industries and business in a number of ways, including but not limited to (i) increase in credit risk due to deterioration in payment discipline of consumers; (ii) declines in prices of the Group's products and/or sales volume of the Group's products due, among others, to a decline in demand; (iii) increase in transportation expenses of the Group, including as a result of borders, international travel, sea ports or cargo transportation shutdowns; (iv) causing potential interruptions at the Group's operations, including as a result of any local outbreaks at the Group's sites or infrastructure used by the Group; (v) limiting the Group's ability to generate cash flow, and as a result, affecting its financial condition; (vi) causing the Group to delay, postpone or cancel certain of its investment projects; (vii) impacting the Group's ability to enter into new strategic transactions or to finalize strategic transactions on previously agreed terms and timetables; and (viii) requiring the Group to make operational changes and implement measures to ensure the health and safety of its employees and counterparties, which may involve increased costs or operational inefficiencies.

In addition, the ongoing impact of the COVID-19 pandemic on the Group's business depends on a range

of factors which it is not possible to accurately predict, including the duration, severity, potential recurrence and scope of the pandemic and the extensiveness of governmental measures. If the current COVID-19 pandemic were to persist, the Group's financial performance for future periods may be materially and adversely affected. Furthermore, public health crises caused by the COVID-19 pandemic may exacerbate other pre-existing political, social and economic risks in certain countries or globally. To the extent the COVID-19 pandemic adversely affects the Group's business and financial results, it may also have the effect of heightening many of the other risks described in this "*Risk Factors*" section.

The Group's business is dependent on the global economic environment

According to the International Monetary Fund (the "**IMF**"), the global economic growth contracted by 3.5% in 2020, compared with a 2.8% growth in 2019. This sharp decline was primarily driven by the COVID-19 pandemic (see "*—The global COVID-19 pandemic and the disruption caused by various countermeasures to reduce its spread, could have a material adverse effect on the Group's business, financial condition and results of operations*"). The global economy is projected to grow by 6.0% and 4.4% in 2021 and 2022, respectively, according to the IMF; however, those baseline projections remain subject to exceptional uncertainty and will be subject, among others, to any continued incidences of COVID-19 infections and the timing and efficacy of the COVID-19 vaccines' rollouts. Furthermore, consumer inflation is not accelerating despite low unemployment, thus allowing central banks to keep interest rates low. Low inflation is explained by an increase in labour productivity due to technological progress and the globalisation of value chains. There is a further risk of a possible cyclical downturn in the Chinese economy and other developing markets, which would result in exacerbation of the global economic downturn and impact the steel industry and other industries.

The global economic environment is subject to a number of uncertainties, including, among others, the COVID-19 pandemic, mounting government deficits, discontinuation of certain stimulus programmes, potential inflation or deflation, continuing high levels of unemployment, political tensions over global trade of goods, labour and capital mobility, terrorism and concerns over the stability of the monetary and political union in the EU. Financial markets and the supply of credit are likely to continue to be impacted by sovereign debt concerns, the possibility of further credit rating downgrades of, or defaults on, such sovereign debt, as well as concerns about a slowdown in growth in certain economies.

Brexit is another source of instability in the markets as there remains significant uncertainty about the future relationship between the United Kingdom and the EU. Following a national referendum and enactment of legislation by the government of the United Kingdom, the United Kingdom formally withdrew from the European Union and ratified a trade and cooperation agreement governing its future relationship with the European Union. The agreement signed in December 2020, which is being applied provisionally from 1 January 2021 until it is ratified by the European Parliament and the Council of the European Union, addresses trade, economic arrangements, law enforcement, judicial cooperation and a governance framework including procedures for dispute resolution, among other things. Because the agreement merely sets forth a framework in many respects and will require complex additional bilateral negotiations between the United Kingdom and the European Union as both parties continue to work on the rules for implementation, significant political and economic uncertainty remains about how the precise terms of the relationship between the parties will differ from the terms before withdrawal. This is expected to continue to cause, political uncertainty, significant volatility in global stock markets and currency exchange rate fluctuations. Furthermore, there is a possibility of trade barriers resulting from the United Kingdom leaving the EU which may affect the macroeconomic environment in Europe. Such developments could also lead to an increase in the already high level of protectionism globally.

In addition, policy actions taken by the U.S. presidential administration may result in turbulence in the financial markets and lead to greater uncertainty regarding the status of trade relations between the U.S. and some of its largest trade partners. Such developments could also lead to an increase of the already high level of protectionism globally, including in the steel industry. This could lead to the introduction of higher anti-dumping tariffs, stricter countervailing measures and increased policing of the U.S. steel import market. The worsening of such trade relations, in particular between the U.S. and China, could result in negative repercussions in these countries and have a knock-on effect on global

trade and the economic environment. For example, in 2019, the U.S. government, among other actions, imposed new or higher tariffs on specified products imported from China to penalise China for what it characterised as unfair trade practices and China has responded by imposing new or higher tariffs on specified products imported from the United States. In December 2019, China announced that it suspended tariffs on certain products and, in January 2020, the U.S. and China signed a trade deal that cut some U.S. tariffs on Chinese goods. There remains a high degree of uncertainty for the global economy regarding the results of trade negotiations between the U.S. and China. Any announcement of new trade or other economic protectionist measures has a significant impact on global commodity markets and may lead to negative consequences for the Group's key markets.

These developments, or the perception that any of them could occur, have had and may continue to have a material adverse effect on global economic conditions and the stability of global financial markets, and may significantly reduce global market liquidity and restrict the ability of key market participants to fund their capital and liquidity requirements and operate in certain financial markets. Any of these factors could depress economic activity, commodities markets and restrict access to capital. If the global economic conditions deteriorate, the resulting contraction in demand for many of the Group's products and the tightening of the credit markets could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

Failures of the Group's IT systems, third-party intrusions into, or any other disruption to, such systems could adversely affect its business

The Group's business and operations may be negatively affected by failures of the Group's key IT systems and equipment, unauthorised access to confidential information or a disruption of activities during the introduction of a new IT system. IT systems are vulnerable to a number of problems, such as software or hardware malfunctions, malicious hacking, cyber terrorism, physical damage to vital IT centres and computer virus infection. These factors may result in a lack of information or potential information inaccuracies that could cause disruptions in the Group's decision-making process, as well as deterioration in the quality of the Group's operational and financial reporting and the overall manageability of the Group. Although all systems supporting and representing the Group's critical business processes contemplate advanced disaster recovery plans that, in case of a system crash, automatically migrate to backup and restarts hardware and prevents sensitive data loss, there can be no full assurance that the Group's IT systems will not fail or data will not be lost.

The Group's ability to operate its business depends on its ability to protect computer systems and databases from the intrusion of third parties who may attempt to gain access to the Group's computer systems, networks or databases through the internet or otherwise. Although the Group has measures in place to ensure the cybersecurity of its computer systems and believes that its computer systems, networks and databases are well protected from unauthorised access, given the potential technical and financial resources of intruders, full assurance cannot be given that its computer systems, networks and databases will not suffer from such attacks in the future. A breach of the Group's cybersecurity systems might adversely affect the Group's ability to operate its business and materially adversely affect the Group's business, results of operations, financial condition, prospects and the value of the Notes.

Furthermore, similar to many of its peers, the Group's IT systems rely on a wide range of foreign technical and software solutions. Increasing protectionism and restrictive trade policies (such as tariffs and sanctions regimes) as well as any similar international, regional or national measures may, among others, lead to some supply chain or vendor support disruptions, which, in turn, may result in significant disruptions in the Group's IT systems, its service provisions and quality controls.

As response to sanction regimes or otherwise, the Russian Government could potentially impose certain protectionist measures which may require domestic businesses, such as the Group, to use only specific IT systems or technical solutions for certain functions. This may create additional financial burdens or quality risks for the Group, as there can be no assurance that any potential new solutions will be comparable in price, meet the functional requirements of the Group's business or meet the necessary levels of safety and reliability that would be expected by the Group. Furthermore, in many cases, the IT

systems and solutions used by the Group often cannot be quickly replaced or there are no alternatives with similar levels of functionality and quality. Such systems replacements, if required, may involve substantial investment of time and financial resources on behalf of the Group and can have a materially adversely affect the Group's business, results of operations, financial condition, prospects and the value of the Notes.

The integration of SGC into the Group's business has recently been completed and the Group may seek further acquisitions or conduct disposals or spin-offs in the future which must be successfully managed and may involve a number of inherent risks, any of which could cause the Group not to realise anticipated benefits

Over the last several years, the Group's operations have been undergoing change driven by the Group's strategy to diversify its business lines and product offering. In particular, in 2018, the Group acquired SGC, a leading producer of power and heat in Siberia and a related party of the Group. In addition, the Group invested into the expansion of its operations in the power sector by acquiring Reftinskaya GRES, Krasnoyarskaya GRES-2 and Primorskaya GRES in 2019 and 2020. During 2018-2020 the Group continued to invest in its rolling stock fleet and port infrastructure and by the end of 2020 the Group's logistics business has developed into a standalone business segment. The operating complexity of the Group's diversified business as well as the responsibilities of the Group's management have increased as a result of these acquisitions and require additional managerial and operational resources. To manage the expanded business and achieve the Group's strategic goals, the Group will need to continue to focus on: (i) the integration of the Group's recently acquired or developed assets into the Group's operations; (ii) the continued development of financial and management controls and information technology systems and their implementation in the Group's recently acquired or developed assets; (iii) increasing the market share of its logistics operations; and (iv) improving the operational efficiency of the Group's recently acquired or developed assets. For more information see "*Operating and Financial Review — Certain Factors Affecting the Group's Results of Operations— Acquisitions and disposals*" and Note 33 to 2020 Consolidated Annual Financial Statements.

In addition, the Group may seek in the future to expand the Group's operations through selective acquisitions. However, there is no assurance that the Group will be able to identify attractive targets in the future or that the Group will be able to acquire them on acceptable terms. Moreover, acquisitions pose significant risks to the Group's existing operations, placing additional demands on the Group's senior management, who are also responsible for managing the Group's existing operations. The Group may also be unable to integrate the operations of recently acquired businesses or to achieve the identified operating and financial synergies the Group anticipated from such acquisitions or, on the other hand, to successfully unwind or separate its integrated operations in case of an asset disposal or spin-off. In addition, acquisitions may result in a significant increase in the Group's indebtedness and disposals or spin-offs may result in the loss of previous synergies, revenue or profit. A failure to successfully integrate the acquired assets or manage any further acquisitions, disposals or spin-offs that the Group may make could have a material adverse effect on the Group's business, results of operations, financial condition and the value of the Notes.

The Company is beneficially controlled by a single person, whose interests could conflict with those of the Noteholders

The Company is beneficially controlled by Mr. Andrey Melnichenko (the "**Majority Shareholder**"), who, as at 30 June 2021, controlled indirectly 92.2% of the Company's shares, see "*Principal Shareholders*". As a result, the Majority Shareholder has the ability to exert significant influence over certain actions requiring shareholder approval, including, but not limited to, increasing or decreasing the authorised share capital of the Company (and disapplying pre-emptive rights), the election of directors, declaration of dividends, the appointment of management and other policy decisions. While transactions with the Majority Shareholder and his affiliates can benefit the Company, the interests of the Majority Shareholder could at times conflict with the interests of the Noteholders. Although the Group has in the past sought and continues to conclude most of related party transactions on an arm's length basis, conflicts of interest may arise between the Group, its affiliates and the Majority

Shareholder or his affiliates, resulting in the conclusion of transactions on terms not determined by market forces, see "*Management*" and "*Related Party Transactions*". Any such conflict of interest could adversely affect the Group's business, financial condition and results of operations, future prospects and the value of the Notes.

The fluctuation of the rouble against the U.S. dollar could affect the Group's financial condition and results of operations

The Group's coal is typically priced in roubles for domestic sales and in U.S. dollars for export sales. The Group's power and heat sales are priced in roubles. The majority of the Group's costs, including railway transportation costs, fuel costs, labour, spare parts and materials are incurred in roubles, while such costs as sea freight and port handling, as well as the majority of interest expenses are incurred in other currencies, principally U.S. dollars. In addition, 52.1% of the Group's total borrowings as at 30 June 2021, or U.S.$3,312 million, was incurred in U.S. dollars.

After a sustained period of depreciation that started in 2014, the Rouble was relatively stable from 2018 to 2020, but certain volatility continues against a number of major currencies, including the U.S. dollar and Euro, driven primarily by the COVID-19 pandemic and substantial fluctuations in oil prices. The exchange rate has moved from RUB 69.47 per U.S.$1.00, to RUB 61.91 per U.S.$1.00 and RUB 73.88 per U.S.$1.00 as at 31 December 2018, 2019 and 2020, respectively. As at 1 September 2021, the Rouble/U.S. dollar and Rouble/ EUR rates were RUB 73.2781 and RUB 86.6660, respectively.

The mix of the Group's revenues and costs is such that depreciation of the Rouble against EUR and the U.S. dollar tends to result in a decrease in the Group's costs relative to its revenues (thereby increasing its profitability), while appreciation of the Rouble against EUR and the U.S. dollar tends to result in an increase in the Group's costs relative to its revenues (thereby decreasing its profitability). In addition, most of the Group's cash held with banks is denominated in U.S. dollars and EUR. Any significant appreciation of the Rouble against the U.S. dollar, in the absence of an increase in domestic demand for thermal coal, may materially adversely affect the Group's financial condition and results of operations. At the same time, although a depreciation of the Rouble generally reduces the Group's Rouble-denominated costs in U.S. dollar and EUR terms, it may also negatively affect the Group in a number of ways, including, among other things, by increasing inflation and having a negative effect on the Russian economy and the Group's customers which in turn leads to reduced demand for the Group's products, which could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

If the rouble depreciates significantly against the U.S. dollar again in the future, the Group may have difficulty repaying or refinancing the Group's foreign currency denominated indebtedness, whereas an appreciation in the value of the rouble would result in a decrease in the value of the Group's dollar-denominated indebtedness and the Group's revenues.

Inflation in Russia could increase the Group's costs

The Russian economy experienced relatively high rates of inflation in 2014-2016 as a result of the deteriorating economic conditions, depreciating Rouble and restrictive measures on certain imports. According to Rosstat, the inflation reached 11.4% and 12.9% in 2014 and 2015, respectively, and amounted to 5.4% in 2016. In 2018, 2019 and 2020, the inflation measured by Rosstat was 4.3%, 3.1% and 4.9%, respectively, and by June 2021 annual inflation has reached 6.5%. A number of the Group's costs relating to its Russian operations, such as wage costs, maintenance costs, construction costs and utilities costs, are sensitive to rises in general price levels in Russia and, as a result, the Group has in the past experienced inflation-driven increases in some of its production costs. However, due to competitive pressures, the Group may not be able to raise prices sufficiently to preserve operating margins.

Accordingly, high rates of inflation could increase the Group's costs and there can be no assurance that the Group will be able to maintain or increase its operating margins to cover such costs and failure to

do so could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

The Group does not maintain full insurance coverage for all risks

The Group's operations are subject to numerous operating risks, including environmental hazards, industrial incidents, unusual or unexpected geological conditions, labour force disruptions, unavailability of materials and equipment, weather conditions, pit wall failures, rock bursts, cave-ins, flooding, seismic activity, interruptions to power supplies and industrial and other accidents at mines, washing plants or related facilities. While management has set up internal controls to try to prevent and mitigate these events, these risks and hazards could result in damage to or destruction of the Group's properties, personal injury or death, environmental damage, delays in mining and monetary losses and possible legal liability.

The Group maintains at least the minimum level of insurance required under the laws of each jurisdiction in which it operates. In particular, the Group maintains insurance for, amongst others, directors and officers liability, public liability for hazardous industrial facilities and hydraulic structures and compulsory vehicle liability. As a participant in exploration and mining activities, the Group may become subject to liability for risks that cannot be insured against, that are not sufficiently covered by mandatory third-party liability insurance, or against which it may elect not to be insured because of high premium costs. Losses from uninsured or partially insured risks may cause the Group to incur significant costs, and no assurance can be given that such insurance will thereafter continue to be available, that it will be available at commercially reasonable premiums or that the Group will obtain or maintain such insurance.

Moreover, the insurance which the Group does maintain in respect of certain risks may not provide sufficient coverage for losses related to these or other risks or hazards. The Group does not have full insurance coverage for some of its mining, processing and transportation facilities, for property damage and business interruption, or for third party liabilities in respect of property or environmental damage arising from accidents on the Group's property or relating to the Group's operations. The lack of, or insufficiency of, insurance coverage could materially adversely affect the Group's business, results of operations, financial condition and the value of the Notes.

The Group's operations require substantial capital expenditures and inability to obtain additional financing or receive approvals and permits for, or otherwise to successfully implement, the Group's main capital investment projects could affect the Group's financial condition and results of operations

The Group's operations require significant capital expenditures for the exploration, development, extraction, maintenance, transportation and preparation of coal, as well as for the maintenance and construction of new power generation assets and logistics infrastructure. The Group's business plans will require substantial capital expenditures for the foreseeable future for the purposes of, among other projects, improving transportation infrastructure, constructing coal processing facilities, upgrading and modernising the Group's power generation facilities and developing the Group's mining assets. See "*Operating and Financial Review—Liquidity and Capital Resources*" and "*Business*". In addition, the Group will be required by certain agreements to construct new electricity and heat generating capacity.

The Group's planned projects could be delayed or adversely affected by a number of factors beyond the Group's control, including any failure to obtain regulatory approvals and permits, lack of funding or capital, natural disasters, or the Group's inability to obtain supplies of fuel and electricity and sufficient technical and other personnel. If the Group encounters difficulties constructing facilities, the Group may experience production or processing shortfalls that could have a material adverse effect on the Group's business, results of operations, financial condition and the value of the Notes. The Group must obtain construction permits for all of the Group's capital investment projects. The Group cannot give any assurance that such projects will be approved in time or at all. As a result, the Group's future profitability and financial condition could be materially adversely affected.

The actual costs for the Group's capital projects may exceed the Group's original budgets. As a result of project delays, cost overruns, changes in market circumstances or other reasons, the Group may not be able to achieve the intended economic benefits or demonstrate the commercial viability of these projects, which in turn could have a material adverse effect on the Group's business, financial condition, results of operations and future prospects.

In addition, the Group's ability to secure debt or equity financing in amounts sufficient to meet the Group's capital expenditure needs could be adversely affected by many factors beyond the Group's control, including, but not limited to, the global economic downturn and the ability of the Russian banking sector to finance the Group's projects. See also "*—The Group's ability to raise financing to finance its investment and maintenance plans or to refinance its existing debt may be limited*". If the Group is unable to raise the necessary financing at market terms, or at all, the Group will have to reduce the Group's planned capital expenditures. This could adversely affect the Group's ability to expand the Group's business and meet the Group's production targets and the Group's subsidiaries may face fines or lose material licences. If these reductions are severe enough, they could materially adversely affect the Group's ability to maintain the Group's production at current levels.

The Group's labour costs represent a significant part of the Group's cost of sales, and any increase in those costs may adversely affect the Group's business and results of operations

The cost of labour represents a significant component of the Group's cost of sales (20%, 20% and 19% for the years ended 31 December 2020, 2019 and 2018, respectively, and 19% and 21% for the six months ended 30 June 2021 and 2020). The rise in the Group's labour costs since 2018 has been attributable to an increase in number of employees due to acquisition of new assets. Additionally, the cost of labour during the periods under review was affected by inflation and wage increases agreed with the trade unions that represent the Group's employees, the Russian Coal Trade Union ("**Rosugleprof**") and Elektroprofsoyuz, a trade union that largely represents the Group's power employees, as well as increased competition among mining and power generating companies. The Group may be required to increase employee wages to maintain the requisite number of skilled personnel needed to operate the Group's business. If the Group's labour costs continue to rise significantly, the Group's business, prospects, results of operations, financial condition or the value of the Notes could be materially and adversely affected.

As at 30 June 2021, over 90% of the Group's employees were represented by industry-wide collective agreements and approximately 40% of the Group's employees are represented by trade unions. The Group has not experienced any business interruption as a result of labour disputes at any of its businesses in the past, and the Group considers its relations with employees to be partnership. Nonetheless, employees' representation subjects the Group's businesses to the risk of interruptions through strikes, lockouts or delays in renegotiating labour contracts. The Group may not be able to renew existing arrangements with trade unions on favourable terms. If this were to occur, there could be a material adverse effect on the Group's business, financial condition, results of operations, prospects and the value of the Notes.

The Group is dependent on hiring and retaining a highly qualified and skilled workforce

The recent development of the coal and power industries led to increased demand for qualified personnel in these industries. In addition, the level of required skills and experience in the power industry has increased due to the liberalisation and market regulation changes.

In addition, the remote locations and severe climatic conditions at many of the Group's mining facilities make it difficult to attract suitably qualified workers. A decline in birth rates and underdeveloped housing infrastructure in the regions where the Group operates, plus a shortage of vocational training institutions and low levels of professional skills among graduates, complicate recruitment.

The competition in Russia for personnel with relevant expertise is intense, and is exacerbated by the ability of employees to terminate their employment on two weeks' notice in accordance with Russian

law.

These factors have led, and could continue to lead, to increased costs and difficulties in hiring, training and retaining skilled personnel, which may materially adversely affect the Group's ability to reach the Group's production targets, the development of new projects and the expansion of the Group's existing operations. There can be no assurance that the Group will be able to retain personnel without affecting profitability. In particular, the Group may be unable to retain qualified personnel consistent with the Group's internal compensation policy or the Group may be unable to control the costs associated with retaining and motivating highly qualified employees. Any failure to manage personnel needs successfully could materially adversely affect the Group's continued operation and growth strategy.

More stringent environmental laws and regulations or more stringent enforcement of these laws and regulations may decrease demand for coal, result in fines and increase the Group's operating costs

The Group's operations and properties are subject to numerous environmental laws and regulations. The Group's production facilities generate or release pollutants and other waste capable of causing damage to human and animal life or to the environment. The discharge, storage and disposal of such waste are subject to environmental regulations, some of which require the clean-up of contamination and reclamation, as well as checking the status of such waste on a regular basis. Pollution risks and related clean-up costs are often impossible to assess unless environmental audits have been performed and the extent of liability under environmental laws is clearly determinable. The Group's mining activities give rise to obligations for site restoration and rehabilitation. Restoration and rehabilitation works can include facility decommissioning and dismantling, the removal or treatment of waste materials, land rehabilitation, and/or site restoration. The extent of work required and the associated costs are inherently difficult to estimate and dependent on, among others, the estimated live of the asset, scale of any possible disturbance and contamination, the timing and extent of corrective actions and the requirements under applicable laws and regulations and the Group's internal policies. The Group provides for estimated environmental restoration and rehabilitation costs over the operating life of the Group's mines based on calculations and judgments the Group make with respect to the Group's expectations of future mining activities and associated cash flows. These estimates are based on existing environmental and regulatory requirements and are subject to revision as a result of future changes in regulations and cash flow estimates. As at 31 December 2020, 2019 and 2018, the Group's provision for environmental obligations amounted to U.S.$159 million, U.S.$175 million and U.S.$79 million, respectively.

Under current Russian environmental legislation, the Group must make payments for air and water discharges, waste that is within specified limits, as well as increased payments for discharges and waste in excess of these limits. In addition, the Group's power plants could be required to pay compensation for damage caused to the environment by air discharges that are above the prescribed limits, which could be imposed from time to time by the regional governments. As a result, the Group's power plants may incur substantial losses, which would have a material adverse effect on the Group's business, results of operations and prospects.

Although environmental legislation in Russia has been enhanced since the Soviet era, it is in a number of respects weaker and less stringently enforced than in the EU or the United States. More stringent standards may be introduced or enforcement increased in Russia in the future. Any change in the current regulatory environment could result in actual costs and liabilities for which the Group have not provided or planned. For example, since October 2019, marine transport infrastructure facilities used for coal transshipment must comply with the best available technologies aimed at reducing pollutants discharge. Failure to comply with the requirements to equip business and other facilities located within the boundaries of water protection zones with structures ensuring the protection of water bodies from pollution, clogging, silting and depletion of water entails the imposition of an administrative fine or suspension of operations for up to 90 days.

Moreover, in the course of, or as a result of, an environmental investigation, regulatory authorities in Russia can issue an order reducing or halting production at a facility that has violated environmental

standards. In the event that production at one of the Group's facilities was partially or wholly prevented due to this type of sanction, the Group's business could suffer significantly and the Group's operating results would be negatively affected.

Based on the current regulatory environment in Russia and elsewhere where the Group conducts the Group's operations, as at 30 June 2021, the Group did not create any reserves for environmental liabilities and compliance costs, other than provision for environmental obligations in the amount of U.S.$176 million. Any change in this regulatory environment could result in actual costs and liabilities for which the Group has not provided reserves.

Health and safety incidents may adversely affect the Group's business

As with other mining and energy companies, certain of the Group's operations are carried out under potentially hazardous conditions. The Group's employees may become exposed to health and safety risks which may lead to the occurrence of work-related incidents. In the past, the Group has suffered fatal accidents, in particular, in 2020, four company employees and one contractor's employee suffered fatal accidents. In the six months ended 30 June 2021, there were five fatal accidents. Though the Group has procedures in place to thoroughly investigate all incidents to identify underlying causes and take remedial action and to improve associated conditions, processes and systems, there can be no assurance that such improvements will be effective or that there will be no incidents in the future. The occurrence of any incidents could delay production, increase production costs and/or result in liability for the Group, and may result in actual production differing potentially materially from estimates of production. If any of this occurs, it could have a material adverse effect on the Group's business, financial conditions, results of operations and the value of the Notes.

If the Russian Federal Antimonopoly Service were to conclude that the Group acquired, transferred or created a company in contravention of antimonopoly legislation, it could impose administrative sanctions and require the divestiture of such company or other assets

The Group's business has grown substantially through the acquisitions of companies, the acquisition and corporate restructuring of which required the prior approval or subsequent notification of the FAS or its predecessor agencies. In part, relevant legislation in the Russian Federation restricts the acquisition, founding or transfer of companies in Russia by groups of companies or individuals acting in concert without this approval or notification. While the Group believes that it has have complied with applicable regulations and orders of the FAS, the legislation and regulations with respect to such matters are vague in certain parts and subject to varying interpretations and there can be no assurance that the FAS will not conclude that an acquisition or the creation of a new company was done in contravention of applicable legislation and competition has been reduced as a result. Any such finding could result in the imposition of administrative sanctions and require the divestiture of such newly acquired or created company or other assets, adversely affecting the Group's business strategy and the Group's results of operations.

Since the Group holds a dominant position, as defined under the Federal Law No. 135-FZ "On Protection of Competition" dated 26 July 2006, as amended, (the "**Competition Law**"), in the Russian coal market, the Group's operations are subject to thorough the FAS review. As a result, the Group is required to comply with certain obligations imposed on it to ensure that the Group does not restrict competition in this market. This may include obligations to obtain the prior consent of the FAS for certain actions and to ensure that the Group's prices are at certain prescribed levels. The Group may also have to provide the FAS with information on the Group's supply and export volumes, as well as to provide certain information relating to the Group's customers and suppliers, along with analysis relating to pricing or demand dynamics, to ensure that the terms of all of the Group's contracts are fulfilled. If the Group is not in compliance with these rules, the FAS may, through its regulation of the Group's business, significantly affect the Group's contractual terms and the prices the Group charge for coal, energy and logistics services all of which would have a material adverse effect on the Group's business, financial conditions, results of operations and the value of the Notes.

The Group may not be able to protect adequately or enforce its intellectual property rights

The Group relies primarily on a combination of patents, registered trademarks, licensing agreements and restrictions on disclosure to protect the Group's intellectual property. Despite these precautions, it may be possible for a third party to copy or otherwise obtain and use the Group's developed techniques, products, processes, brand names or other intellectual property without authorisation. There may also be technologies licensed to and relied on by the Group that are subject to infringement or other corresponding allegations or claims by third parties which may damage the Group's ability to rely on such technologies. If the Group is unable to protect its proprietary rights against infringement or misappropriation, it could materially harm its future financial results and the ability to develop the Group's business. In addition, the Group may need to engage in litigation in order to enforce the Group's intellectual property rights in the future or to determine the validity and scope of the rights of others. Any litigation could result in substantial costs and diversion of management and other resources, either of which could have a material adverse effect on the Group's business, results of operations, financial condition, prospects and the value of the Notes.

Risk Factors Relating to the Russian Federation

Emerging markets such as Russia are subject to greater risks than more developed markets, including, in certain cases, significant economic, political, social and legal risks. Financial turmoil in any emerging market could disrupt the Group's business, as well as cause the price of the Notes to suffer

Generally, investment in emerging markets is suitable only for sophisticated investors who are familiar with and who fully appreciate the significance of the risks involved in investing in emerging markets and prospective investors are urged to consult with their own legal and financial advisers before making an investment in the Notes. Investors in emerging markets, such as Russia, should be aware that these markets are subject to greater risk than more developed markets, including in some cases significant legal, economic and political risks. Investors should note that emerging markets, such as Russia, are subject to rapid change and that the information set out in this Prospectus may become outdated relatively quickly. Moreover, financial turmoil in any emerging market country tends to adversely affect prices in debt or equity markets of all emerging market countries as investors move their money to more stable, developed markets. Financial problems or an increase in the perceived risks associated with investing in emerging economies may adversely affect the level of foreign investment, which may, in turn, adversely affect the economies in those countries. In addition, during such times, companies that operate in emerging markets can face severe liquidity constraints as foreign funding sources are withdrawn. As a result, financial turmoil in Russia could seriously disrupt the Group's business and its ability to service indebtedness, as well as result in a decrease in the value of the Notes.

Political Risks

Political instability or conflict could adversely affect the value of investments in the Notes

Political systems of different countries around the world, including in the regions where the Group operates, from time to time undergo changes, which are often difficult to predict, and which can have adverse business consequences. In particular, protests, strikes and other manifestations of the social unrest, which are often accompanied by political turbulence, could impede the regular conduct of business and could lead to the suspension of production processes, supply chain disruptions, delays in contractual settlements, increased volatility in financial markets, impairment of assets, liquidity crises in the banking sector and other adverse economic consequences.

Possible political changes or eventual lack of consensus between different governmental branches and(or) powerful economic groups in Russia could, particularly in the case of deteriorating economic conditions, lead to political instability, which could have a material adverse effect on the value of investments in Russia generally and the Notes in particular.

Emerging markets such as Russia are also subject to heightened volatility based on economic, military

and political conflicts. For example, the accession of Crimea to Russia in March 2014 and the ongoing crisis in Eastern Ukraine resulted in the imposition of economic sanctions on certain Russian companies and individuals by the U.S., EU, Canada and other countries which caused significant overall price declines in the Russian stock exchanges (see "*—The current political instability and related sanctions imposed by the U.S., the U.K., the EU and other countries, or the imposition of additional sanctions may have a material adverse effect on the Group's financial condition, results of operations and prospects*"). The reaction of those countries, resulting geopolitical tensions and ensuing sanctions programmes have had and could continue to have an adverse effect on the Russian economy, accelerating capital flight from Russia and resulting in volatility on the Russian market.

Conflicts between federal and regional authorities and other political conflicts could create an uncertain operating environment that may hinder the Group's long-term planning ability and could adversely affect the value of investments in Russia

Russia is a federation of various sub-federal political units. Some of these political units exercise considerable autonomy over their internal affairs pursuant to agreements with the federal authorities. In practice, the division of authority between federal and regional authorities, in certain instances, remains uncertain and contested. This uncertainty could hinder the Group's long-term planning efforts and may create uncertainties in its operating environment, any of which may prevent the Group from effectively and efficiently carrying out its business strategy.

For example, to achieve consistency in the regulation of natural gas supplies throughout Russia, the federal authorities have assumed responsibility for the development and implementation of state policy with respect to the supply of natural gas and the industrial and environmental safety of such supplies in Russia. However, regional and local authorities have a significant degree of autonomy in exercising their rights over the use of land and natural resources (including natural gas). Accordingly, the relationship between the relevant federal, regional and local authorities as well as between the Group and such authorities can have a significant impact on the conditions under which the Group can operate in any particular region.

In addition, ethnic, religious, historical and other divisions inside Russia have led to tensions and, in certain cases, military conflict and terrorist attacks. If such an event were to occur in the future, it could result in significant political consequences, including the imposition of a state of emergency in some or all of Russia or heightened security measures, which may disrupt normal economic activity.

In the past such conflicts occurred between Russia and its neighbours. For example, in August 2008, Russia and Georgia were involved in an armed conflict involving South Ossetia and Abkhazia. Furthermore, differing views on the Georgia conflict, and the armed conflict in Eastern Ukraine, have had an impact on the relationship between the Russian Federation, the EU, the United States and certain former Soviet Union countries and, if prolonged, could adversely affect business relationships among these countries and adversely affect the Russian economy.

If existing conflicts remain unresolved, or new disturbances or hostilities arise, the Group may be unable to access capital, or access capital on terms reasonably acceptable to it, which may have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

A reversal of reform policies or government policies targeted at specific individuals or companies could have an adverse effect on the Group's business as well as investments in Russia more generally

The political and economic situation in Russia has been negatively affected by the global financial crisis, the economic sanctions imposed by the United States, the U.K. and the EU, the subsequent economic recession in Russia and the outbreak of COVID-19. Any significant further increases in political instability, a struggle over the direction of future reforms, or a reversal of the reform process, could lead to another deterioration in Russia's investment climate that might constrain the Group's ability to obtain financing in the international capital markets, limit its sales in Russia or otherwise have

a material adverse effect on the Group's business, results of operations, financial condition, its ability to service indebtedness and as a consequence the Issuer's ability to make payments under, or the value of, the Notes.

Russian law contains provisions on liabilities for tax law violations, including criminal. With application of criminal liability provisions in the past, Russian authorities have taken measures against some Russian companies, their executive officers and their shareholders on tax evasion and related charges. In some cases, such measures have resulted in the imposition of prison sentences for individuals and significant claims for unpaid taxes. Any similar actions by governmental authorities could lead to further negative effect on investor confidence in Russia's business and legal environment, which could have a material adverse effect on the Group's ability to raise equity and debt capital in the international markets, as well as the Group's business, results of operations, financial condition, its ability to service indebtedness and as a consequence the Issuer's ability to make payments under the Notes or the value of the Notes.

The current political instability and related sanctions imposed by the U.S., the U.K., the EU and other countries, or the imposition of additional sanctions may have a material adverse effect on the Group's financial condition, results of operations and prospects

In late 2013 and the first half of 2014, deteriorating economic conditions and general social unrest culminated in a wide-scale crisis provoking armed confrontations between various political groups in Ukraine. In March 2014, following a public referendum the Crimea peninsula and the city of Sevastopol became new separate constituents of the Russian Federation.

Following these events, a number of countries imposed various sanctions against Russia and refused to recognise the referendum in Crimea, and the subsequent accession of Crimea and Sevastopol to the Russian Federation, as legal. The United States and the EU (as well as other states, such as Canada, Switzerland, Australia and Japan) have imposed "blocking" sanctions on a number of Russian and Ukrainian persons and entities, including current and former officials and individuals, companies, banks and businessmen, with the consequences that entities and individuals in the U.S. and EU cannot do business with them or provide funds or economic resources to them, with assets in the relevant sanctioning jurisdictions subject to seizure and the individuals to visa bans. In addition, the U.S. and EU have applied "sectoral" sanctions, which imposed restrictions on the ability of several Russian leading banks, leading companies in the oil and gas sector and certain defence companies to access capital markets or otherwise obtain funding from persons in the U.S. and EU. Moreover, the EU and the U.S. prohibited the provision, exportation, or re-exportation, directly or indirectly, of goods, services (except for financial services), or technology in support of exploration or production for deepwater, Arctic offshore, or shale projects that have the potential to produce oil in the Russian Federation and that involve certain companies in the Russian energy sector. The U.S. executive order implementing sectoral sanctions also permits sanctions to be applied against companies in the mining sector. The current sanctions regime is a result of multiple extensions by the U.S. and EU in the term and scope of sanctions. With respect to "blocking" sanctions, a significant extension took place on 6 April 2018, when Office of Foreign Assets Control (the "**OFAC**") added 38 Russian business persons, officials and entities, some of which are entities with securities listed on the London Stock Exchange, the Hong Kong Stock Exchange and/or the Moscow Stock Exchange, to the list of Specially Designated Nationals and Blocked Persons (the "**SDNs**"). On 27 January 2019, the sanctions previously imposed on EN+ Group plc, United Company RUSAL plc and JSC EuroSibEnergo were lifted following negotiations between the U.S. Department of Treasury's Office of Foreign Assets Control and the above companies, which have agreed to provide additional information regarding their operations.

In addition, on 2 August 2017, the U.S. President signed into law the Countering America's Adversaries Through Sanctions Act (the "**CAATSA**") that includes additional sanctions that may be introduced against Russian entities. The CAATSA, inter alia, a) codifies the existing sanctions against Russia established by former President Obama's executive orders, reduces the permitted terms of financing under the existing sectoral sanctions and restricts supplies of equipment and services for new deepwater, Arctic offshore, or shale projects anywhere in the world in which a Russian sanctioned entity holds a

33% or higher interest; b) gives the U.S. Treasury Secretary the power to impose sanctions against state-owned companies in Russia in the railways, metals, and mining sectors; c) requires the U.S. President, subject to the ability to claim a national interest waiver, to impose certain secondary sanctions that were discretionary under existing U.S. sanctions legislation (including, but not limited to, secondary sanctions for investing in or supporting special Russian crude oil projects and the facilitation of transactions on behalf of Russian SDNs); d) allows the U.S. President to introduce secondary sanctions on foreign persons (including those that invest in the construction or servicing of Russian energy export pipelines); and e) requires the U.S. President, subject to the ability to claim a national interest waiver, to impose asset-blocking and travel sanctions, including certain secondary sanctions, on any person who knowingly engages in significant activities that undermine the cybersecurity of any person or government, including a democratic institution, on behalf of the Russian Government. In addition, the CAATSA requires the U.S. administration to submit various reports to the U.S. Congress. In late January 2018, several such reports had been published, including a report under Section 242 of the CAATSA on the effects of expanding the sanctions to include sovereign debt and derivative products, as well as a report under Section 241 of the CAATSA that identified certain Russian individuals, including the Majority Shareholder. The identification of any individuals or entities in such reports under Section 241 of the CAATSA does not automatically lead to the imposition of new sanctions.

In August 2018, the U.S. State Department imposed new sanctions on Russia under the Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (the "**CBW Act**"). The initial set of sanctions under the CBW Act included, among other things, the termination of sales of any defence articles and services and a prohibition on the export to Russia of certain national security-sensitive goods and technology. In November 2018, the U.S. Department of State declared its intention to impose further sanctions in accordance with the CBW Act, including, among other things, a prohibition on U.S. banks to provide financing to the Russian sovereign, extensive bans on exports and imports involving Russia and the possible suspension of aviation rights into the United States. On 2 August 2019, OFAC proceeded to issue a directive that prohibited U.S. banks from participating in the primary market for non-Rouble denominated bonds issued by the Russian sovereign and also prohibited U.S. banks from lending non-Rouble denominated funds to the Russian sovereign. On 12 September 2018, the U.S. President has signed an executive order that provides for the imposition of sanctions on countries, organisations and persons that the U.S. government determines have interfered in the U.S. elections.

In December 2019, the U.S. President signed into law a bill passed by the U.S. Congress that provides for the introduction of certain sanctions on persons providing certain assistance in the construction of the Nord Stream 2 pipeline project. On 1 January 2021, the National Defense Authorisation Act for Fiscal Year 2021 (the "**Defence Budget 2021**") and the Protecting Europe's Energy Security Clarification Act of 2020 (the "**PEESCA**") as part of the Defence Budget 2021 were enacted into law when the U.S. Congress overrode the U.S. President's veto of the legislation. The Defence Budget 2021 and PEESCA mandate the imposition of sanctions on persons providing vessels for pipe-laying activities for the construction of the Nord Stream 2 and the TurkStream gas export pipelines, persons who facilitate providing those vessels, and persons who provide underwriting, insurance or reinsurance services for those vessels, various technology upgrades, or tethering of those vessels, or provide testing, inspections or certifications for the Nord Stream 2 pipeline. It is currently not possible to predict what impact these potential new sanctions or any retaliating measures by the Russian Government may have on the Russian economy or the Group's business.

Several pieces of legislation directed at amplifying U.S. sanctions against the Russian Federation have been introduced in the U.S. Congress and are currently under consideration. The current initiatives, if enacted, could affect, among other things, the Russian sovereign debt, Russian energy projects and the Russian energy and financial sectors. It is currently unclear at which point, if at all, any of these bills could be signed into law and what would be the scope of any new sanctions that may be imposed pursuant to such law.

Like many major Russian companies, the Group may from time to time engage with entities that are subject to sanctions. Particularly, certain of the Group's subsidiaries hold the status of suppliers in the

wholesale electricity market in Russia, and sell electricity and capacity in accordance with Russian wholesale electricity and capacity market rules. A significant portion of the Group's revenues comes from the sale of electricity and capacity on the wholesale market. In April 2014, the ATS appointed Bank Rossiya (an SDN entity) as the sole authorised bank for the Russian wholesale electricity market with effect from 1 July 2014. Under the wholesale electricity market rules and the agreement for accession to the electricity trading system, there may be only one such authorised bank within the electricity trading system, and all participants in the wholesale market, including the Group companies selling electricity and capacity on the wholesale market, are required to enter into a bank account agreement with the authorised bank. Trades in electricity and capacity on the wholesale market are settled through the authorized bank (with certain limited exceptions); buyers are not able to pay, and sellers are not able to receive payments for electricity and capacity if they fail to enter into an agreement with the authorised bank. Accordingly, in order to continue its participation in the wholesale electricity and capacity market in Russia, the Group and its counterparties on the wholesale electricity market are required to open and maintain accounts with, and to settle transactions through, Bank Rossiya. Members of the Group engaged in wholesale electricity trading entered into the relevant account bank agreements with Bank Rossiya in 2014. Save as disclosed above, the Group's dealings with other sanctioned persons are not material in the context of the overall business of the Group.

Some Group entities, including the Issuer, are U.S., U.K. and EU persons and are therefore required to comply with the respective U.S., U.K. and EU sanctions, including not conducting business with any sanctioned persons. None of the proceeds of the issue of any Notes will be used (i) to fund activities of, or business with or involving, persons that are subject to sanctions introduced by the U.S. and the EU, (ii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of sanctions introduced by the U.S., the U.K. and the EU or (iii) to finance or facilitate any activity specified or referenced in section 224, 225, 227, 228, 232, 233 or 234 of the CAATSA as a basis for the imposition of sanctions or penalties on any person pursuant to the CAATSA as a result of such person engaging in such activity. Most of the Group entities are not U.S., U.K. or EU persons, and therefore are restricted in dealings with sanctioned persons only to the extent those dealings are subject to U.S., the U.K. and/or EU jurisdiction, such as through the involvement of U.S., the U.K. and/or EU persons or entities, business conducted on the territory of the U.S., the U.K. or EU, clearing in U.S. dollars, or some other nexus to the relevant jurisdiction. However, there can be no assurance that compliance issues under applicable U.S., the U.K. and/or EU regulation, measures or similar laws and regulations will not arise with respect to the Group or its personnel. Non-compliance with applicable sanctions could result in, among other things, the inability of the relevant Group entities to contract with the U.S., the U.K. and/or EU governments or their agencies, civil or criminal liability of such entities and/or their personnel under U.S., the U.K. and/or EU law, the imposition of significant fines and negative publicity and reputational damage. In addition, should the Group's dealings with sanctioned counterparties become material, the Group's ability to transact with U.S., the U.K. or EU persons could be affected, even though such dealings would comply with applicable law. As a result, the ability of members of the Group to raise funding from international financial institutions or the international capital markets could be restricted.

The sanctions imposed by the U.S., the U.K. and the EU have had an adverse effect on the Russian economy prompting downgrades of the credit ratings of the Russian Federation and a number of major Russian companies that are ultimately controlled by the Russian Federation, causing extensive capital outflows from Russia and impairing the ability of Russian issuers to access international capital markets.

Relations between Russia, the U.S., certain EU members and the U.K. have been strained due to a number of issues, including geopolitical confrontations, economic interests and trade wars, as well as internal political and social events, and there can be no assurance that the governments of the EU and U.S. or other countries will not impose further sanctions against Russia or specific individuals, entities or economy sectors. Furthermore, no longer being a part of the EU following Brexit (see "—*The Group's business is dependent on the global economic environment*"), the U.K. has imposed its own sanctions regime, which mostly follows the approach of the EU but deviates in certain areas.

Further geopolitical confrontations and any escalation of tensions between Russia and the U.S., the U.K. and/or the EU, the imposition of further sanctions, or continued uncertainty regarding the scope thereof, could have a prolonged adverse impact on the Russian economy. These impacts could be more severe than those experienced to date. In particular, should either the U.S., the U.K. or the EU expand their respective sanctions to include existing or future customers, suppliers or other counterparties of the Group, a large sector of the Russian economy or otherwise, such an expansion could result in the Group's dealings with designated persons, if any, being materially adversely impacted, the suspension or potential curtailment of business operations between the Group and the designated persons could occur, and substantial legal and other compliance costs and risks on the Group's business operations could emerge. All of the above could have a material adverse impact on the Group's business, financial condition, results of operations, prospects or the value of the Notes.

Although the Group has no reason to believe that it or its shareholders may be specifically targeted by the U.S., U.K. or EU sanctions, there can be no assurance that this will not occur. If U.S., U.K. or EU sanctions targeting the Russian energy or coal sectors and/or the Group and its shareholders are imposed, such sanctions will likely have a material adverse impact on the Group in a number of ways. For example, the Group might become unable to deal with persons or entities bound by the relevant sanctions, including financial institutions and rating agencies, transact in U.S. dollars, raise funds from investors, or access international capital markets generally, use international settlement, clearing and/or information exchange systems, and/or the Group's existing funds might be blocked. In these circumstances, the Group may be unable to effect payments to discharge any of its indebtedness, which would constitute an event of default and will affect the Notes consequently. In addition, investors in possession or control of the Notes, who are subject to the jurisdiction of any relevant sanctions regimes may be required to block those Notes and may be restricted in their ability to sell, transfer or otherwise deal in or receive distributions with respect to the Notes, which could make such Notes partially or completely illiquid. Potential Noteholders may be deterred from buying the Notes for the same reason. This would adversely affect the market value of the Notes, and could result in reduced liquidity in the trading market for the Notes and have a material adverse effect on their market value.

Economic Risks

Economic instability in Russia could adversely affect the Group's business

Any of the following risks, which the Russian economy has experienced at various times in the past and some of which occurred during the 2008 global financial and economic crisis, may have a significant adverse effect on the investment climate in Russia and, in turn, may be a significant burden on the Group's operations: (i) volatility and/or significant declines in GDP; (ii) high levels of inflation or hyperinflation; (iii) increases in, or high, interest rates; (iv) an unstable currency and instability in the local currency market; (v) high state debt relative to gross domestic product; (vi) weak banking system providing limited liquidity to Russian enterprises; (vii) a large number of loss-making enterprises that continued to operate due to the lack of effective bankruptcy proceedings; (viii) the use of fraudulent bankruptcy actions in order to take unlawful possession of property; (ix) significant use of barter transactions and illiquid promissory notes to settle commercial transactions; (x) tax evasion; (xi) the "black" and "grey" market economies; (xii) budget deficits; (xiii) capital flight; (xiv) corruption and the penetration of organised crime into the economy; (xv) sudden price declines in the natural resource sector; (xvi) dependence of the economy on exports of commodities; (significant declines and volatility in the stock market; (xvii) significant increases in unemployment and underemployment; (xviii) the impoverishment of a large portion of the Russian population; and (xix) a decreasing population and labour force.

Russia produces and exports large quantities of crude oil, natural gas and other mineral resources, which makes the Russian economy particularly vulnerable to world markets' prices of commodities, which have historically been subject to significant volatility over time, as illustrated by the recent decline in crude oil prices. Crude oil prices were relatively stable in 2018 and 2019. However, most recently, oil prices fell with the price of Brent crude declining from a high of U.S.$69.96 per barrel on 6 January 2020 to U.S.$31.43 per barrel on 9 March 2020 and dropping to U.S.$27.63 per barrel on

20 April 2020 as a result of Russia and OPEC failing to reach an agreement over proposed oil production cuts and falling demand for oil triggered by the significant slowdown of business activity and a deteriorating global macro outlook caused by the spread of the COVID-19 pandemic. While a coalition of 23 nations led by Saudi Arabia and Russia subsequently agreed to reduce production of crude oil by 10 million barrels per day in May and June 2020 and 8 million barrels per day from July to December 2020, during the first half of 2021 crude oil prices remained volatile. As of 1 September 2021, the price of Brent crude was U.S.$72.13 per barrel.

Any significant disruptions in oil and gas supply cycles due to production cuts, in light of a decrease in demand due to the COVID-19 pandemic or otherwise, disruptions of major exploration and development projects in the Russian oil and gas sector as a result of technological failures, restrictions on obtaining necessary technologies or services from foreign suppliers as a result of sanctions or insufficient funding may result in decreased productivity, reductions in output of such commodities and ultimately lead to lower federal budget revenues. These developments could have a material adverse effect on the Russian Government's ability to provide financial support to Russian companies, and could have a material adverse effect on the Group's business, financial condition, results of operations, prospects and the value of the Notes.

Any deterioration in the general economic conditions in Russia could adversely influence the level of demand for various products, including those provided by the Group, and therefore could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

Instability of global financial markets could affect the Russian economy

Russia's economy was adversely affected by the global financial and economic crises and could be adversely affected by market downturns and economic crises or slowdowns elsewhere in the world in the future. In particular, the disruptions in the global financial markets have had a severe impact on the liquidity of Russian entities, the availability of credit and the terms and cost of domestic and external funding for Russian entities. This could adversely influence the level of customer demand for various goods and services, including those provided by the Group. These developments, as well as adverse changes arising from systemic risks in global financial systems, including any tightening of the credit environment, or a decline in oil, gas or other commodities prices (such as, for example, metals or coal) could slow or disrupt the Russian economy and adversely affect the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

Introduction of currency restrictions may limit the Group's ability to execute its strategy or operate its business or could otherwise adversely affect the Russian capital markets

Despite gradual liberalization, there can be no assurance that Russia's currency regulation and control regime will not impose new restrictions or prohibitions. Restrictions or prohibitions on hard currency payments and operations could limit the Group's ability to invest in its capital improvement programmes, pursue attractive acquisition opportunities or purchase raw materials or sell its products internationally. In addition, such restrictions or prohibitions may limit an investor's ability to repatriate earnings from securities of Russian issuers, including the Group, or otherwise have a negative impact on the Russian capital markets. The consequences of any new restrictions or prohibitions could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

The Russian banking system remains underdeveloped with a limited number of creditworthy Russian banks, and another banking crisis could place severe liquidity constraints on the Group's business

Russia's banking and other financial systems are not well developed or regulated compared with more developed countries. There are currently a limited number of creditworthy Russian banks, most of which are headquartered in Moscow. Although the CBR has the mandate and authority to suspend banking licences of insolvent banks, some insolvent banks still operate. Over the last several years, the

CBR has undertaken a "clean-up" campaign aimed at removing fraudulent, failing or undercapitalised financial institutions from the banking sector to make it more robust, stable and transparent in the event of any potential systemic shocks. As part of this campaign, the CBR revoked banking licences or introduced financial rehabilitation for a large number of banks, which the CBR believed were undermining the sustainability and reliability of the sector. Recessionary trends in the Russian economy and stricter enforcement action by the CBR have previously affected a number of notable Russian banks, such as Bank Otkritie, B&N Bank, Promsvyazbank, Moscow Industrial Bank, MDM Bank, Master-Bank, ROST-Bank, Trust-Bank, InvestTradeBank, Probusinessbank, Russian Capital Bank, Bank Peresvet and Prominvestbank, that were either acquired, liquidated or taken over for financial rehabilitation by other Russian banks or directly by the Deposit Insurance Agency or the CBR.

While the overall liquidity of the banking sector has remained relatively stable since 2017, the Russian financial sector has faced turbulence due to the COVID-19 pandemic, which has led to a drop in the average household income, a deterioration in the credit quality of borrowers, an increase in provisioning levels and, consequently, led an overall decrease in the profitability of the banking sector (see "*—The global COVID-19 pandemic and the disruption caused by various countermeasures to reduce its spread, could have a material adverse effect on the Group's business, financial condition and results of operations*").

The Group maintains significant cash deposits and cash balances with approximately 36% of the Group's cash and cash equivalents held on deposit and accounts with major state-owned Russian banks as at 30 June 2021. The Group's business and financial position could be adversely affected by any further deterioration and increased instability of, and the lack of liquidity in, the Russian banking sector.

The revocation of the licenses or insolvency of any major banks in which the Group maintains its accounts and uses for settlement operations could result in losses for the Group. Furthermore, any funding shortages or other banking disruptions experienced by the Group's major bank partners could have a material adverse effect on its ability to execute planned developments or to obtain the financing required for the Group's operations, which could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

Russia's physical infrastructure is in poor condition, which could disrupt normal business activity

Russia's physical infrastructure largely dates back to the Soviet period and in certain respects has not been adequately maintained and developed due to insufficient funding. In some areas the rail and road networks, power generation and transmission, communication systems and building stock are particularly affected. Road conditions throughout areas of Russia are poor, with many roads not meeting minimum requirements for usability and safety. Breakdowns and failures of any part of Russia's physical infrastructure may disrupt the Group's normal business activity.

Further deterioration of Russia's physical infrastructure and/or significant increases in charges and tariffs may harm the national economy, disrupt the transportation of goods and supplies, add costs to doing business in Russia and interrupt business operations, any or all of which could have a material adverse effect on the Group's business and the value of the Notes. See "*—JSC "Russian Railways" cannot fully satisfy Russia's coal transportation requirements. Insufficient railway capacity, significant increases in tariffs and the disruption of transportation services could materially reduce the profitability of the Group's operations*".

Social Risks

Social instability caused by weakening economic conditions and turmoil in the financial markets in Russia could increase support for renewed centralized authority, nationalism or violence and thus materially adversely affect the Group's ability to conduct its business effectively

Weakening economic conditions and turmoil in the financial markets in Russia may result in high unemployment or the failure of state and private enterprises to pay full salaries on time and the failure of salaries and benefits generally to keep pace with the increasing cost of living. These conditions led

to a certain amount of labour and social unrest in the past, which may reoccur or worsen in the future. Such labour and social unrest may have widespread political, social and economic consequences, such as increased support for a renewal of centralized authority, increased nationalism, including restrictions on foreign involvement in the economy of Russia, and increased tension between the Government and its people. Any of these consequences could restrict the Group's operations and lead to a loss of revenue, which in turn may have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

Risk Factors Relating to the Russian Legal System and Russian Legislation

The Russian legal system and Russian legislation are at a developmental stage and this may create an uncertain environment for investment and for business activity

Although Russia has made substantial progress in developing an adequate legal framework required for the proper functioning of a market economy, the relatively recent nature of much of Russian legislation and the rapid evolution of the Russian legal system may place the enforceability and underlying constitutionality of laws in doubt and result in ambiguities and inconsistencies in their application. In addition, Russian legislation sometimes leaves substantial gaps in the regulatory infrastructure.

Among the risks of the current Russian legal system are (i) inconsistencies among federal laws, decrees, orders and regulations issued by the president, the Russian Government, federal ministries and regulatory authorities and regional and local laws, rules and regulations; (ii) limited judicial and administrative guidance on interpreting Russian legislation; (iii) the relative inexperience of judges and courts in interpreting new principles of Russian legislation, particularly business and corporate law; (iv) substantial gaps in the regulatory structure due to delay or absence of implementing legislation; (v) a high degree of unchecked discretion on the part of governmental authorities; and (vi) bankruptcy procedures that may be subject to abuse.

The foregoing factors make judicial decisions in the Russian Federation difficult to predict and effective redress uncertain. Additionally, court claims are often used to further political aims. The Group may be subject to these claims and may not be able to receive a fair hearing.

These weaknesses in the Russian legal system could affect the Group's ability to enforce its legal rights in Russia, including rights under contracts, or to defend itself against claims by others, which could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

The lack of independence of certain members of the judiciary, the difficulty of enforcing court decisions and governmental discretion in instigating, joining and enforcing claims could prevent the Group or the Noteholders from obtaining effective redress in a court proceeding and could materially adversely affect the value of the Notes

The independence of the judicial system and its immunity from economic, political and nationalistic influences in Russia are also less than complete. The Russian court system in the past has been and may still be understaffed and underfunded. Russia, along with many western European states, such as Germany and France, is a civil law jurisdiction and, as such, judicial precedents generally have no binding effect on subsequent decisions. Enforcement of court judgments by law enforcement agencies can sometimes be time consuming because of the large number of outstanding court judgments. Additionally, court claims are often used in furtherance of political aims. The Group may be or may become subject to such claims and may not be able to receive a fair trial.

There are also legal uncertainties relating to property rights. During Russia's transformation from a centrally planned economy to a market economy, legislation has been enacted to protect private property against expropriation and nationalisation. However, it is possible that, due to the lack of experience in enforcing these provisions and due to political changes, these protections would not be enforced in the event of an attempted expropriation or nationalisation, or in the event that the Group's business is reorganised. Expropriation or nationalisation of any of the Group's entities, their assets or portions

thereof, or their break-up into separate companies, potentially without adequate compensation, could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

The actions of the Russian legislative, executive and judicial authorities can affect the Russian securities market and consequently the Group's business, financial condition, operating results and prospects

The actions of the Russian legislative, executive and judicial authorities can affect the Russian securities market as well as banks and other businesses operating in Russia. In particular, the events surrounding claims brought by the Russian authorities against several major Russian companies, led to questions being raised regarding the progress of market and political reforms in Russia and have resulted in significant fluctuations in the market price of Russian securities and a negative impact on foreign direct and portfolio investment in the Russian economy, over and above the general market turmoil recently. Any similar actions by the Russian authorities that result in a further negative effect on investor confidence in Russia's business and legal environment could have a further material adverse effect on the Russian securities market and price of Russian securities, or securities issued or backed by Russian entities, including the Notes, as well as on the Group's business, its ability to obtain financing in the international markets, and its financial condition, results of operations, prospects and the value of the Notes.

Selective or arbitrary government action in Russia may have an adverse effect on the Group's business

State authorities have a high degree of discretion in Russia and, at times, act selectively or arbitrarily, without hearing or prior notice, and sometimes in a manner that is inconsistent with legislation or influenced by political or commercial considerations. Moreover, the state has the power in certain circumstances, by regulation or act, to interfere with the performance of, nullify or terminate contracts. Selective or arbitrary state actions have included withdrawals or non-renewals of licences, sudden and unexpected tax audits, criminal prosecutions, and civil actions, among others. Federal and local government entities used common defects in matters surrounding documentation of financing activities as pretexts for court claims and other demands to invalidate such activities and/or to void transactions. The Russian tax authorities have actively brought tax evasion claims relating to the use by Russian companies of tax-optimisation schemes, and press reports have speculated that these enforcement actions have been selective. Selective or arbitrary state action, if directed at the Group, could have a material adverse effect on the Group's business, financial condition, results of operations, prospects and the value of the Notes.

Russia's real property law is subject to uncertainty and inconsistency

The legal framework relating to the ownership and use of land and other real property in Russia is not yet sufficiently developed to support private ownership of land and other real estate to the same extent as is common in some of the more developed market economies of North America and Europe. Land use and title systems rely on complex traditional ownership systems. As a result, the title of land that the Group might invest in may be unclear or in doubt. Moreover, the validity of the Group's right to title or use of its properties may be successfully challenged or invalidated due to technical violations or defects in title. Such instability creates uncertainties in the operating environment in the emerging market nations, which could hinder the Group's long-term planning efforts and may prevent the Group from carrying out its business strategy effectively and efficiently. If the real property owned or leased by the Group is found not to be in compliance with all applicable approvals, consents, registrations or other regulations, the Group may lose the right to use such real property, which could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

Shareholder liability under Russian legislation could cause the Company to become liable for the obligations of its subsidiaries

Russian legislation provides that a company (the "**effective parent**") which (i) is capable of making decisions for another company (the "**effective subsidiary**") or (ii) has approved transactions consummated by the effective subsidiary bears joint and several responsibility for transactions concluded by the effective subsidiary in carrying out such decisions or with the consent of the effective parent. Shareholders of the effective subsidiary may claim damages incurred by the effective subsidiary as a result of the action or inaction of the effective parent. In addition, the effective parent is secondarily liable for the effective subsidiary's debts if the effective subsidiary becomes insolvent or bankrupt as a result of the action or inaction of the effective parent. The Group's subsidiaries consolidated and identified in the Consolidated Financial Statements may be regarded as "effective subsidiaries", depending on particular facts and circumstances, by a Russian court if a case is brought before it. Accordingly, if the Group is found liable (as the effective parent) for the debts of its effective subsidiaries, the Group would have to pay under such judgments, which in turn may have a material adverse effect on the Group's financial position and results of operations.

The Group is subject to anti-monopoly laws enforced by the FAS, which may result in certain limitations being imposed on the Group's activities, the violation of which may result in civil, administrative and even criminal liability

The Competition Law generally prohibits any concerted action, agreement or coordination of business activity that results or may result in, among other things, (i) price fixing, discounts, extra charges or margins; (ii) coordination of auction bids; (iii) partition of a commodity market by territory, volume of sales or purchases, types of goods, customers or suppliers; (iv) refusal to enter into contracts with buyers (customers) for reasons other than economic or technological reasons; (v) imposing unfavourable contractual terms; (vi) fixing disparate prices for the same goods, for reasons other than economic or technological reasons; (vii) creation of barriers to entering or exiting a market; and (viii) restriction of competition in any other way. There is no established court practice on what concerted actions or coordination of business activity is and courts interpret these concepts inconsistently. As a result, there is significant uncertainty as to what actions may be viewed as violation of the Competition Law. In a number of precedents, Russian courts found concerted actions where market participants acted in a similar way within the same period of time, although, arguably, there have been legitimate economic reasons for such behaviour and the behaviour was not aimed at restriction of competition. Therefore, there is a risk that the Group can be found in violation of the Competition Law if its market behaviour, vis-à-vis its customers or suppliers is viewed as being similar to behaviour of the Group's competitors and perceived by the FAS as a purported restriction of competition. Such broad interpretations of the Competition Law may result in the FAS imposing substantial limitations on the Group's activities, may limit operational flexibility and may result in civil, administrative and even criminal liability.

Furthermore, the Group has expanded its operations through the acquisition of companies that are incorporated and operating in Russia or assets that are located in Russia, such as generating companies that currently comprise the energy segment of the Group's business. Some of these acquisitions are, or were, subject to the prior approval or subsequent notification requirements of the FAS, or its predecessor agencies. Certain portions of these requirements are vaguely worded and there can be no assurance that the Group will be able to comply fully or that the FAS will not challenge the Group's past compliance, which could result in administrative sanctions, required divestitures or limitations on operations.

The FAS has ample powers to investigate perceived violations of the Competition Law, has become active in policing marketing, sales and supply strategies of major participants of the Russian steel industry and has previously brought charges against certain market participants alleging concerted actions in violation of the Competition Law.

If the Group's activities are found to be in violation of the Competition Law in any of the cases described above or in any other cases, the Group could be subject to penalties or ordered to change its business operations in a manner that increases costs or reduces profit margin and revenue, which can adversely affect the Group's business, financial condition, results of operations, future prospects and the value of the Notes.

Tax Risks

The Russian taxation system is relatively undeveloped

Generally, taxes payable by Russian companies are substantial and include, amongst others: corporate income tax, value added tax ("**VAT**"), property tax and other taxes.

The tax laws related to these taxes, in particular the Tax Code of the Russian Federation (the "**Russian Tax Code**"), have been in force for a relatively short period of time compared with tax laws in more developed economies. Although the Russian Federation's tax climate and the quality of Russian tax legislation have generally improved since the introduction of the Russian Tax Code, Russian tax laws remain subject to frequent changes, varying and contradicting interpretations and inconsistent and selective enforcement.

Taxpayers, the Ministry of Finance of the Russian Federation and the Russian tax authorities often interpret tax laws and regulations differently. Private clarifications issued by the Ministry of Finance of the Russian Federation in response to specific taxpayers' queries with respect to particular situations are not binding on the Russian tax authorities and there can be no assurance that the Russian tax authorities will not take positions contrary to those set out in the private clarification letters issued by the Ministry of Finance of the Russian Federation. In some instances, the Russian tax authorities have used new interpretations of tax laws retroactively, issued tax claims for periods for which the statute of limitations had expired and reviewed the same tax period several times. During the past several years, the Russian tax authorities have shown a tendency to take more assertive positions in their interpretation of tax legislation, which has led to an increased number of material tax assessments issued by them as a result of tax audits of Russian companies operating in various industries.

The Russian tax authorities generally interpret the tax laws in ways that do not favour taxpayers, who often have to defend their position against the tax authorities in courts. Furthermore, in the absence of binding precedent, court rulings on tax or other related matters by different courts relating to the same or similar circumstances may also be inconsistent or contradictory. As taxpayers and the Russian tax authorities often interpret tax laws differently, taxpayers often need to resort to court proceedings to defend their position against the Russian tax authorities. In the absence of any binding precedent or consistent case law, decisions on tax or other related matters taken by different courts relating to the same or similar circumstances may be inconsistent or contradictory.

The practice relating to tax audits and the statute of limitations for penalties and taxes also create significant uncertainties for Russian taxpayers

Tax returns together with related documentation are subject to review and investigation by the tax authorities, which are empowered to impose severe fines and penalties. Generally, tax returns remain open and subject to inspection by the tax authorities for a period of three years immediately preceding the year in which the decision to conduct a tax audit is taken. However, the fact that the tax authorities have reviewed a particular year does not prevent any tax returns relating to that year from being further reviewed by the tax authorities during the three-year limitation period. In particular, a repeated tax audit may be conducted by a higher-level tax authority as a measure of control over the activities of lower-level tax authorities, or in connection with the reorganisation or liquidation of a taxpayer, or as a result of the filing by such taxpayer of an amended tax return decreasing the tax payable. Therefore, previous tax audits may not preclude from subsequent tax claims relating to the audited period.

On 14 July 2005, the Constitutional Court of the Russian Federation issued a decision that allows the statute of limitations for tax penalties to be extended beyond the three-year term set out in the Russian Tax Code if a court determines that a taxpayer has obstructed or hindered a tax inspection. Moreover, the Russian Tax Code provides for the possibility of an extension of the three-year statute of limitations for tax offences if the taxpayer obstructed the performance of the tax review, and this has become an insurmountable obstacle for the tax audit. As the terms "obstructed", "hindered" and "insurmountable obstacles" are not specifically defined in Russian law, the Russian tax authorities may attempt to

interpret these terms broadly, effectively linking any difficulty experienced by them in the course of their tax audit with obstruction by the taxpayer and use that as a basis to impose additional tax adjustments and penalties beyond the three-year limitation term. Therefore, the statute of limitations is not entirely effective.

The Russian Government is constantly reforming the tax system by redrafting parts of the Russian Tax Code resulting in continuous changes being introduced to existing tax laws and their interpretation. In particular, a large number of changes have been introduced to various chapters of the Russian Tax Code since its adoption.

In 2017, the general anti-avoidance rules were introduced in the Russian Tax Code, which amended the court concept which defined "unjustified tax benefit" mainly by reference to circumstances such as absence of business purpose or transactions where the form does not match the substance and which could lead to the disallowance of tax benefits resulting from the transaction or the re-characterisation of the transaction for tax purposes. Provisions of Article 54.1 of the Russian Tax Code are viewed as new anti-avoidance approach which amends the concept of "unjustified tax benefit". Under those provisions, a taxpayer may not reduce the tax base and/or the amount of tax payable by misrepresenting information on economic events or the objects of taxation which are required to be disclosed in a taxpayer's tax and/or accounting records or tax statements. A taxpayer has the right to reduce the tax base and/or the amount of taxes payable, provided that the following conditions are met: (i) it is not the principal objective of a transaction to cause an amount of tax not to be paid or to be refunded, or (ii) the obligation arising from a transaction was performed by a person who is a party to the contract concluded with the taxpayer and/or a person to whom such obligation was transferred by contract or law. Application of this concept may lead to disallowance of tax benefits resulting from a transaction or the re-characterisation of a transaction for tax purposes. As a result, it is possible that despite the best efforts of the Group to comply with Russian tax laws and regulations, certain transactions and activities of the Group that have not been challenged in the past may be challenged in the future, resulting in a greater than expected tax burden, exposure to significant fines and penalties and potentially severe enforcement measures for the Group.

Recent developments show that the Russian tax authorities are scrutinising various tax planning and mitigation techniques used by taxpayers, including international tax planning. In particular, the Russian Federation introduced "controlled foreign company" rules, the concept of "tax residency for an organisation" and the "beneficial ownership" concept, and is increasingly engaged in the international exchange of tax and financial information (including through country-by-country reporting standards and common reporting standards developed and approved by the Organisation for Economic Co-operation and Development (the "**OECD**")).

In 2017, the Russian Federation signed the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS (the "**MLI**") implementing a series of tax treaty measures to update international tax rules and lessen the opportunity for tax avoidance. On 1 May 2019, the MLI was ratified by the Russian Federation. Starting from 2021, the MLI could limit tax benefits granted by significant number of double tax treaties to which Russia is a party.

In 2020 the Russian government introduced initiative related to the increase of the withholding tax rates applied to dividends and interest paid to certain jurisdictions channelling significant resources from the Russian Federation. The proposals to amend double tax treaties by increasing the withholding tax rate on interest income and dividends to 15% were sent in 2020 to Cyprus, Luxembourg, Malta and the Netherlands. Relevant amendments were made to the double tax treaties with Cyprus, Malta and Luxembourg, while the tax treaty with the Netherlands is to be denounced with the effect from 2022. It remains to be seen whether and which amendments to other Russian double tax treaties will be made or whether such or other Russian double tax treaties will eventually be denounced or terminated.

In addition, the Russian Government may impose arbitrary and/or onerous taxes and penalties in the future, which could adversely affect the Group's business. Russia's inefficient tax collection system increases the likelihood of such events.

Furthermore, although the Constitution of the Russian Federation provides that laws that introduce new taxes or worsen a taxpayer's position cannot be applied retroactively, there have been several instances where such laws have been introduced and applied retroactively.

Such evolving tax conditions create tax risks in the Russian Federation that are greater than the tax risks typically found in countries with more developed taxation, legislative and judicial systems. These tax risks impose additional burdens and costs on the Group's operations, including management's resources. Furthermore, these risks and uncertainties complicate the Group's tax planning and related business decisions, potentially exposing the Group to significant fines, penalties and enforcement measures, and could materially adversely affect the Group's business, results of operations, financial condition and the Company's ability to service its payment obligations under the Guarantee.

Furthermore, Russian tax legislation is consistently becoming more sophisticated. It is possible that new revenue raising measures could be introduced. Although it is unclear how any new measures would operate, the introduction of such measures may affect the Group's overall tax efficiency and may result in significant additional taxes becoming payable. No assurance can be given that no additional tax exposures will arise. Additional tax exposures could have a material adverse effect on the Group's business, results of operations, financial condition and the Guarantor's ability to service its payment obligations under the Guarantee.

The Group's transfer prices may be challenged by the Russian tax authorities

The Russian transfer pricing rules allow the Russian tax authorities to make transfer pricing adjustments and impose additional tax liabilities in respect of transactions which are considered "controlled" for Russian transfer pricing purposes.

The Russian transfer pricing rules may have a potential impact on the Group's tax costs arising from the pricing mechanisms used in controlled transactions and, in particular, transactions with related parties outside of the Russian Federation. The Russian tax authorities will be entitled to accrue additional tax liabilities if prices of the "controlled transactions" differ from those which independent counterparties in similar conditions would have applied. The Russian tax authorities have conducted a number of transfer pricing audits and accrued additional taxes to the relevant taxpayers. Moreover, in certain instances the Russian tax authorities have applied the transfer pricing rules and methods in cases, where the rules have formally not been applicable, claiming additional tax charges calculated using the transfer pricing rules but based on other tax concepts (*e.g.*, unjustified tax benefit, lack of economic justification of expenses, etc.).

Due to uncertainties in the interpretations of transfer pricing legislation, no assurance can be given that the Russian tax authorities will not challenge the prices applied by the Group and make adjustments, which could affect the Group's tax position. Unless such tax adjustments are successfully contested in court, the Group could become liable for increases in its taxes payable. The Russian transfer pricing law, including the possible tax adjustments outlined above, could have a material adverse effect on the Group's business, results of operations and financial condition.

Payments under the Guarantee may be subject to Russian withholding tax or Russian personal income tax

There is a risk that the whole amount of payments under the Guarantees, including a portion relating to principal of the Notes, could be treated as Russian-source income. Accordingly, such Guarantee payments may be subject to withholding tax at a rate of 20% in the event that a payment under the Guarantee is made to a non-resident Noteholder that is a legal entity or organisation subject to any available double tax treaty relief.

Generally, no Russian withholding tax obligations should arise on Guarantee payments made to legal entity or organisation that is not Russian tax resident if such Guarantee is provided in respect of qualifying traded bonds issued by a foreign entity by virtue of a specific exemption envisaged by the Russian Tax Code. In particular, the Russian Tax Code provides that Guarantors which are Russian

legal entities or organisations should be released from the obligation to withhold Russian income tax from Guarantee payments following the enforcement of the Guarantee which is issued in respect of qualified traded bonds provided that certain conditions are simultaneously met as follows: (i) there is an underlying debt obligation of the Russian debtor arising in connection to the issuance of such traded bonds; (ii) there is a double tax treaty between Russia and the jurisdiction of tax residency of the legal entities or organisations which are recipients of guarantee payments; and (iii) the above recipients of guarantee payments provide the respective Guarantor with tax residency certificates. See *"Taxation—Certain Russian Tax Considerations"*.

This release from the obligation to withhold the Russian withholding tax from Guarantee payments made by the Guarantors to the recipients of Guarantee payments which are foreign legal entities or organisations may be relied on to the extent the above conditions are satisfied and until a delisting of the 144A Global Notes from Euronext Dublin, or the Regulation S Global Notes are simultaneously (i) delisted from Euronext Dublin and (ii) exchanged for duly executed and authenticated registered Notes in definitive form in the limited circumstances described under "*Summary of the Provisions Relating to the Notes in Global Form*".

Importantly, the Russian Tax Code does not provide an exemption to the foreign guarantee payments recipients from Russian withholding tax, although currently there is no mechanism or requirement for foreign income recipients that are legal entities or organisations to self-assess and pay Russian tax. However, there can be no assurance that such mechanism will not be introduced in the future or that the Russian tax authorities will not attempt to collect the tax from foreign income recipients. See "*Taxation—Certain Russian Tax Considerations*".In the event the payments under the Guarantee are made to a non-resident individual, there is a risk that such payments including the portion relating to interest and principal of the Notes may be subject to personal income tax at a rate of 30% subject to any available double tax treaty relief. If tax is not withheld at source by the Guarantors, non-resident Noteholders that are individuals would be required to pay Russian personal income tax on their own on the basis of a personal income tax return.

Due to the specifics of the Guarantee payments structure where the immediate recipient of the Guarantee payments is the Trustee (or the Principal Paying Agent in the order of the Trustee), which is a non-resident legal entity, it cannot be excluded that in case the "traded bonds" exemption is not applied, the Guarantee payments eventually received by Russian resident Noteholders may be taxed at source at 20% tax rate normally applicable to non-resident recipients of Russian source income which are legal entities or organizations. Russian Resident Holders may apply for a refund of excessively withheld tax in accordance with the general tax refund procedure envisaged by the Russian Tax Code.

The Group cannot offer any assurance that withholding tax or personal income tax as applicable would not arise on the full amount of the payment under the Guarantees, including with respect to the principal amount of the Notes. The imposition or possibility of imposition of this withholding tax could adversely affect the value of the Notes. See "*Taxation — Certain Russian Tax Considerations*".

Under the gross-up provisions for the Notes, if payments made under the Guarantee are subject to any withholding taxes for any reason (as a result of which the Guarantors would be obliged to reduce the payments to be made under the Guarantee by the amount of such taxes to be withheld), the Guarantors are required to increase the payments as necessary so that the net amounts received in respect of such payments after such withholding or deduction will equal the respective amounts that would have been received in respect of such payments in the absence of such withholding or deduction. It is unclear whether a tax gross-up clause such as that contained in this Prospectus is enforceable in the Russian Federation. There is a risk that the tax gross-up for withholding tax will not take place and that the full amount of the payments made by the Guarantors, will be reduced by Russian withholding income tax at a rate of 20% (or 30% in respect of individual Noteholders). See "*Taxation — Certain Russian Tax Considerations*".

Payments under the Notes may be subject to Russian withholding tax

Under the Russian Tax Code, a foreign legal entity may be recognized as a Russian tax resident if such entity is in fact managed from Russia. In particular, a foreign legal entity may be recognized as a Russian tax resident if: (i) its executive body(ies) operates in respect of such company in Russia on a regular basis (however, the activity of executive body will not be viewed as regular if it is insignificant compared to the one in the other jurisdiction), or (ii) senior executive personnel of the company who are authorized to plan and control activities of the company and take responsibility over it carry out their activities in Russia (i.e. make decisions or take any other actions in respect of operational activities of the company that are within the competence of the company's executive body). If an entity is recognized as Russian tax resident it is obligated to register with the Russian tax authorities, calculate and pay Russian tax on its worldwide income and comply with other tax-related rules established for Russian legal entities or organisations. There is still an uncertainty as to how these criteria will be applied by the Russian tax authorities in practice.

The Russian Tax Code also contains the concept of permanent establishment in Russia under which foreign legal entities, which carry on regular commercial activities in Russia beyond the activities of a preparatory and auxiliary nature either by themselves or via a dependent agent could be recognised as having Russian permanent establishment.

There is an exemption under which foreign companies that are issuers of qualified traded bonds cannot be recognised as Russian tax residents provided that certain conditions are simultaneously met as follows: (i) there is an underlying debt obligation of the Russian or foreign debtor arising in connection with the issuance of such traded bonds; (ii) there is a double tax treaty between Russia and the jurisdiction of tax residency of the issuer of traded bonds; (iii) not less than 90 per cent. of expenses of such foreign issuer of traded bonds are represented by interest payable on debt obligations related to such traded bonds. If the requirements for applying the above exemption are not met by the Company, the Company falls under the general requirements established by general Russian corporate tax residency concept. The Russian Tax Code further provides an exemption from the obligation to withhold tax from interest paid by a Russian organisation to Legal Entity Non-Resident Noteholders under the "quoted bonds" issued in accordance with the legislation of a foreign jurisdiction. This exemption should also be applicable to foreign organisations, which are recognised as Russian tax residents, although this has not been tested in practice.

The Issuer believes that it should not be treated as Russian tax resident or as having a permanent establishment in Russia. Nevertheless, due to uncertainties around interpretation and practical application of the above-mentioned concepts by the Russian tax authorities it cannot be excluded that the Issuer could be treated as Russian tax resident or its activities are deemed as leading to creation of the permanent establishment of the Issuer in the Russian Federation despite of the efforts taken by the Group to minimize such risks.

If the Issuer is treated as Russian tax resident or if the Issuer's activities lead to creation of a permanent establishment for the Issuer in the Russian Federation payments made by the Issuer under the Notes may be subject to Russian withholding tax. In particular, payments of interest under the Notes made by the Issuer to the Legal Entity Non-Resident Noteholders could be subject to Russian withholding tax at a rate of 20% and payments under the Notes (including interest and principal amounts under the Notes) made by the Issuer to Individual Non-Resident Noteholders less any available cost deduction could be subject to Russian taxation at a rate of 30% subject to any available double tax treaty relief (for details see "*Taxation — Certain Russian tax considerations — Double Tax Treaty Relief*").

Tax might be imposed on disposals of the Notes in Russia, thereby reducing their value

Proceeds from the disposal of Notes received from a source within the Russian Federation by a Noteholder that is an individual not qualifying as a Russian tax resident for the purpose of Russian personal income tax would be subject to a personal Russian income tax at a rate of 30% (or such other tax rate as may be effective at the time of such sale or other disposal). The tax would apply to the gross proceeds from such disposal of the Notes less any available duly documented costs (including the acquisition cost of the Notes and other expenses relating to the acquisition holding and sale or other

disposal of the Notes) provided that the duly executed supporting documentation is available to the person obliged to calculate and withhold Russian personal income tax in a timely manner. Furthermore, sales or other disposal proceeds attributable to accrued interest, if deemed to be received by such Noteholders from the Russian sources, can be subject to Russian personal income tax at the rate of 30% (or such other tax rate as could be effective at the time of such sale or other disposal), even if the sale or other disposal results in a loss.

Russian personal income tax rate may technically be reduced or eliminated under provisions of an applicable double tax treaty concluded between Russia and the country of tax residency of a particular Noteholder, subject in practice to timely compliance by that Noteholder with the respective treaty clearance formalities.

In order to apply for tax exemption or payment of tax at a reduced tax rate under the respective double tax treaty a Non-Resident Noteholder – Individual which has the actual right to receive income should confirm his/her tax residency status to the tax agent. For these purposes a Non-Resident Noteholder – Individual resident in a country that has a double tax treaty with Russia can provide to the tax agent a passport of a foreign citizen or other document that is deemed to be an identification document under the federal law or an applicable international treaty. If this document is not sufficient to prove the residency status, the tax agent will request the Non-Resident Noteholder – Individual to provide a tax residency certificate issued by the competent authorities in his/her country of residence for tax purposes.

There is some uncertainty regarding the tax treatment of the portion of the sales or disposal proceeds, if any, attributable to accrued interest (coupon) on the bonds (i.e. debt obligations) where proceeds from sale or other disposition of the Notes are received from a source within Russia by a Non-Resident Noteholder which is legal entity or organisation. Although the Ministry of Finance of the Russian Federation expressed its opinion that the amount of sale or other disposal proceeds attributable to the accrued interest paid to a non-Russian organisation should not be regarded as Russian source income and on this basis should not be subject to taxation in Russia, there remains a possibility that a Russian tax agent which purchases the Notes or acts as an intermediary may seek to assess Russian withholding tax at the rate of 20% on the accrued interest portion of the disposal proceeds (even if a disposal results in a loss).

The imposition or possibility of imposition of the withholding tax could adversely affect the value of the Notes. *See* "*Taxation—Certain Russian Tax Considerations*".

Risk Factors Relating to the Issuer

The Issuer is subject to risks relating to the location of its center of main interest ("COMI"), the appointment of examiners and the claims of preferred creditors under Irish law

COMI

The Issuer has its registered office in Ireland. Under Regulation (EU) 2015/848 of the European Parliament and of the Council of 20 May 2015 on insolvency proceedings (recast) (the "**Recast EU Insolvency Regulation**"), the Issuer's centre of main interest ("**COMI**") is presumed to be the place of its registered office (i.e., Ireland) in the absence of proof to the contrary and provided that the Issuer did not move its registered office within the 3 months prior to a request to open insolvency proceedings.

As the Issuer's COMI is presumed to be Ireland, any main insolvency proceedings in respect of the Issuer would fall within the jurisdiction of the courts of Ireland. As to what might constitute "proof to the contrary" regarding the location of a company's COMI, the key decision is that in Re Eurofood IFSC Ltd ([2004] 4 IR 370 (Irish High Court); [2006] IESC 41 (Irish Supreme Court); [2006] Ch 508; ECJ Case C-341/04 (European Court of Justice)), given in respect of the equivalent provision in the previous EU Insolvency Regulation (Regulation (EC) No. 1346/2000). In that case, on a reference from the Irish Supreme Court, the European Court of Justice concluded that "factors which are both objective and ascertainable by third parties" would be needed to demonstrate that a company's actual situation is different from that which the location of its registered office is deemed to reflect. For instance, if a

company with its registered office in Ireland does not carry on any business in Ireland, that could rebut the presumption that the company's COMI is in Ireland.

As the Issuer has its registered office in Ireland, has Irish directors, is registered for tax in Ireland and has retained an Irish corporate services provider, the Issuer does not believe that factors exist that would rebut the presumption that its COMI is located in Ireland, although this would ultimately be a matter for the relevant court to decide based on the circumstances existing at the time when it was asked to make that decision. If the Issuer's COMI was found to be in another EU jurisdiction and not in Ireland, main insolvency proceedings would be opened in that jurisdiction instead.

Examinership

Examinership is a court moratorium/protection procedure which is available under Irish company law to facilitate the survival of Irish companies in financial difficulties. Where a company, which has its COMI in Ireland is, or is likely to be, unable to pay its debts an examiner may be appointed on a petition to the relevant Irish court under Section 509 of the Companies Act 2014 of Ireland (as amended, the "**Companies Act 2014**").

The Issuer, the directors of the Issuer, a contingent, prospective or actual creditor of the Issuer, or shareholders of the Issuer holding, at the date of presentation of the petition, not less than one-tenth of the voting share capital of the Issuer are each entitled to petition the court for the appointment of an examiner. The examiner, once appointed, has the power to halt, prevent or rectify acts or omissions, by or on behalf of the company after his appointment and, in certain circumstances, negative pledges given by the company prior to his appointment will not be binding on the company. Furthermore, where proposals for a scheme of arrangement are to be formulated, the company may, subject to the approval of the court, affirm or repudiate any contract under which some element of performance other than the payment remains to be rendered both by the company and the other contracting party or parties.

During the period of protection, the examiner will compile proposals for a compromise or scheme of arrangement to assist in the survival of the company or the whole or any part of its undertaking as a going concern. A scheme of arrangement may be approved by the relevant Irish Court when a minimum of one class of creditors, whose interests are impaired under the proposals, has voted in favour of the proposals and the relevant Irish Court is satisfied that such proposals are fair and equitable in relation to any class of members or creditors who have not accepted the proposals and whose interests would be impaired by implementation of the scheme of arrangement and the proposals are not unfairly prejudicial to any interested party.

If for any reason, an examiner were appointed while any amounts due by the Issuer under the Notes were unpaid, the primary risks to the Noteholders are as follows: (a) the Trustee, acting on behalf of the Noteholders, would not be able to enforce rights against the Issuer during the period of examinership; and (b) a scheme of arrangement may be approved involving the writing down of the debt owed by the Issuer to the Noteholders irrespective of the Noteholders' views.

Preferred Creditors

If the Issuer becomes subject to an insolvency proceeding and the Issuer has obligations to creditors that are treated under Irish law as creditors that are senior relative to the Noteholders, the Noteholders may suffer losses as a result of their subordinated status during such insolvency proceedings. In particular, under Irish law, the claims of unsecured creditors of the Issuer rank behind other creditors (including fees, costs and expenses of any examiner appointed, certain capital gains tax liabilities and claims of the Irish Revenue Commissioners for certain unpaid taxes).

Risks relating to Irish Taxation—OECD Action Plan on Base Erosion and Profit Shifting & EU Anti-Tax Avoidance Directive

Fiscal and taxation policy and practice is constantly evolving and recently the pace of change has increased due to a number of developments. In particular, a number of changes of law and practice are occurring as a result of the OECD Base Erosion and Profit Shifting project ("**BEPS**"). Investors should note that certain action points which form part of the OECD BEPS project (such as Action 4, which can deny deductions for financing costs, see "*—EU Anti-Tax Avoidance Directive*" below or Action 6 on the prevention of treaty abuse) may be implemented in a manner which affects the tax position of the Issuer.

EU Anti-Tax Avoidance Directive

As part of its anti-tax avoidance package, and to provide a framework for a harmonised implementation of a number of the BEPS conclusions across the EU, the EU Council adopted Council Directive (EU) 2016/1164 (the "**Anti-Tax Avoidance Directive**") on 12 July 2016.

The EU Council adopted Council Directive (EU) 2017/952 (the "**Anti-Tax Avoidance Directive 2**") on 29 May 2017, amending the Anti-Tax Avoidance Directive, to provide for minimum standards for counteracting hybrid mismatches involving EU member states and third countries.

EU member states were required to implement the Anti-Tax Avoidance Directive by 2019 (subject to derogations for EU member states which have equivalent measures in their domestic law) and had until 31 December 2019 to implement the Anti-Tax Avoidance Directive 2 (except for measures relating to reverse hybrid mismatches, which must be implemented by 31 December 2021).

The Directives contain various measures that could, depending on their implementation in Ireland, potentially result in certain payments made by the Issuer ceasing to be fully deductible. This could increase the Issuer's liability to tax and reduce the amounts available for payments on the Notes. There are two measures of particular relevance.

Firstly, the Anti-Tax Avoidance Directive provides for an "interest limitation rule" which restricts the deductible interest of an entity to 30% of its earnings before interest, tax, depreciation and amortisation. However, the interest limitation only applies to the net borrowing costs of an entity (being the amount by which its borrowing costs exceed its taxable interest revenues and other economically equivalent taxable revenues). This measure has not yet been implemented in Ireland and is expected to be implemented with effect from 1 January 2022. The exact scope of the measure and its impact on the Issuer's tax position will depend on how this is implemented in Ireland.

Secondly, the Anti-Tax Avoidance Directive (as amended by the Anti-Tax Avoidance Directive 2) provides for hybrid mismatch rules. These rules apply in Ireland with effect from 1 January 2020 and are designed to neutralise arrangements where amounts are deductible from the income of one entity but are not taxable for another, or the same amounts are deductible for two entities. These rules could potentially apply to the Issuer where: (i) the interest that it pays under the Notes, and claims deductions from its taxable income for, is not brought into account as taxable income by the relevant Noteholder, either because of the characterisation of the Notes, or the payments made under them, or because of the nature of the Noteholder itself; and (ii) the mismatch arises between associated enterprises, between the Issuer and an associated enterprise or under a structured arrangement. It is not clear if the Issuer will have any associated enterprise, however if the Issuer has an associated enterprise holding Notes, then the measures should not impact payments on the Notes to that enterprise where the amounts of the payment are fully included for tax purposes and brought into account as taxable income by that enterprise.

For the purposes of the hybrid rules, a structured arrangement is one involving a mismatch outcome where the mismatch outcome is priced into the terms of the arrangement or the arrangement was designed to give rise to a mismatch outcome. Absent any specific guidance from the Irish Revenue Commissioners on how they will approach structured arrangements, it is not yet clear if this would apply to the issue of the Notes to bring it within scope of the hybrid rules.

Any adverse change to the Issuer's tax position as a result of these measures could increase the costs payable by the Group, or, failing which, result in the Issuer having insufficient funds after payment of applicable tax to fulfil its obligations under the Notes.

Risks Factors Relating to the Notes and the Trading Market

The Issuer's or the respective Guarantor's ability to fulfil its obligations under the Notes or the Guarantee is dependent on the Group

The Issuer has insufficient net assets, other than amounts due to it from the Group in respect of any inter-Group loans, to meet its obligations to pay interest and other amounts payable in respect of the Notes. The Issuer would, therefore, in the absence of other funding sources, have to rely on the Group providing sufficient funds to meet such obligations.

The Guarantors' ability to make payments under the Guarantees depends upon payments to them from their respective subsidiaries. Although the Guarantors control their subsidiaries as the majority shareholders, these subsidiaries are separate and distinct legal entities and have no obligation, contingent or otherwise, to pay any amounts due pursuant to the Guarantees or to make any funds available for these purposes, whether by dividends, loans, distributions or other payments, and do not guarantee the payment of interest on, or principal of, the Notes.

The Notes contain a non-petition provision relating to the Issuer

The Notes contain a non-petition provision which prevents the Noteholders from (i) instituting against the Issuer any bankruptcy or similar insolvency proceedings under any applicable bankruptcy or similar law and (ii) having any recourse against any director or officer of the Issuer, in each case in connection with any obligations of the Issuer under the Notes (except in the case of fraud, wilful default or negligence). As a result, although the Noteholders will be able to prove in an insolvency of the Issuer initiated by another person, the Noteholders' ability to recover against the assets of the Issuer or its directors is more limited as a consequence of these provisions.

The Issuer or, as the case may be, the Guarantors may be unable to redeem the Notes at maturity or redeem the Notes early upon the occurrence of certain events set forth in the Terms and Conditions of the Notes

At the time of maturity, the Issuer or, as the case may be, the Guarantors may not have the funds to fulfil their respective obligations under the Notes or the Guarantees and may not be able to arrange for additional financing. Furthermore, if the maturity date of the Notes occurs at a time when other arrangements prohibit the Issuer or, as the case may be, the Guarantors from redeeming the Notes, the Issuer or, as the case may be, the Guarantors would try to obtain waivers of such prohibitions from the lenders under those arrangements, or the Issuer or, as the case may be, the Guarantors could attempt to refinance the borrowings that contain the restrictions. If the Issuer or, as the case may be, the Guarantors were unable to obtain the requisite waivers or refinance these borrowings, the Issuer or, as the case may be, the Guarantors would be unable to redeem the Notes.

Payments under the Guarantees are structurally subordinated to existing indebtedness of the respective Guarantor's subsidiaries, and these subsidiaries may incur further such indebtedness in the future

The Guarantees are structurally subordinated to the existing obligations of the Guarantors' subsidiaries. In addition, subject to certain limitations set forth in the Terms and Conditions of the Notes, the Guarantors and their respective subsidiaries may be able to incur substantial additional debt in the future, including debt that may be secured or structurally senior to the Guarantees. Any such additional debt incurred by the Guarantors' subsidiaries may be structurally senior to the obligations of the Guarantors under the Guarantees. Secured indebtedness of the Guarantors or any of their respective subsidiaries may also rank effectively senior to the obligations of the Guarantors under the Guarantees.

The incurrence of additional indebtedness by the Guarantors, including secured indebtedness, may have a material adverse effect on the value of an investment in the Notes.

The Terms and Conditions of the Notes do not restrict the Group from incurring Non-recourse Project Financing and certain other indebtedness

The Terms and Conditions of the Notes contain certain restrictions limiting the Group's flexibility in operating its business. Such restrictions limit its ability to, *inter alia*, create liens, borrow moneys, sell or otherwise dispose of assets and engage in mergers. However, the Terms and Conditions of the Notes do not place any restrictions on the Group's ability to incur Non-recourse Project Financing. Therefore, the Group will be able to incur Non-recourse Project Financing even in circumstances where (i) the Group would be unable to meet its obligations under the Consolidated Net Debt to Consolidated EBITDA ratio or (ii) it would result in a Potential Event of Default or Event of Default occurring or continuing, in each case, on a pro-forma basis. In addition, the Terms and Conditions of the Notes do not restrict the Group from incurring indebtedness under Hedging Obligations and indebtedness related to trade account payables arising in the ordinary course of business. For more information, see "*Terms and Conditions of the Notes — Covenants — Limitation on Consolidated Total Debt*". Terms defined in this risk factor have the meanings given to them in the Terms and Conditions of the Notes.

There is currently no active trading market for the Notes

The Notes are new securities which may not be widely distributed and for which there is currently no active trading market. If the Notes are traded after their initial issuance, they may trade at a discount to their initial offering price, depending upon prevailing interest rates, the market for similar securities, general economic conditions and the financial condition of the Guarantors. Although application has been made to Euronext Dublin for the Notes to be admitted to the Official List and trading on its regulated market, there is no assurance that such application will be accepted or that an active trading market will develop. In addition, liquidity may be limited if the Issuer makes large allocations of the Notes to a limited number of investors (including one or more of the Joint Bookrunners). Accordingly, there is no assurance as to the development or liquidity of any trading market for the Notes.

Even if a market for the Notes develops, the market price of the Notes could be subject to significant fluctuations in response to actual or anticipated variations in the Group's own, and the Group's competitors', operating results, adverse business developments, changes to the regulatory environment in which the Group operates, changes in financial estimates by securities analysts and the actual or expected sale of a large number of Notes, as well as other factors. In addition, in recent years, the global financial markets have experienced significant price and volume fluctuations which, if repeated, could adversely affect the market price of the Notes without regard to the Group's business, results of operations, financial condition or prospects.

The Notes may only be transferred in accordance with the procedures of the depositaries in which the Notes are deposited

Except in limited circumstances, the Notes will be issued only in global form, with interests therein held through the facilities of Euroclear, Clearstream, Luxembourg and/or DTC. Ownership of beneficial interests in the Notes is shown on, and the transfer of that ownership is effected only through, records maintained by Euroclear, Clearstream, Luxembourg and/or DTC or their nominees and the records of their participants. The laws of some jurisdictions may require that certain purchasers of securities take physical delivery of such securities in definitive form. These laws may impair the ability to transfer beneficial interests in the Notes. Because Euroclear, Clearstream, Luxembourg and/or DTC can only act on behalf of their participants, which, in turn, act on behalf of owners of beneficial interests held through such participants and certain banks, the ability of a person having a beneficial interest in a Note to pledge or transfer such interest to persons or entities that do not participate in the Euroclear, Clearstream, Luxembourg and/or DTC systems may be impaired.

Enforcement under the Guarantee

Each of the Guarantors is organised in the Russian Federation. All of the Guarantors' assets are located outside the United Kingdom, and most of the members of the Guarantors' boards of directors are resident outside of the United Kingdom. As a result, an arbitral award or a court decision taken against a Guarantor under the Guarantee, if any, may have to be enforced in the Russian Federation, as the case may be, which may be a time consuming and costly procedure.

The Prospectus does not contain separate single company accounts for each of the Guarantors

Although item 11.1 of Annex IX of Commission Regulation (EC) No. 809/2004 requires that the Prospectus include separate single company accounts for each of the Guarantors, the Issuer has submitted a request to the Central Bank for the omission of such single company accounts of SUEK-Khakasia, Tugnuisky Opencast Mine and SUEK-Kuzbass from the Prospectus, and the Central Bank has granted such omission request. The consolidated financial information of the Group set out in this Prospectus, as at and for the six months ended 30 June 2021 and 2020, has been derived or calculated based on, except where noted otherwise, from the Interim Financial Statements. The consolidated financial information of the Group set out in this Prospectus, as at and for years ended 31 December 2020, 2019 and 2018, has been derived or calculated based on, except where noted otherwise, from the Annual Financial Statements. See "*—Presentation of Financial and Other Information*".

ENFORCEABILITY OF CIVIL LIABILITIES

The Issuer is organised under the laws of Ireland. Each of the Guarantors is incorporated under the laws of the Russian Federation. The majority of assets of the Guarantors are currently located outside the United Kingdom and the United States. In addition, the majority of the directors and executive officers of the Guarantors and the Issuer are residents of countries other than the United Kingdom and the United States. As a result, it may not be possible for investors to (i) effect service of process within the United Kingdom or the United States on the Issuer or the Guarantors or on any of the directors or executive officers of the Issuer or the Guarantors named in this Prospectus; or (ii) enforce, in courts located within the United Kingdom or the United States, judgments obtained in courts in jurisdictions located outside the United Kingdom and the United States against the Issuer or the Guarantors or any of the directors or executive officers of the Guarantors in any action.

In addition, it may be difficult for investors to enforce, in original actions brought in courts in jurisdictions located outside the United Kingdom and the United States, liabilities predicated upon English law or U.S. securities laws.

Russian Federation

Judgments rendered by a court in any jurisdiction outside the Russian Federation will be recognised by courts in Russia only if: (i) an international treaty providing for the recognition and enforcement of judgments in civil cases exists between the Russian Federation and the country where the judgment is rendered; and/or (ii) a federal law of the Russian Federation provides for the recognition and enforcement of foreign court judgments. No such treaty exists between Russia, on the one hand, and the United Kingdom or the United States, on the other hand, for the reciprocal enforcement of foreign court judgments. Even if there were such a treaty, Russian courts could nevertheless refuse to recognise and enforce a foreign court judgment on the grounds set forth in such treaty and in Russian law in effect on the date which such recognition or enforcement is sought. Moreover, Russia has adopted no such law.

The Terms and Conditions of the Notes and the Trust Deed are governed by English Law. The Issuer and the Guarantors have agreed that any dispute or difference arising from or in connection with the Guarantees shall be settled by arbitration in accordance with the Rules of the London Court of International Arbitration (the "**LCIA**"). The Russian Federation is a party to the 1958 United Nations (New York) Convention on the Recognition and Enforcement of Foreign Arbitral Awards. Consequently, a foreign arbitral award obtained in a state which is party to that convention generally should be recognised and enforced by a Russian court (subject to the qualifications provided for in the convention and compliance with Russian civil procedure regulations and other procedures and requirements established by Russian legislation).

The Arbitrazh Procedural Code of the Russian Federation (the "**Arbitrazh Procedural Code**") sets out the procedure for the recognition and enforcement of foreign arbitral awards by Russian courts. The Arbitrazh Procedural Code also contains an exhaustive list of grounds for the refusal of recognition and enforcement of foreign arbitral awards by Russian courts, which grounds are broadly similar to those provided by the New York Convention. However, recent changes to the Arbitrazh Procedural Code have allowed Russian companies that are subject to foreign restrictive measures, in certain limited circumstances, to refer disputes to Russian courts despite an arbitration agreement, to apply to Russian courts for an anti-suit injunction prohibiting the contract counterparty from initiating or continuing proceedings before a foreign arbitral tribunal, or to seek a compensatory amount from the contract counterparty that does not comply with such injunction. The practice of application of these changes is yet to develop.

The Arbitrazh Procedural Code and other Russian procedural legislation could change further, and other grounds for Russian courts to refuse the recognition and enforcement of foreign courts' judgments and foreign arbitral awards could arise in the future. In practice, reliance upon international conventions and

treaties may meet with resistance or relative inexperience or a lack of understanding on the part of a Russian court or other officials, thereby introducing delay and unpredictability into the process of enforcing any foreign judgment or any foreign arbitral award in the Russian Federation.

Furthermore, any arbitral award pursuant to arbitration proceedings in accordance with the LCIA Rules and the application of English law to the Notes and the Trust Deed may be limited by the mandatory provisions of Russian laws relating to the exclusive jurisdiction of Russian courts and the application of Russian laws with respect to bankruptcy, winding up or liquidation of Russian companies.

Ireland

The courts of Ireland will not automatically recognise and/or enforce any judgment obtained in a court established in a country other than Ireland unless such enforcement is envisaged by an international treaty to which Ireland is a party providing for recognition and enforcement of such judgments and then only in accordance with the terms of such treaty.

The United Kingdom currently does not have a treaty with Ireland providing for reciprocal automatic recognition and enforcement of judgments in civil and commercial matters. Therefore, a final judgment for the payment of money rendered by any English court based on civil liability would not automatically be recognised and enforceable in Ireland. A judgment of the English courts will be enforced by the Irish courts if the following general requirements are met: (i) the procedural rules of the English court must have been observed and the English court must have had jurisdiction in relation to the particular defendant according to Irish conflicts of law rules (the submission to jurisdiction by the defendant would satisfy this title); and (ii) the judgment must be final and conclusive and the decree must be final and unalterable in the court which pronounces it. A judgment can be final and conclusive even if it is subject to appeal or even if an appeal is pending. Where however, the effect of lodging an appeal under the applicable law is to stay execution of the judgment, it is possible that, in the meantime, the judgment should not be actionable in Ireland. It remains to be determined whether final judgment given in default of appearance is final and conclusive. However, the Irish courts may refuse to enforce a judgment of the English courts which meets the above requirements for one of the following reasons: (a) if the judgment is not for a definite sum of money; (b) if the judgment was obtained by fraud or trick; (c) if the enforcement of the judgment in Ireland would be contrary to natural or constitutional justice; (d) if the judgment is contrary to Irish public policy or involves certain English laws which will not be enforced in Ireland; or (e) if jurisdiction cannot be obtained by the Irish courts over the judgment debtors in the enforcement proceedings by personal service in Ireland or outside Ireland under Order 11 of the Irish Superior Courts Rules.

Ireland is party to the United Nations (New York) Convention on the Recognition and Enforcement of Foreign Arbitral Awards 1958 (the "**New York Convention**"). Consequently, an arbitral award obtained in England (which is also party to the New York Convention) should be recognised and enforced by an Irish court in accordance with the procedure and subject to the matters set out in the New York Convention without re-examination of the merits of the case.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Presentation of Financial Information

The financial information set out in this Prospectus with respect to the Group has, except where expressly stated otherwise, and subject to rounding, been derived from the Consolidated Financial Statements (as defined below).

The consolidated financial information of the Group set out in this Prospectus, as at and for the six months ended 30 June 2021 and 2020, has been derived or calculated based on, except where noted otherwise, from the unaudited consolidated interim condensed financial information of the Group for the six months ended 30 June 2021 as set forth on pages F-1 to F-14 in this Prospectus (the "**Interim Financial Statements**"). The consolidated financial information of the Group set out in this Prospectus, as at and for years ended 31 December 2020, 2019 and 2018, has been derived or calculated based on, except where noted otherwise from the audited consolidated annual financial statements of the Group as at and for the year ended 31 December 2020 (the "**2020 Consolidated Financial Statements**") and the year ended 31 December 2019 (the "**2019 Consolidated Financial Statements**") as set forth on pages F-15 to F-110 in this Prospectus (the "**Annual Financial Statements**", and together with the Interim Financial Statements, the "**Consolidated Financial Statements**"). The Interim Financial Statements have been prepared in accordance with International Accounting Standard 34 – "*Interim Financial Reporting*" and the Annual Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

The Annual Financial Statements were audited by JSC "KPMG". In 2021, the Company has changed its external auditor to AO Deloitte & Touche CIS. Consequently, the Interim Financial Statements were reviewed by AO Deloitte & Touche CIS.

The comparative consolidated statement of comprehensive income, cash flows and changes in shareholders' equity of the Group for the year ended 31 December 2019 and the comparative consolidated statement of financial position of the Group as at 31 December 2019, in each case, included in the 2020 Consolidated Financial Statements were restated to reflect the acquisition by the Group of LLC "Tuapse Bulk Terminal" and LLC "Murmansk Bulk Terminal" in December 2020 from a company under common control, EuroChem group, as if such acquisition had occurred on 1 January 2019 (see Note 33 of the 2020 Consolidated Financial Statements). As a result, the financial information as at and for the year ended 31 December 2019 presented in this Prospectus will conform to the financial information as of and for the year ended 31 December 2019 contained in the 2020 Consolidated Financial Statements, but will not, where restated, conform in all respects to the Group's financial information as at and for the year ended 31 December 2019 contained in the 2019 Consolidated Financial Statements. The restatement has not been done further back retrospectively to the financial information as at and for the year ended 31 December 2018 and therefore, in certain cases, the financial information as at and for the year ended 31 December 2018 may be incomparable to the more recent financial information presented in this Prospectus.

Non-IFRS Measures

In this Prospectus, the Group uses non-IFRS measures and ratios such as Adjusted EBITDA, Adjusted EBITDA margin, Adjusted Division EBITDA, Adjusted Division EBITDA margin, Covenant Adjusted EBITDA, Covenant Adjusted EBITDA to interest expense, Free cash flow, Last Twelve Months (LTM) Financial Data, Net debt, Net debt to Covenant Adjusted EBITDA and Total Debt (collectively, the "**Non-IFRS Measures**") in the analysis of its business, financial position and results of operations.

"**Adjusted EBITDA**" is calculated by the Group as net profit for the period adjusted for depreciation and amortisation, income tax expense, finance costs, net and foreign exchange (gain)/loss.

"**Adjusted EBITDA margin**" is calculated as the Group's Adjusted EBITDA divided by the Group's revenue and multiplied by 100%.

"**Adjusted Division EBITDA**" is calculated by the Group as segment operating profit/(loss) for the period adjusted for segment depreciation and amortisation.

"**Adjusted Division EBITDA margin**" is calculated as Adjusted Division EBITDA divided by the consolidated sum of segment external revenues and inter-segment revenues and multiplied by 100%.

"**Covenant Adjusted EBITDA**" is a Non-IFRS Measure that is calculated by the Group as net profit for the period adjusted for income tax benefit/(expense), tax on mining, property and other taxes, income taxes, finance costs, net, share of loss/(profit) of associates, gains/(losses) from disposal of investments, foreign exchange (gain)/loss, depreciation and amortisation less dividend income.

"**Covenant Adjusted EBITDA to interest expense**" is calculated as Covenant Adjusted EBITDA divided by the consolidated sum of interest expense and interest on lease.

"**Free cash flow**" is calculated as cash generated from operating activities less cash funds used for payments related to property, plant and equipment.

"**Last Twelve Months (LTM) Financial Data**" for the 12 months ended 30 June 2021 is derived by adding the financial information for the six months ended 30 June 2021 to the financial information for the year ended 31 December 2020 and subtracting the financial information for the six months ended 30 June 2020.

"**Net debt**" is calculated as the Group's total debt less its cash and cash equivalents.

"**Net debt to Covenant Adjusted EBITDA**" is calculated as the Group's net debt divided by its Covenant Adjusted EBITDA.

"**Total debt**" is calculated as the sum of long-term borrowings, short-term borrowings and lease liabilities. Lease liabilities include only liabilities under lease agreements which would be treated as a finance lease in accordance with IAS 17 (before it was superseded by IFRS 16 on 1 January 2019 - pre-IFRS 16 Leases).

The Non-IFRS Measures are presented as supplemental measures of the Group's operating performance and financial position, which the Group believes are frequently used by securities analysts, investors and other interested parties in the evaluation of companies in the energy, coal and transportation sectors. Such supplemental measures have limitations as analytical tools, and investors should not consider them in isolation, or any combination of them together, as a substitute for analysis of the Group's operating results, debt and liquidity as reported under IFRS. Other companies may calculate the Non-IFRS Measures differently or may use the Non-IFRS Measures for different purposes than the Group, limiting their usefulness as a comparative measure.

The Group relies primarily on its IFRS operating results and uses the Non-IFRS Measures only as a supplement to those results. See the Consolidated Financial Statements included elsewhere in this Prospectus. The Non-IFRS Measures are not defined by, or presented in accordance with, IFRS. The Non-IFRS Measures are not a measurement of the Group's operating performance, debt and liquidity under IFRS and should not be considered as an alternative to revenues, profit, operating profit, net cash provided by operating activities or any other measures of performance under IFRS or as an alternative to cash flow from operating activities or as a measure of the Group's liquidity. In particular, the Non-IFRS Measures should not be considered as a measure of discretionary cash available to the Group to invest in the growth of its business.

Currency

In this Prospectus, the following currency terms are used:

- "**U.S. dollar**", "**Dollar**", or "**U.S.$**" means the lawful currency for the time being of the United States;

- "**RUB**", "**RR**", "**Russian Roubles**", "**Rouble**", or "**rouble**" means the lawful currency for the time being of the Russian Federation; and

- "**EUR**", "**Euro**", "**euro**" or "**€**" means the lawful currency for the time being of the member states of the European Union that adopted the single currency in accordance with the Treatyof Rome establishing the European Economic Community, as amended.

Exchange Rate Information

The Group's functional currency of each of the Group's entities varies, depending on the subsidiary (key currencies include Rouble, Euro and U.S. dollar). The currency in which its direct costs and other costs are denominated likewise depends on the subsidiary. However, presentation currency of the Group is the U.S. dollars since the management considers the U.S. dollar to be more appropriate for the understanding and comparability of Consolidated Financial Statements. As a result, fluctuations in the value of these currencies and, in particular, the value of the Rouble against the U.S. dollar may affect these results when translated into U.S. dollar. See "*Risk Factors— Risk Factors Relating to the Group's Business and Industry—The fluctuation of the rouble against the U.S. dollar could affect the Group's financial condition and results of operations*".

The following table sets forth, for the periods and dates indicated, certain information regarding the exchange rate between the Rouble and the U.S. dollar, based on the official exchange rate quoted by the CBR. Fluctuations in the exchange rates between the Rouble and the U.S. dollar in the past are not necessarily indicative of fluctuations that may occur in the future. These rates may also differ from the actual rates used in the preparation of the Group's financial statements and other information presented in this Prospectus.

	Exchange Rate			
	High	**Low**	**Average**	**Period End**
Year/Period	(*Rouble / U.S. dollar*)			
2018	69.97	55.67	62.71	69.47
2019	69.47	61.72	64.74	61.91
2020	80.88	60.95	72.15	73.88
June 2021	73.5	71.68	72.62	72.37
July 2021	75.2	72.72	73.89	73.12

In this Prospectus, all references to "**U.S.**" are to the United States of America, all references to "**U.K.**" are to the United Kingdom and all references to "**European Union**" are to the European Union and its member states as of the date of this Prospectus. All references **"CIS"** are to the countries that formerly comprised the Union of Soviet Socialist Republics and that are now members of the Commonwealth of Independent States: Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

In this Prospectus, all references to "**tonnes**" are to metric tonnes, and one metric tonne is equal to one thousand kilograms.

Rounding

Some numerical figures included in this Prospectus have been subject to rounding adjustments. Accordingly, numerical figures shown as totals in certain tables may not be an arithmetic aggregation of the figures that preceded them. Also, some absolute and percentage changes were calculated using amounts in thousands of U.S. dollar, therefore, absolute and percentage changes presented in millions of U.S. dollar may not be arithmetical calculation from numbers presented in millions of U.S. dollar.

USE OF PROCEEDS

The Issuer will use the proceeds received from the issue and sale of the Notes to make a loan (or loans) to a Group company (or Group companies), a tax resident (or residents) of the Russian Federation, which will use the proceeds for refinancing of the Group's outstanding indebtedness.

Total commissions and expenses relating to the offering of the Notes are expected to be U.S.$4,000,000. The net proceeds that the Group will receive from the offering, after payment of estimated commissions and expenses incurred in connection with the offering, will be U.S.$496,000,000.

None of the Issuer nor either Guarantor nor any of their respective affiliates, nor any person acting on its or their behalf will, directly or indirectly, use all or part of the proceeds of the offering of the Notes, or lend, pay, contribute or otherwise make available such proceeds to any other person:

- to fund or facilitate any activities of or business with any person that, at the time of such funding or facilitation, is the subject or target of UN, U.S., U.K. or EU sanctions; or
- to fund or facilitate any activities of or business in any country or territory that is the subject or the target of UN, EU, US or U.K. country-wide or territory-wide sanctions; or
- in any other manner that could result in a violation by any EU, U.K. or U.S. or any other person (including any person participating in the offering, whether as underwriter, advisor, investor or otherwise) of UN, U.S., U.K. or EU sanctions; or
- to finance or facilitate any activity that is, at the time of such financing or facilitation, an activity referenced or specified in Sections 224, 225, 227, 228, 232, 233 or 234 of the CAATSA, as a basis for the imposition of sanctions or penalties on any person pursuant to CAATSA as a result of such person engaging in such activity.

CAPITALISATION

The following table sets forth the Group's consolidated cash and cash equivalents, and capitalisation as at 30 June 2021, derived from the Interim Financial Statements included elsewhere in this Prospectus. This information should be read in conjunction with "Selected Consolidated Financial and Other Information", "Operating and Financial Review" and the Interim Financial Statements included elsewhere in this Prospectus.

	As at 30 June 2021
	(*in U.S.$ million*)
Non-current borrowings	
Long-term borrowings	4,669
Long-term lease liabilities	302
Total non-current borrowings[(1)]	**4,971**
Current borrowings	
Short-term borrowings	1,685
Short-term lease liabilities	152
Total current borrowings[(2)]	**1,837**
Equity	
Share capital	—
Share premium	104
Revaluation reserve	5,182
Hedging reserve	(443)
Translation reserve	(2,059)
Retained earnings	2,712
Equity attributable to ordinary shareholders of the parent	**5,496**
Non-controlling interests	111
Total Equity	**5,607**
Total capitalisation[(3)]	**12,415**

(1) Represents the sum of long-term borrowings and long-term lease liabilities.
(2) Represents the sum of short-term borrowings and short-term lease liabilities.
(3) Represents the sum of total equity, current borrowings and non-current borrowings.

The Group partially repaid its 2018 PXF Facility (as defined in "*Operating and Financial Review – Borrowings – Loans and borrowings*") in the amount of U.S.$33.3 million in July 2021 and U.S.$33.3 million in August 2021 and its 2019 PXF Facility (as defined in "*Operating and Financial Review – Borrowings – Loans and borrowings*") in the amount of U.S.$23.8 million in July 2021 and U.S.$23.8 million in August 2021, in each case, according to the repayment schedule.

In August 2021, the Group fully repaid its RUB 10 billion 8.3% domestic bonds due in August 2021 issued in 2018

In August 2021, the Group raised short-term debt from PJSC "Sberbank" and JSC "Russian Agricultural Bank" and on the date of this Prospectus the outstanding principal amount was U.S.$240 million and U.S.$110 million, respectively.

Except as described above, there have been no material changes in the consolidated capitalisation of the Group since 30 June 2021.

SELECTED CONSOLIDATED FINANCIAL AND OTHER INFORMATION

The following tables present selected consolidated financial information as at 30 June 2021 and for the six-month periods ended 30 June 2021 and 30 June 2020 and as at and for the years ended 31 December 2020, 2019 and 2018 and has been derived from the Consolidated Financial Statements included in the Prospectus. This section should be read in conjunction with the Consolidated Financial Statements and the notes thereto, as well as the sections entitled "Operating and Financial Review" and "Presentation of Financial and Other Information".

Data from Statements of Profit or Loss and Other Comprehensive Income

	Six months ended 30 June		Year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
			(*in U.S.$ million*)		
Revenue	**4,202**	**3,327**	**6,683**	**7,638**	**8,296**
Cost of sales	(2,136)	(1,831)	(3,846)	(4,301)	(4,110)
Distribution costs	(1,081)	(879)	(1,762)	(1,978)	(2,047)
General and administrative expenses	(97)	(92)	(185)	(229)	(239)
Other income/(expenses), net	(6)	21	2	(15)	(28)
Operating profit	**882**	**546**	**892**	**1,115**	**1,872**
Finance costs, net	(131)	(181)	(337)	(420)	(311)
Foreign exchange (loss) / gain	44	(196)	(308)	200	(83)
Profit before tax	795	169	**247**	**895**	**1,478**
Income tax expense	(182)	(37)	(53)	(146)	(314)
Net profit for the period	**613**	**132**	**194**	**749**	**1,164**
Net profit attributable to:					
Ordinary shareholders of the Parent	603	129	185	742	1,144
Non-controlling interests	10	3	9	7	20
Net profit for the period	**613**	**132**	**194**	**749**	**1,164**
Basic and diluted earnings per share (U.S.$)	2.55	0.55	0.78	3.14	4.88
Other comprehensive (loss)/income					
Items which may be reclassified to profit or loss in the future:					
Transfer of changes in fair value of cash flow hedges to profit or loss, net of deferred tax	83	(10)	31	(220)	104
Effective portion of changes in fair value of cash flow hedges, net of deferred tax	(186)	(251)	(488)	311	(16)
Total items which may be reclassified to profit or loss in the future	**(103)**	**(261)**	**(457)**	**91**	**88**
Items which may not be reclassified to profit or loss in the future:					
Translation difference	52	(277)	(354)	154	(460)
Revaluation of intra-group debt denominated in foreign currency	-	-	(43)	(1)	(1)
Revaluation surplus/(deficit)	-	-	648	(810)	1,322
Tax effect of revaluation	-	-	(130)	162	(264)
Actuarial gains/(losses)	-	-	8	(7)	10
Total items which may not be reclassified to profit or loss in the future	**52**	**(277)**	**129**	**(502)**	**607**
Total other comprehensive (loss)/income for the period	**(51)**	**(538)**	**(328)**	**(411)**	**695**
Total other comprehensive (loss)/income attributable to:					
Ordinary shareholders of the parent	(52)	(516)	(263)	(401)	718
Non-controlling interests	1	(22)	(65)	(10)	(23)

	Six months ended 30 June		Year ended 31 December		
	2021	2020	2020	2019	2018
Total other comprehensive (loss)/income for the period	**(51)**	**(538)**	**(328)**	**(411)**	**695**
Total comprehensive (loss)/income attributable to:					
Ordinary shareholders of the parent	550	(387)	(81)	336	1,858
Non-controlling interests	12	(19)	(53)	2	1
Total comprehensive (loss)/income for the period	**562**	**(406)**	**(134)**	**338**	**1,859**

Statement of Financial Position Data

	As at 30 June		As at 31 December		
	2021	2020	2020	2019	2018
			(*in U.S.$ million*)		
ASSETS					
Non-current assets	**13,995**	**13,518**	**14,109**	**14,354**	**12,044**
Property, plant and equipment	13,072	12,156	13,068	12,310	11,724
Right-of-use assets	424	1,022	591	1,647	-
Deferred tax assets	317	171	246	132	136
Goodwill	78	78	78	78	78
Derivative financial assets	15	-	21	87	-
Other assets	89	91	105	100	106
Current assets	**2,089**	**2,045**	**1,925**	**2,245**	**1,995**
Trade accounts and other receivables	925	712	822	981	882
Inventories	782	767	704	767	735
Prepaid and recoverable taxes	175	194	183	265	175
Derivative financial assets	55	88	33	55	37
Cash and cash equivalents	152	284	183	177	166
Total assets	**16,084**	**15,563**	**16,034**	**16,599**	**14,039**
EQUITY AND LIABILITIES					
Equity	**5,607**	**4,981**	**5,054**	**5,603**	**5,235**
Share capital	-	-	-	-	-
Share premium	104	104	104	104	104
Revaluation reserve	5,182	4,795	5,267	4,866	5,665
Hedging reserve	(443)	(144)	(340)	117	26
Translation reserve	(2,059)	(1,939)	(2,110)	(1,747)	(1,812)
Retained earnings	2,712	2,012	2,016	2,088	1,063
Attributable to ordinary shareholders of the parent	**5,496**	**4,828**	**4,937**	**5,428**	**5,046**
Non-controlling interests	**111**	**153**	**117**	**175**	**189**
Non-current liabilities	**7,171**	**7,760**	**7,900**	**7,795**	**7,083**
Long-term borrowings	4,669	5,321	5,270	4,939	3,272
Long-term lease liabilities	302	698	470	999	-
Deferred tax liabilities	1,533	1,403	1,510	1,481	1,663
Derivative financial liabilities	329	-	314	5	-
Other liabilities	338	338	336	371	2,148
Current liabilities	**3,306**	**2,822**	**3,080**	**3,201**	**1,721**
Short-term borrowings	1,685	1,510	1,732	1,799	1,081
Short-term lease liabilities	152	149	147	225	-
Trade accounts and other payables	1,067	748	915	1,003	506
Derivative financial liabilities	236	252	102	7	4
Taxes payable	166	163	184	167	130

Total shareholders' equity and liabilities	**16,084**	**15,563**	**16,034**	**16,599**	**14,039**

Statement of Cash Flows Data

	Six months ended 30 June		Year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
			(*in U.S.$ million*)		
Profit before tax	**795**	**169**	**247**	**895**	**1,478**
Adjustments to profit before tax:					
Depreciation and amortisation	555	519	1,081	1,053	669
Bad debt expense	6	1	19	7	30
Finance costs, net	131	181	337	420	311
Foreign exchange (gain)/loss	(44)	196	308	(200)	83
Other, net	5	(5)	6	10	(9)
Changes in working capital items:					
Decrease/(increase) in trade accounts and other receivables	(107)	159	(263)	(17)	(61)
(Increase)/decrease in inventories	(43)	(30)	(7)	3	(144)
Decrease/(increase) in prepaid and recoverable taxes (other than income tax)	(3)	27	22	(60)	(25)
Increase/(decrease) in trade accounts and other payables	115	(221)	8	231	(156)
Increase/(decrease) in taxes payable (other than income tax)	(21)	11	49	(28)	13
Net cash flow from operations	**1,389**	**1,007**	**1,807**	**2,314**	**2,189**
Income tax paid	(142)	(57)	(138)	(189)	(288)
Net cash flow from operating activities	**1,247**	**950**	**1,669**	**2,125**	**1,901**
Investing activities					
Purchase of property, plant and equipment	(391)	(506)	(965)	(1,329)	(903)
Business combination	-	(156)	(262)	(259)	(496)
Acquisition of subsidiaries	-	-	(9)	-	-
Interest received	1	4	7	15	28
Loans issued, net	1	(2)	3	(8)	37
Other non-current investments, net	1	-	3	(12)	3
Payments for the acquisition of SGC group	-	-	-	(1,941)	-
Net cash used in investing activities	**(388)**	**(660)**	**(1,223)**	**(3,534)**	**(1,331)**
Financing activities					
Proceeds from long-term borrowings	115	1,838	3,067	3,424	2,402
Repayments of long-term borrowings	(894)	(1,479)	(2,407)	(1,295)	(2,641)
Proceeds from/(repayments of) short-term borrowings, net	76	(62)	(102)	5	(134)
Payment for purchase of leased railcars	-	(196)	(363)	-	-
Interest and commissions paid	(84)	(134)	(264)	(301)	(313)
Payment of lease liabilities	(103)	(132)	(224)	(313)	-
Dividends paid to shareholders	-	-	(103)	-	-
Other transactions	-	-	(20)	(62)	-
Settlement of cross-currency interest rate swap	-	-	-	-	(30)

Dividends paid to non-controlling interests	(9)	(5)	(5)	(12)	(8)
Acquisition of non-controlling interests	-	-	-	(17)	(164)
Net cash flow from / (used in) financing activities	**(899)**	**(170)**	**(421)**	**1,429**	**(888)**
Foreign exchange effect on cash and cash equivalents	9	(12)	(19)	(10)	8
Net (decrease)/increase in cash and cash equivalents	**(31)**	**108**	**6**	**10**	**(310)**
Cash and cash equivalents at the beginning of the period	183	176	177	167	476
Cash and cash equivalents at the end of the period	**152**	**284**	**183**	**177**	**166**

Non-IFRS Measures

	Six months ended 30 June		Year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
			(*in U.S.$ million*)		
Covenant Adjusted EBITDA	1,480	1,109	2,062	2,264	2,657
LTM Covenant Adjusted EBITDA	2,433	N/A	N/A	N/A	N/A
Adjusted EBITDA	1,437	1,065	1,973	2,168	2,541
Adjusted EBITDA Margin	34.2%	32.0%	29.5%	28.4%	30.6%
Free cash flow	856	444	704	796	998
Total debt	6,378	7,010	7,038	7,162	4,374
Net debt	6,226	6,726	6,855	6,985	4,208
Net debt to Covenant Adjusted EBITDA[(1)]	2.56x	N/A	3.3x	3.1x	1.6x
Covenant Adjusted EBITDA to interest expense	13.7x	6.7x	6.8x	5.6x	9.1x

(1) LTM Covenant Adjusted EBITDA is used for calculation of Net debt to Covenant Adjusted EBITDA for the six months ended 30 June 2021.

Reconciliation of Net Profit to Covenant Adjusted EBITDA

	Six months ended 30 June		Year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
			(*in U.S.$ million*)		
Net profit for the period	**613**	**132**	**194**	**749**	**1,164**
Depreciation and amortisation	555	519	1,081	1,053	669
Finance costs, net	131	181	337	420	311
Income tax expense	182	37	53	146	314
Share of loss/(profit) of associates	-	-	-	-	-
(Gains) / losses from disposal of investments	-	-	-	(1)	1
Tax on mining	14	14	29	41	40
Property and other taxes	29	30	60	56	75
Foreign exchange (gain)/loss	(44)	196	308	(200)	83
Dividend income	-	-	-	-	-
Covenant Adjusted EBITDA	**1,480**	**1,109**	**2,062**	**2,264**	**2,657**

Reconciliation of LTM Covenant Adjusted EBITDA for the twelve months ended 30 June 2021

	As of and for the twelve months ended 30 June
	2021
Covenant Adjusted EBITDA for the year ended 31 December 2020	2,062
Plus	
Covenant Adjusted EBITDA for the six months ended 30 June 2021	1,480
Less	
Covenant Adjusted EBITDA for the six months ended 30 June 2020	1,109
LTM Covenant Adjusted EBITDA	**2,433**

Reconciliation of Net Profit to Adjusted EBITDA

	Six months ended 30 June		Year ended 31 December		
	2021	2020	2020	2019	2018
	(*in U.S.$ million*)				
Net profit for the period	**613**	**132**	**194**	**749**	**1,164**
Depreciation and amortisation	555	519	1,081	1,053	669
Income tax expense	182	37	53	146	314
Finance costs, net	131	181	337	420	311
Foreign exchange (gain)/loss	(44)	196	308	(200)	83
Adjusted EBITDA	**1,437**	**1,065**	**1,973**	**2,168**	**2,541**

Reconciliation of Adjusted EBITDA Margin

	Six months ended 30 June		Year ended 31 December		
	2021	2020	2020	2019	2018
	(*in U.S.$ million*)				
Adjusted EBITDA	1,437	1,065	1,973	2,168	2,541
Divided by					
Revenue	4,202	3,327	6,683	7,638	8,296
Adjusted EBITDA Margin	**34.2%**	**32.0%**	**29.5%**	**28.4%**	**30.6%**

Reconciliation of Coal Division Adjusted EBITDA[(1)]

	Six months ended 30 June		Year ended 31 December		
	2021	2020	2020	2019	2018
	(*in U.S.$ million*)				
Coal segment operating profit/(loss)	344	(19)	38	154	1,193
Coal segment depreciation and amortisation	311	288	637	597	438
Corporate segment operating profit/(loss)	(22)	(16)	(44)	(58)	(35)
Corporate segment depreciation and amortisation	5	3	9	7	4
Coal Division Adjusted EBITDA	**638**	**256**	**640**	**700**	**1,600**

(1) Coal Division Adjusted EBITDA represents the financial results of the Group's coal segment and the corporate segment.

Reconciliation of Energy Division Adjusted EBITDA

	Six months ended 30 June		Year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
			(*in U.S.$ million*)		
Segment operating profit/(loss)	343	332	522	483	391
Segment depreciation and amortisation	137	118	228	178	177
Energy Division Adjusted EBITDA	**480**	**450**	**750**	**661**	**568**

Reconciliation of Logistics Division Adjusted EBITDA

	Six months ended 30 June		Year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
			(*in U.S.$ million*)		
Segment operating profit/(loss)	217	249	376	536	323
Segment depreciation and amortisation	102	110	207	271	50
Logistics Division Adjusted EBITDA	**319**	**359**	**583**	**807**	**373**

Reconciliation of Adjusted Division EBITDA Margin[(1)]

	Six months ended 30 June		Year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
			(in U.S.$ million)		
Coal Division					
Coal Division Adjusted EBITDA	638	256	640	700	1,600
Divided by the sum of					
Coal segment external revenues	2,513	2,038	4,057	5,140	6,031
Coal inter-segment revenues	423	281	760	664	568
Corporate segment external revenues	3	-	-	-	-
Corporate inter-segment revenues	29	24	48	53	54
Coal Division Adjusted EBITDA Margin	**21.5%**	**10.9%**	**13.2%**	**12.0%**	**24.0%**
Energy Division					
Energy Division Adjusted EBITDA	480	450	750	661	568
Divided by the sum of					
Segment external revenues	1,407	1,195	2,374	2,189	2,130
Inter-segment revenues	35	34	65	8	7
Energy Division Adjusted EBITDA Margin	**33.3%**	**36.6%**	**30.8%**	**30.1%**	**26.6%**
Logistics Division					
Logistics Division Adjusted EBITDA	319	359	583	807	373
Divided by the sum of					
Segment external revenues	279	94	252	309	135
Inter-segment revenues	896	876	1,666	1,903	1,875
Logistics Division Adjusted EBITDA Margin	**27.1%**	**37.0%**	**30.4%**	**36.5%**	**18.6%**

(1) Coal Division Adjusted EBITDA margin represents the financial results of the Group's coal segment and the corporate segment.

Reconciliation of Free Cash Flow

	Six months ended 30 June		Year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
			(*in U.S.$ million*)		
Net cash flow from operations	1,247	950	1,669	2,125	1,901
Purchase of property, plant and equipment	(391)	(506)	(965)	(1,329)	(903)
Free cash flow	**856**	**444**	**704**	**796**	**998**

Reconciliation of Total Debt and Net Debt

	As at 30 June		As at 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
			(*in U.S.$ million*)		
Long-term borrowings	4,669	5,321	5,270	4,939	3,272
Short-term borrowings	1,685	1,510	1,732	1,799	1,081
Lease liabilities[(1)]	24	179	36	424	21
Total Debt	**6,378**	**7,010**	**7,038**	**7,162**	**4,374**
Less: Cash and cash equivalents	152	284	183	177	166
Net Debt	**6,226**	**6,726**	**6,855**	**6,985**	**4,208**

(1) Lease liabilities include only liabilities under lease agreements which would be treated as a finance lease in accordance with IAS 17 (before it was superseded by IFRS 16 on 1 January 2019 - pre-IFRS 16 Leases).

Reconciliation of Net debt to Covenant Adjusted EBITDA

	Twelve months ended 30 June	Year ended 31 December		
	2021	**2020**	**2019**	**2018**
		(*in U.S.$ million*)		
Net Debt	6,226	6,855	6,985	4,208
Divided by				
Covenant Adjusted EBITDA	2,433	2,062	2,264	2,657
Net debt to Covenant Adjusted EBITDA	**2.56x**	**3.3x**	**3.1x**	**1.6x**

Reconciliation of Covenant Adjusted EBITDA to interest expense

	Six months ended 30 June		Year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
			(*in U.S.$ million*)		
Covenant Adjusted EBITDA	1,480	1,109	2,062	2,264	2,657
Divided by					
Interest expense and interest on lease	108	165	304	406	292
Covenant Adjusted EBITDA to interest expense	**13.7x**	**6.7x**	**6.8x**	**5.6x**	**9.1x**

Last Twelve Months (LTM) Financial Data

	As of and for the twelve months ended 30 June
	2021
Revenue	7,558

Net profit/(loss)	675
Foreign exchange gain/(loss)	68
Financial costs, net	287
Income tax expense	198
Depreciation and amortisation	1,117
Covenant Adjusted EBITDA	2,433
Adjusted EBITDA	2,345
Total Debt	6,378
Net Debt	6,226

Last Twelve Months (LTM) Revenue attributable to Russian Federation

	As of and for the twelve months ended 30 June
	2021
Revenue attributable to Russian Federation for the year ended 31 December 2020	3,114
Plus	
Revenue attributable to Russian Federation for the six months ended 30 June 2021	1,836
Less	
Revenue attributable to Russian Federation for the six months ended 30 June 2020	1,535
LTM Revenues **attributable to Russian Federation**	**3,415**

Last Twelve Months (LTM) Revenue attributable to Pacific Region

	As of and for the twelve months ended 30 June
	2021
Revenue attributable to Pacific Region for the year ended 31 December 2020	2,377
Plus	
Revenue attributable to Pacific Region for the six months ended 30 June 2021	1,610
Less	
Revenue attributable to Pacific Region for the six months ended 30 June 2020	1,264
LTM Revenue attributable to Pacific Region	**2,723**

Last Twelve Months (LTM) Revenue attributable to Atlantic Region

	As of and for the twelve months ended 30 June
	2021
Revenue attributable to Atlantic Region for the year ended 31 December 2020	1,192
Plus	
Revenue attributable to Atlantic Region for the six months ended 30 June 2021	756
Less	
Revenue attributable to Atlantic Region for the six months ended 30 June 2020	528
LTM Revenue attributable to Atlantic Region	**1,420**

Last Twelve Months (LTM) Coal segment revenue attributable to Atlantic Region and Pacific Region

	As of and for the twelve months ended 30 June
	2021
Coal segment revenue attributable to Atlantic Region for the year ended	1,192

31 December 2020	
Plus	
Coal segment revenue attributable to Atlantic Region for the six months ended 30 June 2021	734
Less	
Coal segment revenue attributable to Atlantic Region for the six months ended 30 June 2020	528
Plus	
Coal segment revenue attributable to Pacific Region for the year ended 31 December 2020	2,377
Plus	
Coal segment revenue attributable to Pacific Region for the six months ended 30 June 2021	1,562
Less	
Coal segment revenue attributable to Pacific Region for the six months ended 30 June 2020	1,264
LTM Coal segment revenue attributable to Atlantic Region and Pacific Region	**4,073**

Last Twelve Months (LTM) Coal segment revenue attributable to Russian Federation

	As of and for the twelve months ended 30 June
	2021
Coal segment revenue attributable to Russian Federation for the year ended 31 December 2020	488
Plus	
Coal segment revenue attributable to Russian Federation for the six months ended 30 June 2021	217
Less	
Coal segment revenue attributable to Russian Federation for the six months ended 30 June 2020	246
LTM Coal segment revenue attributable to Russian Federation	**459**

Last Twelve Months (LTM) Energy segment revenue

	As of and for the twelve months ended 30 June
	2021
Energy segment revenue for the year ended 31 December 2020	2,374
Plus	
Energy segment revenue for the six months ended 30 June 2021	1,407
Less	
Energy segment revenue for the six months ended 30 June 2020	1,195
LTM Energy segment revenue	**2,586**

Last Twelve Months (LTM) Logistics segment revenue attributable to Atlantic Region and Pacific Region

	As of and for the twelve months ended 30 June
	2021
Logistics segment revenue attributable to Atlantic Region for the year ended 31 December 2020	-
Plus	
Logistics segment revenue attributable to Atlantic Region for the six months ended 30 June 2021	22

Less	
Logistics segment revenue attributable to Atlantic Region for the six months ended 30 June 2020	-
Plus	
Logistics segment revenue attributable to Pacific Region for the year ended 31 December 2020	-
Plus	
Logistics segment revenue attributable to Pacific Region for the six months ended 30 June 2021	48
Less	
Logistics segment revenue attributable to Pacific Region for the six months ended 30 June 2020	-
LTM Logistics segment revenue attributable to Atlantic Region and Pacific Region	**70**

Last Twelve Months (LTM) Logistics segment revenue attributable to Russian Federation

	As of and for the twelve months ended 30 June
	2021
Logistics segment revenue attributable to Russian Federation for the year ended 31 December 2020	252
Plus	
Logistics segment revenue attributable to Russian Federation for the six months ended 30 June 2021	209
Less	
Logistics segment revenue attributable to Russian Federation for the six months ended 30 June 2020	94
LTM Logistics segment revenue attributable to Russian Federation	**367**

Please refer to "*Presentation of Financial and Other Information—Non-IFRS Measures*" for disclosure of Non-IFRS measures used in this Prospectus.

OPERATING AND FINANCIAL REVIEW

The following overview of the Group's financial condition and results of operations as at 30 June 2021 and for the six-month periods ended 30 June 2021 and 2020 and as at and for the years ended 31 December 2020, 2019 and 2018, should be read in conjunction with the Consolidated Financial Statements and related notes included elsewhere in this Prospectus and Presentation of Financial and Other Information.

The following overview includes forward-looking statements that reflect the current view of the management and involve inherent risks and uncertainties. The actual results of the Group could differ materially from those contained in such forward-looking statements as a result of factors discussed below and elsewhere in this Prospectus, particularly in "Risk Factors".

Selected consolidated financial information in this section has been derived from both the reviewed and audited Consolidated Financial Statements, in each case without material adjustments, unless otherwise stated, as well as the Group's management financial reports.

Overview

The Group is a leading vertically integrated energy and coal producer with diversified businesses spanning the energy value chain that are supported by complimentary logistics operations and infrastructure. The diversification of operations and the development of synergies between business lines that was undertaken by the Group in the last several years, as well as the Group's investments in research and development and product innovation, has strengthened its resilience to market downturns and positioned it to capture domestic economic growth and global economic recovery opportunities as they arise. The Group's mission is to provide affordable and reliable energy to customers across the world whilst adhering to the best in class principles of corporate governance, sustainability, health and environmental safety.

In the six months ended 30 June 2021, the Group's total revenue and net profit amounted to U.S.$4,202 million and U.S.$613 million compared to U.S.$3,327 million and U.S.$132 million, respectively, in the six months ended 30 June 2020. For the year ended 31 December 2020, the Group's total revenue and net profit amounted to U.S.$6,683 million and U.S.$194 million compared to U.S.$7,638 million and U.S.$749 million for the year ended 31 December 2019 and U.S.$8,296 million and U.S.$1,164 million for the year ended 31 December 2018, respectively. The Group's Adjusted EBITDA for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018 amounted to U.S.$1,437 million, U.S.$1,973 million, U.S.$2,168 million and U.S.$2,541 million, respectively. The Group's Adjusted EBITDA margin was 34.2%, 29.5%, 28.4% and 30.6% for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively.

The Group's operations comprise three main divisions: (i) the Energy Division; (ii) the Coal Division; and (iii) the Logistics Division.

Energy Division

The Energy Division represents the Group's activities in the energy sector which include: (1) the generation and sale of electricity, (2) the sale of electricity capacity, and (3) the generation, transmission and sale of heat. These activities are conducted by SGC, a leading producer of electricity and heat in Siberia, which the Group acquired in 2018.

The Group operates TPPs across eight Russian regions with a combined installed electricity capacity of 17.6 GW and combined installed heat capacity of 26,500 kGcal/h. The Group's heat transportation and distribution network consists of approximately 11 thousand kilometres of double pipelines. The Group has expanded the installed electricity capacity and geographical coverage of the Energy Division's operations with the acquisition of Reftinskaya GRES in 2019, Krasnoyarskaya GRES-2 and Primorskaya GRES in 2020.

Since the majority of the Group's power plants are located in Siberia, where central heating is consumed nine months a year due to harsh weather conditions, the Group's power plants primarily operate in a combined heat cycle (as co-generation power plants with combined production of electricity and heat) which increases the production efficiency of energy consumed by customers in Siberia.

The Energy Division sells electricity and electricity capacity on the wholesale and retail electricity and capacity markets and provides a stable distribution channel for the Coal Division. The Energy Division purchased 21.8 million, 37.1 million, 33.7 million, and 30.2 million tonnes of coal supplied by the Coal Division, or 37.0%, 33.0%, 29.0% and 26.0% of the Coal Division's sales volumes during the six months ended 30 June 2021, and the years ended 31 December 2020, 2019 and 2018, respectively.

In addition, the Energy Division operates ELSIB, a producer of turbine generators for hydroelectric, nuclear and thermal power plants in Russia and other countries. ELSIB is one of the key players in the Russian market for the production of turbine generators from 60 to 130 MW.

In the first half of 2021, the Group produced 20.7% of the total electricity generated in the Siberian IES compared to 21.2% in the same period in 2020, according to the System Operator. The Group provides heat to more than 5.5 million people living in the Novosibirsk Region, the Krasnoyarsky Krai, the Altaisky Krai, the Kemerovo Region, the Republic of Khakasia and the Republic of Tuva.

In the six months ended 30 June 2021 and 2020, the Group generated 36.5 TWh and 31.9 TWh of electricity and 28.4 million GCal and 22.4 million GCal of heat, respectively. In the years ended 31 December 2020, 2019, and 2018, respectively, the Group generated 63.7 TWh, 51.5 TWh and 46.2 TWh of electricity and 43.7 million GCal, 43.5 million GCal, and 46.0 million GCal of heat, respectively. The Group was the sixth largest producer of electricity in Russia and the third supplier of heat in Russia, according to data published by Russian energy companies. See "*Business – Energy Division*".

For the six months ended 30 June 2021 and the year ended 31 December 2020, the Energy Division's revenue accounted for 33.5% and 35.5% of the Group's total revenues, respectively. For the six months ended 30 June 2021 and the year ended 31 December 2020, the Energy Division's Adjusted EBITDA accounted for 33.4% and 38.0% of the Group's Adjusted EBITDA, respectively. The Energy Division's Adjusted EBITDA margin was 33.3% and 30.8% for the same periods.

Coal Division

The Coal Division represents the Group's coal mining, processing, sale and distribution business. The Group operates nine underground and 19 open-pit large-scale mines in Siberia and the Russian Far East. The Group also has ten washing plants and processing facilities which allow it to process all of the coal designated for export and to access premium coal markets.

As at 30 June 2021, the Group was the largest Russian coal producer and the largest supplier of thermal coal to the Russian market by volume, according to the CDU TEK. The Group was also the world's fourth largest coal exporter by volume as at 30 June 2021, according to data published by major coal companies, with supplies of high quality thermal, sized and metallurgical coal to a diversified customer base across 48 countries. See "*Business – Coal Division*".

As at 1 January 2019, the Group had proved and probable reserves of 7.7 billion tonnes, as audited by SRK, which ranked the Group as the fifth largest coal miner globally, according to data published by major coal companies. According to the Group's internal estimates, its estimated reserves amounted to 7.46 billion tonnes as at 30 June 2021.

The Group sells coal on the domestic market and on the export markets of the Asia-Pacific region, Europe and other countries through a global sales and distribution network of representative and marketing offices located in countries of strategic importance for the Group such as China, Taiwan, South Korea, Japan, Vietnam, Lithuania, Indonesia, Australia, the U.K. and the USA. In Russia, the Group primarily supplies coal to power generating companies, including its Energy Division, industrial

consumers, state agencies and communal utilities. In export markets, the Group sells coal primarily to direct consumers through its global distribution network.

The Coal Division profitability is largely dependent on the cost of coal transportation and transshipment. Since most of the coal produced by the Coal Division is transported and transshipped by the Logistics Division, the Group has better control over such costs through the value chain, which enables it to improve the Coal Division's margin.

In the six months ended 30 June 2021 and 2020, respectively, the Group sold 58.9 million and 51.7 million tonnes of coal (including to the Group's Energy Division) of which the Group exported 47% and 50%, respectively. In the years ended 31 December 2020, 2019, and 2018, respectively, the Group sold 112.7 million, 113.7 million and 113.8 million tonnes of coal (including to the Group's Energy Division) of which the Group exported 47.0%, 47.0% and 48.0%, respectively. Approximately 67% and 33% of the Group's coal production in the first half of 2021 was hard and brown coal, respectively (compared to 69% and 31% of hard and brown coal, respectively, in the first half of 2020).

For the six months ended 30 June 2021 and the year ended 31 December 2020, the Coal Division's revenue (including corporate segment revenue) and Adjusted EBITDA accounted for 59.9% and 60.7% of the Group's total revenues and 44.4% and 32.4% of the Group's total Adjusted EBITDA, respectively. The Coal Division's Adjusted EBITDA margin was 21.5% and 13.2% for the same periods.

Logistics Division

The Logistics Division represents the Group's high-capacity railcar transportation and port transshipment business. The operations of the Logistics Division were consolidated under NTC in 2021, which manages the Logistics Division and provides transportation and transshipment services to the Group's other divisions and third parties. The Logistics Division assets include Tuapse Bulk Terminal, Murmansk Commercial Seaport and Murmansk Bulk Terminal in the western regions of Russia and Vanino Bulk Terminal and Maly Port in the Far East with a combined 58.6 million tonnes transshipment capacity and an extensive railway infrastructure comprising 56 thousand rolling stock, over 300 locomotives, approximately 1 thousand kilometres of railway tracks, 16 internal loading stations and other ancillary assets.

The Logistics Division underpins the vertically integrated business model of the Group by ensuring cost-efficient and reliable supplies between the divisions, including, in particular, supplies of coal from the Group's coal assets to the Group's power plants and other customers in Russia and abroad. In addition to the intra-Group supplies, the Logistics Division generates external revenue by transporting and transshipping coal, iron ore, fertilisers and other bulk cargo for third parties.

As at 30 June 2021, the Group was the second largest bulk port operator in Russia by transshipment capacity and the fourth largest Russian gondola car operator, according to the Group's calculations based on published data (see also "*Business – Logistics Division*"). In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the Group transshipped 23.7 million tonnes, 50.3 million tonnes, 48.2 million tonnes and 45.8 million tonnes of cargo, respectively, and transported 62.9 million tonnes, 109.9 million tonnes, 104.7 million tonnes and 100.3 million tonnes of cargo by railcars, respectively.

For the six months ended 30 June 2021 and the year ended 31 December 2020, the Logistics Division's revenue and Adjusted EBITDA accounted for 6.6% and 3.8% of the Group's total revenues and 22.2% and 29.5% of the Group's total Adjusted EBITDA, respectively. The Logistics Division's Adjusted EBITDA margin was 27.1% and 30.4% for the same periods. See "*– Factors Affecting Results of the Group's Logistics Operations–Acquisitions and Disposals*".

Certain Factors Affecting the Group's Results of Operations

A number of external factors affect the results of operations of the Group, including, among others, the level of coal demand and coal prices, coal sales volumes, electricity, capacity and heat prices, foreign exchange rates and seasonality. See "*—Results of Operations for the Six Months ended 30 June 2021 and 2020*" and "*—Results of Operations for the Years ended 31 December 2020, 2019 and 2018*" for a description of the extent to which those external factors have affected the Group's results of operations. See also "*Risk Factors*".

Factors affecting results of the Group's coal segment operations

The Group's results of operations in its coal segment during the periods under review have been primarily affected by the factors set forth below, which the Group believes will continue to affect its results of operations in the future.

Coal prices

The Group's revenue from sales of coal amounted to U.S.$2,513 million, U.S.$3,799 million, U.S.$4,877 million and U.S.$5,706 million, which accounted for 59.8%, 56.8%, 63.9% and 68.8% of the Group's total revenue in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively (excluding intragroup eliminations). As the Group derives a significant portion of its revenues from sales of coal, its results of operations are affected by fluctuations in the coal prices.

The market price of coal can fluctuate significantly and is affected by a number of factors which are outside the Group's control, including in particular, coal demand and supply. Major influences on the coal price include also international economic and geopolitical conditions, the availability and costs of substitute energy products such as natural gas, inventory levels maintained by producers, government action and policies, trade barriers and the actions of participants in the coal and energy market. Moreover, the Group's realised coal price also dependents on coal quality characteristics such as calorific value, ash content, sulphur content, nitrogen content and moisture level, which determine whether the Group's coal products are sold with a premium or a discount to the established market prices.

The average coal price for 2020 based on Argus and GlobalCOAL was U.S.$54.6 per tonne, a decrease of U.S.$12.8, or 19.0%, from 2019 average price of U.S.$67.4 per tonne. The price ranged from U.S.$38.6 to U.S.$79.9 per tonne in 2020, reaching its annual high in December 2020. In 2019, the average coal price decreased to U.S.$67.4 per tonne from U.S.$94.1 per tonne in 2018.

The average price for the six months ended 30 June 2021 based on Argus and GlobalCOAL was U.S.$87.4 per tonne, compared to the average price for the same period in 2020 of U.S.$53.4 per tonne. During the first six months of 2021, the price ranged from U.S.$65.9 to U.S.$127.7 per tonne, reaching its six-month high in June 2021.

A 10% decrease of thermal coal price would have decreased profit after tax for the years ended 31 December 2020 and 2019 by U.S.$274 million and U.S.$356 million, respectively.

Price variations and market cycles have influenced the financial results of the Group during the periods under review, and the Group expects that this will remain the case for the foreseeable future. The table below sets forth the thermal coal price indices for the periods indicated, which serve as a reference for pricing the Group's coal products:

	Six months ended 30 June		Year ended 31 December		
	2021	2020	2020	2019	2018

			(*U.S.$ per tonne*)		
globalCOAL® NEWC Index (FOB Newcastle) ..	98.8	61.5	60.4	77.8	107.3
API 2 (CIF Rotterdam, Northwest Europe).....	78.1	45.9	50.3	61.0	91.9
FOB Vostochny 5,500 NAR.....	85.3	52.9	53.1	63.5	83.3

The table below sets forth the cash cost and the average price of coal sold by the Group.

	Six months ended 30 June	**Year ended 31 December**		
	2021	**2020**	**2019**	**2018**
		(*U.S.$ per tonne*)		
Domestic market				
Average realised price	19	19	20	21
Cash cost (incl. rail costs).....	16	16	19	18
International market				
Average realised price	78	57	71	88
Cash cost, FOB.....	42	46	54	51

Although the Group has adopted a hedging policy and entered into several derivative arrangements to mitigate its exposure to commodity price risk, the existing derivative arrangements are covering an insignificant amount of the Group's revenue attributable to coal sales. In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the Group's derivative arrangements covered 19.0%, 16.7%, 19.9% and 16.5% of the Group's revenue from coal sales, respectively. As such, the Group's realised thermal coal price is heavily dependent on the market price of coal, which is demonstrated by the fact that the Group's realised coal price remained close to the market price of coal in each of the years ended 31 December 2020, 2019 and 2018. As a result, the price of coal is one of the largest factors in determining profitability and cash flow from operations of the Group, and the Group's financial performance has been, and is expected to continue to be, closely linked to the market price of coal. The Group monitors coal price trends and regulates its sales policy accordingly.

Coal sales volumes

Coal sales volumes is one of significant factors affecting the Group's results of operations as it directly affects its revenues and costs. In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the Group sold 58.9 million tonnes, 112.7 million tonnes, 113.7 million tonnes and 113.8 million tonnes of coal products, respectively. The Group's coal sales volumes are primarily driven by coal production volumes and transportation capacity.

Coal production volumes are dependent on a number of factors, including the geological characteristics of the Group's coal mines such as mine location, amount of coal reserves, seam thickness and stripping ratios, mine plans, weather conditions and coal demand from the power generating companies. In the six months ended 30 June 2021 and 2020 and the years ended 31 December 2020, 2019 and 2018, the Group produced 53.7 million tonnes, 52.2 million tonnes, 101.2 million tonnes, 106.2 million tonnes and 110.4 million tonnes of coal on its coal mines. Decline in coal production in the years ended 31 December 2020 and 2019 as compared to the previous periods was primarily attributable to lower demand for coal products in the respective periods. Further, production volumes can be impacted by operational disruptions. See "*Risk Factors—Some of the Group's coal mining equipment and processing plants are functioning beyond their original expected life*".

Moreover, production levels are heavily dependent on the Group's ability to invest in the exploration and development of new mines, as well as the improvement of its existing mines. In particular, the Group is implementing several projects to increase the coal production levels at Talidinskaya-Zapadnaya-2, Pravoberezhny and Vostochno-Beisky mines. The Group's capital expenditures related to coal business segment amounted to U.S.$201 million, U.S.$723 million, U.S.$972 million and

U.S.$802 million in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively.

In addition, the Group's future production levels depend on its reserves base. Although the Group has a substantial amount of coal reserves, the Group's reserves, unless replenished, will decline as it produces coal. The Group's future production growth, therefore, will be dependent upon it successfully developing its existing reserves base and discovering or acquiring additional reserves. A summary of the Group's reserves is shown in "*Business*".

The coal sales volumes are also dependent on the Group's ability to make deliveries over long distances within Russia and to seaports for export. The Group has a developed logistics capability which manages the transportation of coal through the national rail system to the Group's domestic customers and to seaports, including to the Group's dedicated bulk coal terminals at Vanino Port, Murmansk Port and Maly Port. See "*Business—Logistics Division*" for a description of the Group's logistics infrastructure and "*—Factors affecting results of the Group's logistics operations*".

Coal segment expenses

The coal segment expenses are primarily comprised of transportation costs and on-mine and processing costs.

The Group's transportation costs comprise railway services, freight and stevedoring from third parties costs and represented 35.4%, 30.5%, 28.3% and 30.6% of the Group's coal segment expenses for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively.

Significant portion of the Group's distribution expenses is railway services costs, which amounted to U.S.$602 million, U.S.$1,034 million, U.S.$1,172 million and U.S.$1,234 million in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively. The Group's domestic rail freight shipments are carried out by Russian Railways. Railway tariffs for freight shipments are subject to regulation and set by the FAS. Moreover, freight tariffs are subject to regular increases. During the periods under review, railway tariffs for freight were increased by 3.5% in 2020, 3.6% in 2019 and 5.4% in 2018. In 2021, rail freight tariffs have been further increased by 3.7%. The Group aims to optimise pricing and the discounts potentially available to it by using own railcars (rather than those of third-party operators), where possible, and by increasing the share of high-capacity railcars and the proportion of deliveries which are consolidated shipments in order to use the maximum permitted amount of railcars on a single train.

The following table sets out the average railway tariff that the Group paid to Russian Railways to transport coal from certain rail loading stations in the coal regions in which it operates to the relevant seaports in the year ended 31 December 2020:

	European destinations			**Asia-Pacific Destinations**	
Region of operations	**Tuapse**	**Murmansk**	**St. Petersburg**	**Vanino Port**	**Maly Port**
			(*in RUB per tonne*)		
Kemerovo	738	784	754	851	901
Khakasia	-	811	771	836	880
Buryatia	-	-	-	802	814
Khabarovsk	-	-	-	390	-

As the substantial majority of the Group's coal exports are seaborne, resulting in sea freight, port handling and other charges in addition to rail costs, increases in export sales volumes on delivery terms that include sea freight (such as CIF and DES) will increase the Group's transportation costs. Sea freight and port handling costs vary depending on the capacity of respective facilities, geographical location of ports, types of vessels and final destinations. Freight costs of the Group amounted to U.S.$242 million, U.S.$310 million, U.S.$289 million and U.S.$282 million in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively.

On-mine and processing costs are primarily comprised of labour costs, depreciation and amortisation, consumables and spares costs, fuel and energy costs, repairs and maintenance services cost, which represented 31.4%, 33.1%, 32.4% and 27.7% of the Group's coal expenses in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively. Such costs vary depending on multiple factors, including mining and geological conditions, overall level of coal production, proportion of underground mining, capacity utilisation of washing and processing plants and inflation in Russia.

Factors affecting results of the Group's energy segment operations

Electricity, capacity and heat prices

The Group's revenue from sales of electricity, capacity and heat amounted to U.S.$1,377 million, U.S.$2,292 million, U.S.$2,132 million and U.S.$2,042 million, which accounted for 32.8%, 34.3%, 27.9% and 24.6% of the Group's total revenue in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively. As the Group derives significant revenue from sales of electricity, capacity and heat, fluctuations in the price and demand for these products have a material impact on the Group's results of operations.

Primarily all of the Group's produced electricity (except for electricity produced on the power plants located in the Russian Far East and electricity that is sold for supply to residential consumers) has been supplied to wholesale consumers at unregulated prices. Unregulated prices can fluctuate significantly, particularly in response to short-term movements in the balance of supply and demand. Such fluctuations are, in turn, caused by a number of factors, including changes in electricity demand, the cyclicality of annual electricity consumption, changes in unloaded working capacity volumes and variability in outdoor temperatures.

Price formation on the day-ahead market is marginal, which means that a single price is set by the most expensive generator that satisfies supply and demand (with such single price applying to all wholesale market participants). Naturally, any decrease to a power plant's marginal cost to produce power will result in a higher profit potential for such plant. Therefore, the key factors that impact the day-ahead power prices are cost of fuel and efficiency.

The table below sets forth the highest, lowest and weighted average daily prices of electricity on the day-ahead market in the first and second price zones during the periods indicated:

	Six months ended 30 June		Year ended 31 December		
	2021	2020	2020	2019	2018
			(*RUB per MWh*)		
First price zone					
Highest price	1,750.2	1,553.6	1,591.5	1,706.6	1,782.2
Lowest price	611.7	0.2	0.2	63.9	0.2
Weighted average daily price	1,275.0	1,127.0	1,154.6	1,227.5	1,180.3
Second price zone					
Highest price	1,167.0	1,126.0	1,126.0	1,178.5	1,165.8
Lowest price	0	248.6	0	118.6	0
Weighted average daily price	844.6	858.7	816.5	830.6	849.6

Capacity is treated as a separate economic product to electricity as it represents the obligation and ability to keep sufficient generation capacity in reserve in order to satisfy a target level of potential demand, while the sale of electricity represents the actual delivery of electricity to the purchaser. The interim capacity market in Russia was launched on 1 July 2008 and since then an increasing amount of capacity has been sold separately from electricity on the unregulated wholesale capacity market. All of the Group's capacity is sold at the unregulated market prices.

The table below sets forth the prices established following the competitive capacity selection in the first and second price zones for the periods indicated:

	2018	2019	2020	2021	2022
	(*RUB/MW per month*)				
First price zone					
Price of capacity (in real terms).....	119,683.3	124,047.8	126,500.8	151,031.8	186,136.4
Mandatory capacity supply contracts (DPMs).....	903,790.0	925,570.0	954,120.0	1,149,100.0	—
Second price zone					
Price of capacity (in real terms).....	200,282.9	213,704.9	209,201.6	253,236.8	293,181.8
Mandatory capacity supply contracts (DPMs).....	1,258,610.0	1,296,100.0	1,464,080.0	1,579,990.0	—

Heat is partially sold by the Group under regulated tariffs, which are established by regional authorities. Historically, tariffs were determined with the purpose of covering a producer's costs and providing an additional allowance for certain profits. Under this methodology, it has been argued that there is little incentive for any industry player to improve their operating efficiency and reduce operating costs, since any such reduction would be offset by a reduction in the relevant regulated tariff. Power plants that produce both heat and electricity allow the Group to balance both the profitability and margins for each product in aggregate and, therefore, to mitigate the effect of the current tariff levels, which do not sufficiently cover all of the expenses associated with stand-alone heat production. While the demand for heat that is to be used in production processes by industrial corporate customers is relatively stable throughout the year, the demand for heat that is used for heating purposes varies significantly, and is highly dependent on weather conditions. Currently, in certain cities of the Group's operations the 3 or 5 year heat tariffs were adopted, while other cities have already transferred to price zones where tariff rates increase faster than inflation based on agreements between heat suppliers and local authorities with only the cap price being set by the regulator (for example, in cities where tariffs are already in effect: Barnaul, Rubtsovsk, Krasnoyarsk, Kansk, Biysk). The Group expects that cities in which the Group operates located in other price zones will also adopt such longer-term heat tariffs.

Any significant fluctuations in the demand for and prices of electricity, heat and capacity in the future may adversely affect business and results of operations of the Group. See "*Risk Factors—Demand for electricity in Russia depends on economic activity and is subject to fluctuations, and the Group may be unable to obtain expected levels of revenue and/or address daily, seasonal or yearly fluctuations in demand for electricity and heat*".

Energy segment expenses

The main components of the Group's energy segment expenses are fuel and purchased energy costs.

Fuel is the largest variable cost involved in power generation. Fuel cost, which comprises the cost of coal and, to a lesser extent, other types of fuel consumed by the Group's power plants, represented 47%, 46.0%, 40.0% and 40.7% of energy segment expenses for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively. The principal fuel type consumed by the Group's power plants is coal, the cost of which represented 96.4%, 96.8%, 96.0% and 93.9% of the combined fuel cost of the energy segment in six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively. In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, Group's energy segment costs related to purchase of coal from third parties amounted to 26%, 19%, 9% and 14% of the total cost of coal of the energy segment for the same periods. The cost of gas and fuel oil represented 3.6%, 3.2%, 4.2% and 5.6% of the combined fuel cost of the energy segments in the same periods, respectively. As such, the cost of coal purchased from third parties is also a material factor, which may affect the Group's overall results of operations.

The Group purchases electricity for meeting its supply commitments under wholesale regulated and unregulated agreements and for heat generation at its boiler houses. Cost of purchased energy represented 9.7%, 9.8%, 11.5% and 12.8% of the Group's energy segment expenses for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively.

Factors affecting results of the Group's logistics operations

The Group's revenue from logistics operations amounted to U.S.$279 million, U.S.$252 million, U.S.$309 million, and U.S.$135 million in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively. Results of the Group's revenue from logistics operations are affected by a number of factors, including the transshipment volumes and capacity of each of the Group's ports, rail transshipment on the Group's railcar fleet and the prices the Group charges for its services.

In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the Group transshipment through own ports amounted to 23.7 million tonnes, 50.3 million tonnes, 48.2 million tonnes and 45.8 million tonnes, with the coal cargo representing 81.7%, 78.9%, 96.7% and 97.8% of the total transshipment through the Group's ports. Rail transshipment with the use of the Group's railcar fleet amounted to 62.9 million tonnes, 109.9 million tonnes, 104.7 million tonnes and 100.3 million tonnes in the six months ended 30 June 2021 and years ended 31 December 2020, 2019 and 2018, respectively. The majority of the rail transshipment in the periods under review represented the coal cargo transshipments of the Group, the remaining bulk cargo transshipment related to third parties and was handled by the Group to avoid empty wagon run. See "*Business—Logistics Division*"

During the periods under review, the Group made investments to increase the Group's transportation and transshipment capacity. In particular, the Group increased its railcars portfolio to 56.8 thousand railcars as at 30 June 2021 from 48.7 thousand, 48.5 thousand and 39.2 thousand railcars as at 31 December 2020, 2019 and 2018, respectively. In addition, the Group made investments to increase the annual transshipment capacity of Murmansk Commercial Seaport up to 28 million tonnes, Vanino Port up to 40 million tonnes and Maly Port up to 4 million tonnes, to meet the demand for increasing Group's and third-party exports of coal, fertilizers and iron ore. To some extent, the Group relies on freight and transportation services provided by Russian Railways, a Russian government-controlled rail monopoly, and is exposed to insufficient railway capacity, which in turn makes the Group compete for rail capacity with others, including the Group's direct competitors in the coal industry. See "*Risk Factors—JSC "Russian Railways" cannot fully satisfy Russia's coal transportation requirements. Insufficient railway capacity, significant increases in tariffs and the disruption of transportation services could materially reduce the profitability of the Group's operations*".

The Group's revenue is dependent upon the prices it charges for its services. Prices for the services provided by the Group are not regulated and are driven by the market forces. Prices for the Group's logistics services are typically set towards the end of the calendar year for the following year.

Acquisitions and disposals

During the periods under review, the Group's results of operations were affected by acquisitions and some disposals of assets. For example, in August 2018, the Group acquired from a parent company 99.9% of SGC for U.S.$1,916 million. Since the acquisition of the SGC represents a transaction under common control, the consolidated financial statements of the Group were retrospectively restated to reflect the effect of the acquisition as if it had occurred on 1 January 2017.

In October 2019, the Group acquired generating and other assets of Reftinskaya GRES for U.S.$345 million from a third party.

In March 2020, the Group acquired generating and other assets of Krasnoyarskaya GRES-2 for U.S.$156 million from a third party.

In November 2020, the Group acquired from a related company 100% of LLC "Primorskaya GRES" for U.S.$49 million.

In December 2020, the Group acquired LLC "Tuapse Bulk Terminal" and LLC "Murmansk Bulk Terminal" for U.S.$114 million and U.S.$168 million, respectively, from EuroChem group to strengthen the Group's position on the logistics market.

The Group recognised the above acquisitions (except for the acquisition of SGC) as business combinations in its consolidated financial statements. See Note 33 to the 2020 Consolidated Financial Statements and Note 33 to the 2019 Consolidated Financial Statements.

Any further acquisitions or disposals that the Group may undertake in the future, may affect the Group's results of operations. In particular, the Group's management and the Majority Shareholder are evaluating the possibility of spinning-off the Group's logistics assets involved in the transshipment business, as well as certain liabilities and debt of the Group, into a separate entity which would be indirectly controlled by the Majority Shareholder. As of the date of this Prospectus, no decision has been made in relation to this potential spin-off.

Interest expense on borrowings

The Group is leveraged and has significant debt service obligations. As at 30 June 2021, the Group had U.S.$6.4 billion of borrowings, excluding U.S.$1,067 million of debt related to trade accounts and other payables. A substantial portion of the Group's cash flow from operations may be required to service payments on the Group's indebtedness, thereby reducing the availability of cash flow for growth, capital expenditures and other general corporate activities. See "*—Liquidity and Capital Resources*" and "*Risk Factors—The Group's ability to raise financing to finance its investment and maintenance plans or to refinance its existing debt may be limited*".

Foreign exchange

A significant part of the Group's revenue is generated in U.S. dollars and its reporting currency is the U.S. dollar, but the Group incurs costs in several currencies, particularly the rouble. In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, revenue generated in foreign currency, mostly U.S. dollars, represented 54.6%, 53.4%, 59.3%, and 64.5% of the Group's total revenue.

In the six months ended 30 June 2021, approximately 75% of the Group's costs were denominated in Russian roubles and 25% were denominated in foreign currency. Moreover, the Group holds significant amount of cash in U.S. dollars and has to pay expenses nominated in Russian roubles. Therefore, the Group's results of operations are impacted by the movements of the currencies in which it incurs costs against the U.S. dollar. For information related changes in exchange rates of currencies see "*Risk Factors — The fluctuation of the rouble against the U.S. dollar could affect the Group's financial condition and results of operations*".

Seasonality

Demand for electricity and heat in the Russian Federation may vary significantly on a daily, seasonal and yearly basis due to weather conditions and other factors. Demand for electricity and heat is usually higher during the period from October to March due to colder weather and longer nights, and it is generally lower in the period from April to September due to warmer weather and longer days. In addition, demand for electricity is usually higher during normal business hours during the day and for a longer duration during the period from October to March due to fewer daylight hours. Demand may also fluctuate from year to year due to changes in weather patterns. For example, increase in water flows in the regions with hydropower plants may increase the generation and supply of hydroelectricity, which in turn, could temporarily adversely affect the demand for, and the price of, coal fired electricity in those regions.

Macroeconomic trends

The Group's business and results of operations are affected by the global economic environment, which affects coal segment results of operations in particular, and Russian economic conditions.

The current level of growth in many countries is slow, and many markets which previously experienced very high levels of growth have exhibited slower levels of growth in recent years. In 2020, the global economic environment remained unstable, with global GDP declining by 4.3%, as compared to growth by 2.3% and 3.0% in the years ended 31 December 2019 and 2020, respectively, according to World Bank. The slowdown has been attributed to the COVID-19 pandemic, decline in industrial production, slowing growth rates in emerging and developing economies, among other developments. In particular, China has been experiencing a decline in its rate of growth, which contributed to the decline in commodity prices generally, including prices for coal in particular. The Group is therefore subject to cyclical fluctuations in global economic conditions, and in particular those affecting coal end-use markets.

A substantial portion of the Group's assets, including all of energy segment assets and significant customers, are located in, have businesses related to, revenues derived from, and/or expenses incurred in, the Russian Federation. As a result, the Group is affected by Russian economic conditions.

The following table sets forth certain Russian economic indicators for the periods indicated:

	Year ended 31 December		
	2020	**2019**	**2018**
Real GDP growth / (decline) (%)	(3.0%)	1.3%	2.5%
Inflation (%)	4.9%	3.0%	4.3%
Total nominal GDP (billions of RUB)	106,967.5	109,241.5	103,861.7
Electricity consumption (millions of MWh)	1,050.4	1,075.2	1,076.3
Industrial production index	97.4%	103.4%	103.5%

In 2021, the world economy is expected to recover from the effect of the COVID-19 pandemic with global GDP growing by 5.6%, according to World Bank. Although the world economy has experienced recovery in the first half of 2021, any deterioration of either the global economy or the Russian economy could adversely affect the industries that use the Group's products, which, in turn, could lead to a decline in the demand for and, therefore the prices, of the Group's products, and could, in turn, have a material adverse effect on the Group's business and the results of its operations.

COVID-19

In March 2020, the World Health Organisation declared the outbreak of COVID-19 as a pandemic. The rapidly changing global market and economic conditions as a result of COVID 19 have impacted, and are expected to continue to impact, the Group's operations and business. In particular, there was a decline in demand for coal and electricity and a general decline in coal prices, which in turn resulted in the lower revenue of the Group in the year ended 31 December 2020 as compared to the year ended 31 December 2019.

A significant uncertainty regarding the impacts and duration of the COVID-19 pandemic, which can be exacerbated by disruptions or delays in the COVID-19 vaccines rollouts and potential mutations of COVID-19 can have an impact on the Group's results of operations. In particular, further COVID-19 outbreak may result in lower demand for the Group's products, negatively impact revenues and affect the Group's results of operations. Furthermore, COVID-19 quarantine measures, including any import restrictions, may affect the Group's ability to use the logistics infrastructure and deliver its products to the customers, which in turn may negatively affect the Group's working capital due to prolonged delivery of its products, revenues and results of operations.

Moreover, the Group may be required to implement certain health measures that may affect operational performance of the Group's production facilities, which in turn may have a material adverse effect on

the production levels and revenue. See "*Risk Factors—The global COVID-19 pandemic and the disruption caused by various countermeasures to reduce its spread, could have a material adverse effect on the Group's business, financial condition and results of operations*".

Segment Information

The Group generally analyses information by the groups of operations which are consolidated in the following separate reporting segments:

- Coal segment: This segment includes coal extraction and washing, sales and distribution in the Russian Federation and abroad.
- Energy segment: This segment includes generation and sales of electricity, capacity and heat.
- Logistics segment: This segment includes railroad transportation and transshipment in ports.
- Corporate segment: This comprises operations of the Group's holding companies.

Transactions between the business segments are usually on normal commercial terms and conditions. Internal charges between segments are reflected in the performance of each business segment.

Adoption of New IFRS Standards and Comparability of Financial Information Between Periods

The Group adopted IFRS 16 Leases from 1 January 2019.

IFRS 16 Leases

Upon adoption of IFRS 16 as at 1 January 2019 the Group recognised lease liabilities in relation to leases which had previously been classified as operating leases in accordance with IAS 17. The Group applied transition requirements and practical expedients, which have been provided for in the standard.

The Group applied the modified retrospective method without restatement of comparatives which presumes recognition of cumulative effect of initial application at the date of the initial application, therefore, in certain cases, the financial information as at and for the year ended 31 December 2018 may be incomparable to the more recent financial information presented in this Prospectus. Lease liabilities were measured at the present value of the remaining lease payments, discounted as at 1 January 2019 using the lessee's incremental borrowing rate, that was 8.03%. At 1 January 2019, the Group recognised U.S.$813 million of lease liabilities. The Group applied a unified approach to all classes of lease contracts excluding short-term leases and leases of low-value assets.

Right-of-use assets were recognised in an amount equal to the lease liability adjusted for any repayments of lease made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received. At 1 January 2019, the Group recognised U.S.$798 million of right-of-use assets.

During the year ended 31 December 2019, the Group made certain changes in accounting policy affecting classification and presentation of certain captions of statement of financial position, statement of profit or loss and statement of comprehensive income due to adoption of IFRS 16 "Leases". The Group has applied IFRS 16 "Leases" from 1 January 2019 using the modified retrospective approach as of 1 January 2019 and therefore the comparative information as at and for the year ended 31 December 2018 was not restated and continues to be reported under IAS 17 and IFRIC 4.

For further details on IFRS 16 adoption and impact, please refer to Note 2 to the 2019 Consolidated Financial Statements.

Significant Accounting Policies

Significant accounting policies are disclosed in Note 3 to the 2020 Consolidated Financial Statements. In the process of applying the accounting policies, management makes judgements, estimates and assumptions that affect the reported amounts of equity, assets and liabilities, revenue and expenses. The estimates and underlying assumptions are based on historical experience, available information, future expectations and other factors that the Group considers to be reasonable under the circumstances. Actual results may differ from these estimates.

Recent Developments

The Group partially repaid its 2018 PXF Facility (as defined in "*–Borrowings – Loans and borrowings*") in the amount of U.S.$33.3 million in July 2021 and U.S.$33.3 million in August 2021 and its 2019 PXF Facility (as defined in "*–Borrowings – Loans and borrowings*") in the amount of U.S.$23.8 million in July 2021 and U.S.$23.8 million in August 2021, in each case, according to the repayment schedule.

In August 2021, the Group fully repaid its RUB 10 billion 8.3% domestic bonds due in August 2021 issued in 2018

In August 2021, the Group raised short-term debt from PJSC "Sberbank" and JSC "Russian Agricultural Bank" and on the date of this Prospectus the outstanding principal amount was U.S.$240 million and U.S.$110 million, respectively.

In August 2021, the Group entered into sale and purchase agreement to purchase 5.1% stake in LLC "Stevedoring Company "Maly Port" and the sale was completed on 31 August 2021.

Consolidated Financial Results Overview

The table below sets forth a summary of the Group's consolidated financial results for the six months ended 30 June 2021 and 2020 and the years ended 31 December 2020, 31 December 2019 and 31 December 2018:

	Six months ended 30 June		Year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
			(*in U.S.$ million*)		
Revenue	**4,202**	**3,327**	**6,683**	**7,638**	**8,296**
Cost of sales	(2,136)	(1,831)	(3,846)	(4,301)	(4,110)
Distribution costs	(1,081)	(879)	(1,762)	(1,978)	(2,047)
General and administrative expenses	(97)	(92)	(185)	(229)	(239)
Other income/(expenses), net	(6)	21	2	(15)	(28)
Operating profit	**882**	**546**	**892**	**1,115**	**1,872**
Finance costs, net	(131)	(181)	(337)	(420)	(311)
Foreign exchange (loss) / gain	44	(196)	(308)	200	(83)
Profit before tax	795	169	**247**	**895**	**1,478**
Income tax expense	(182)	(37)	(53)	(146)	(314)
Net profit for the period	**613**	**132**	**194**	**749**	**1,164**
Net profit attributable to:					
Ordinary shareholders of the Parent	603	129	185	742	1,144
Non-controlling interests	10	3	9	7	20
Net profit for the period	**613**	**132**	**194**	**749**	**1,164**
Basic and diluted earnings per share (U.S.$)	2.55	0.55	0.78	3.14	4.88
Other comprehensive (loss)/income					
Items which may be reclassified to profit or loss in the future:					
Transfer of changes in fair value of cash flow hedges to profit or loss, net of deferred tax	83	(10)	31	(220)	104

	Six months ended 30 June		Year ended 31 December		
	2021	2020	2020	2019	2018
Effective portion of changes in fair value of cash flow hedges, net of deferred tax	(186)	(251)	(488)	311	(16)
Total items which may be reclassified to profit or loss in the future	**(103)**	**(261)**	**(457)**	**91**	**88**
Items which may not be reclassified to profit or loss in the future:					
Translation difference	52	(277)	(354)	154	(460)
Revaluation of intra-group debt denominated in foreign currency	-	-	(43)	(1)	(1)
Revaluation surplus/(deficit)	-	-	648	(810)	1,322
Tax effect of revaluation	-	-	(130)	162	(264)
Actuarial gains/(losses)	-	-	8	(7)	10
Total items which may not be reclassified to profit or loss in the future	**52**	**(277)**	**129**	**(502)**	**607**
Total other comprehensive (loss)/income for the period	**(51)**	**(538)**	**(328)**	**(411)**	**695**
Total other comprehensive (loss)/income attributable to:					
Ordinary shareholders of the parent	(52)	(516)	(263)	(401)	718
Non-controlling interests	1	(22)	(65)	(10)	(23)
Total other comprehensive (loss)/income for the period	**(51)**	**(538)**	**(328)**	**(411)**	**695**
Total comprehensive (loss)/income attributable to:					
Ordinary shareholders of the parent	550	(387)	(81)	336	1,858
Non-controlling interests	12	(19)	(53)	2	1
Total comprehensive (loss)/income for the period	**562**	**(406)**	**(134)**	**338**	**1,859**

Results of Operations for the Six Months Ended 30 June 2021 and 2020

Revenue

The Group derives its revenues primarily from the sale of coal, sale of electricity through the retail electricity market and the wholesale electricity market, sale of electric capacity on the wholesale market, sale of heat and hot water and from services related to railroad transportation and transshipment in the Group's ports.

The Group's revenue increased by U.S.$875 million, or 26.3%, to U.S.$4,202 million for the six months ended 30 June 2021 from U.S.$3,327 million for the six months ended 30 June 2020 due to increase in revenue from sales of coal by U.S.$400 million, or 20.7%, increase in revenue from logistics services by U.S.$178 million, or 176.2%, increase in revenue from selling petroleum coke and other commodities by U.S.$99 million, or 157.1%, and increase in revenue from sales of electricity by U.S.$90 million, or 23.7%, increase in revenue from sales of heat by U.S.$81 million, or 21.9%, and increase in revenue from sales of capacity by U.S.$32 million, or 7.5%, in the six months ended 30 June 2021 compared to the same period in 2020.

The table below shows a breakdown of the Group's revenues by product for the periods indicated.

	Six months ended 30 June	
	2021	2020
	(in U.S.$ million)	
Revenue		
Coal	2,330	1,930
Electricity	469	379

	Six months ended 30 June	
	2021	**2020**
	(in U.S.$ million)	
Capacity	457	425
Heat	451	370
Logistics services[(1)]	279	101
Petroleum coke and other commodities	162	63
Other	54	59
Total	**4,202**	**3,327**

(1) Change in presentation was made in 2021 by showing revenue from logistics services separately from other revenue.

Revenue from coal

The Group's revenue from coal sales increased by U.S.$400 million, or 20.7%, to U.S.$2,330 million for the six months ended 30 June 2021 from U.S.$1,930 million for the six months ended 30 June 2020, primarily as a result of increase in coal prices by 63.6% and increase in the coal sales volumes by 13.9% to 58.9 million tonnes in the six months ended 30 June 2021 compared to the same period of 2020.

Revenue from capacity

The Group's revenue from electric capacity sales increased by U.S.$32 million, or 7.5%, to U.S.$457 million for the six months ended 30 June 2021 from U.S.$425 million for the six months ended 30 June 2020 as a result of increase in capacity sales by 11.7% to 15.6 GW in the six months ended 30 June 2021 from 14.0 GW in the six months ended 30 June 2020, which was primarily driven by acquisition by the Group of Primorskaya GRES and Krasnoyarskaya GRES-2.

Revenue from electricity

The Group's revenue from electricity sales increased by U.S.$90 million, or 23.7%, to U.S.$469 million for the six months ended 30 June 2021 from U.S.$379 million for the six months ended 30 June 2020, primarily as a result of increase in the electricity output by 14.3% to 36.5 TWh in the six months ended 30 June 2021 from 31.9 TWh in the six months ended 30 June 2020, which was primarily driven by growing sales following the expansion of the Group's assets, including the acquisition by the Group of Krasnoyarskaya GRES-2, which was also supported by higher electricity prices in the market in the first half of 2021 compared to the same period of 2020.

Revenue from heat

The Group's revenue from heat sales increased by U.S.$81 million, or 21.9%, to U.S.$451 million for the six months ended 30 June 2021 from U.S.$370 million for the six months ended 30 June 2020 as a result of increase in heat output by 25.0% to 24.3 MGcal in the six months ended 30 June 2021 from 19.5 MGcal in the six months ended 30 June 2020, which was primarily a result of colder weather conditions in 2021 and expansion of the Group's assets, including Krasnoyarskaya GRES-2.

Revenue from logistics services

The Group's revenue from logistics services increased by U.S.$178 million, or 176.2%, to U.S.$279 million for the six months ended 30 June 2021 from U.S.$101 million for the six months ended 30 June 2020 as a result of increase in railway shipments volume by 48.9% and increase in transshipment of third-party cargo in the Group's ports in the six months ended 30 June 2021 compared to the same period of 2020.

Revenue from petroleum coke and other commodities

The Group's revenue from selling petroleum coke and other commodities increased by U.S.$99 million, or 157.1%, to U.S.$162 million for the six months ended 30 June 2021 from U.S.$63 million for the six months ended 30 June 2020 as a result of increase in price and trading volumes of petroleum coke and

other commodities in the six months ended 30 June 2021, which was primarily attributable to increase in iron ore consumption in China.

Other revenue

Other revenue in the six months ended 30 June 2021 and the six months ended 30 June 2020 consisted of repair services, electricity connection services, consulting services, revenue from operations with fixed assets and inventories and other services.

Other revenue slightly decreased by U.S.$5 million, or 8.5%, to U.S.$54 million for the six months ended 30 June 2021 from U.S.$59 million for the six months ended 30 June 2020 due to decline in other services revenue and electricity connection services.

Cost of sales

The Group's cost of sales increased by U.S.$305 million, or 16.7%, to U.S.$2,136 million for the six months ended 30 June 2021 from U.S.$1,831 million for the six months ended 30 June 2020 primarily due to increase in coal and other commodities purchased from third parties, increase in depreciation and amortisation expenses, increase in purchased fuel and power and increase in labour costs and consumables and spares in the six months ended 30 June 2021 compared to the same period in 2020.

The table below shows the Group's cost of sales for the periods indicated:

	Six months ended 30 June	
	2021	**2020**
	(*in U.S.$ million*)	
Coal and other commodities purchased from third parties[(1)]	641	442
Depreciation and amortisation	454	412
Labour	398	386
Purchased fuel	160	125
Consumables and spares	156	143
Purchased power	106	83
Repairs and maintenance services	54	59
Property and other taxes	28	29
Personnel transportation services	17	19
Fire and rescue brigade expenses	17	17
Transfer of heat	14	15
Tax on mining	14	14
Transportation services	12	15
Other	65	72
Total	2,136	1,831

(1) For the six months ended 30 June 2020, amounts represent Coal and petroleum coke purchased from third parties.

Coal and other commodities purchased from third parties

The Group's coal and other commodities purchased from third parties expenses increased by U.S.$199 million, or 45.0%, to U.S.$641 million for the six months ended 30 June 2021 from U.S.$442 million for the six months ended 30 June 2020, which was primarily driven by increase in coal prices and in the volume of coke purchased from third parties.

Depreciation and amortisation

The Group's depreciation and amortisation expenses increased by U.S.$42 million, or 10.2%, to U.S.$454 million for the six months ended 30 June 2021 from U.S.$412 million for the six months ended 30 June 2020 primarily due to increase in the property, plant and equipment in the six months ended 30 June 2021 compared to the same period of 2020, which was primarily attributable to the acquisition of machinery, equipment and transport.

Labour

The Group's labour expenses increased by U.S.$12 million, or 3.1%, to U.S.$398 million for the six months ended 30 June 2021 from U.S.$386 million for the six months ended 30 June 2020 as a result of increase in compensation of the Group's employees in the first half of 2021, which was primarily driven by increase in coal production volumes in the same period.

Purchased fuel

The Group's purchased fuel expenses increased by U.S.$35 million, or 28.0%, to U.S.$160 million for the six months ended 30 June 2021 from U.S.$125 million for the six months ended 30 June 2020 primarily as a result of increased fuel consumption driven by a growth in coal, electricity and heat output in the six months ended 30 June 2021.

Consumables and spares

The Group's consumables and spares expenses increased by U.S.$13 million, or 9.1%, to U.S.$156 million for the six months ended 30 June 2021 from U.S.$143 million for the six months ended 30 June 2020 primarily due to increased consumption of consumables and spares as a result of a growth in coal, electricity and heat production and transportation volumes in the six months ended 30 June 2021.

Purchased power

The Group's purchased power expenses increased by U.S.$23 million, or 27.7%, to U.S.$106 million for the six months ended 30 June 2021 from U.S.$83 million for the six months ended 30 June 2020 due to increase in electricity and heat output of the Group's power generating companies and related increase in purchase of energy from third party suppliers.

Distribution costs

The Group's distribution costs increased by U.S.$202 million, or 23.0%, to U.S.$1,081 million for the six months ended 30 June 2021 from U.S.$879 million for the six months ended 30 June 2020 primarily as a result of increase in freight expenses, railway services expenses and stevedoring from third parties.

The table below shows the Group's distribution costs for the periods indicated:

	Six months ended 30 June	
	2021	**2020**
	(*in U.S.$ million*)	
Railway services	602	531
Freight	242	147
Depreciation and amortisation	101	107
Stevedoring from third parties	73	53
Labour	26	22
Repair and maintenance services	19	7
Other	18	12
Total	**1,081**	**879**

Railway services expenses

The Group's railway services expenses increased by U.S.$71 million, or 13.4%, to U.S.$602 million for the six months ended 30 June 2021 from U.S.$531 million for the six months ended 30 June 2020 as a result of increased rail transportation volumes in the six months ended 30 June 2021.

Freight expenses

The Group's freight expenses increased by U.S.$95 million, or 64.6%, to U.S.$242 million for the six months ended 30 June 2021 from U.S.$147 million for the six months ended 30 June 2020 as a result of increase in freight rates in the six months ended 30 June 2021.

Stevedoring from third parties expenses

The Group's stevedoring from third parties expenses increased by U.S.$20 million, or 37.7%, to U.S.$73 million for the six months ended 30 June 2021 from U.S.$53 million for the six months ended 30 June 2020 as a result of increased transshipment in the Group's south ports in the six months ended 30 June 2021.

General and administrative expenses

The Group's general and administrative expenses increased by U.S.$5 million, or 5.4%, to U.S.$97 million for the six months ended 30 June 2021 from U.S.$92 million for the six months ended 30 June 2020 primarily due to an increase in salaries, charitable donations, consulting, legal, audit, other professional services expenses and other expenses.

Other (expenses)/income, net

The Group's other expense, net was U.S.$6 million for the six months ended 30 June 2021, as compared to other income, net of U.S.$21 million for the six months ended 30 June 2020, this overall change of U.S.$27 million, or 128.6%, was a result of increase of write-offs of doubtful debts in the six months ended 30 June 2021 compared to the same period of 2020.

Operating profit

The Group's other operating profit increased by U.S.$336 million, or 61.5%, to U.S.$882 million for the six months ended 30 June 2021 from U.S.$546 million for the six months ended 30 June 2020 primarily due to an increase in the Group's revenue partially offset by an increase in the cost of sales and the distribution costs, in each case, for the reasons described above.

Finance costs, net

The Group's net finance costs decreased by U.S.$50 million, or 27.6%, to U.S.$131 million for the six months ended 30 June 2021 from U.S.$181 million for the six months ended 30 June 2020 primarily due to a decrease in the Group's interest expense driven by decrease in interest rates on the Group's loans and borrowings and by repayment certain of the Group's long-term borrowings and long-term lease liabilities during the six months ended 30 June 2021.

Foreign exchange gain/(loss)

The Group's foreign exchange gain amounted to U.S.$44 million for the six months ended 30 June 2021, as compared to a foreign exchange loss of U.S.$196 million for the six months ended 30 June 2020, this overall change of U.S.$240 million, or 122.4%, was primarily attributable to increase in value of rouble against U.S. dollar during the six months ended 30 June 2021 compared to the same period of 2020 and related gain on the translation of the Group's U.S. dollar denominated borrowings.

Profit before tax

The Group's profit before tax increased by U.S.$626 million, or 370.4%, to U.S.$795 million for the six months ended 30 June 2021 from U.S.$169 million for the six months ended 30 June 2020 primarily as a result of an increase in the Group's operating profit, a decrease in net finance costs and recorded foreign exchange gain.

Income tax expense

The Group's income tax expense increased by U.S.$145 million, or 391.9%, to U.S.$182 million for the six months ended 30 June 2021 from U.S.$37 million for the six months ended 30 June 2020, which was primarily attributable to an increase in profit before tax in the six months ended 30 June 2021 compared to the same period of 2020.

Net profit for the period

The Group's net profit increased by U.S.$481 million, or 364.4%, to U.S.$613 million for the six months ended 30 June 2021 from U.S.$132 million for the six months ended 30 June 2020 as a result of a U.S.$626 million increase in the profit before tax, which primarily reflects an increase in revenues from coal, energy and transportation segments and foreign exchange gain for the period.

Results of Operations for the Years Ended 31 December 2020, 2019 and 2018

Revenue

The Group's revenue decreased by U.S.$955 million, or 12.5%, to U.S.$6,683 million for the year ended 31 December 2020 from U.S.$7,638 million for the year ended 31 December 2019 primarily due to a decrease in revenue from coal sales by U.S.$1,078 million, or 22.1%, a decrease in revenue from railroad transportation and transshipment in ports by U.S.$78 million, or 25.2%, a decrease in revenue from sales of heat by U.S.$60 million, or 8.5%, which was partially offset by an increase in revenue from electricity and electric capacity by U.S.$120 million and U.S.$100 million, or 17.3% and 13.7%, respectively.

The Group's revenue decreased by U.S.$658 million, or 7.9%, to U.S.$7,638 million for the year ended 31 December 2019 from U.S.$8,296 million for the year ended 31 December 2018 primarily due to a decline in revenue from coal sales by U.S.$829 million, or 14.5%, and a decrease in revenue from sales of heat by U.S.$27 million, or 3.7%, was partially offset by an increase in revenue from electricity and electric capacity by U.S.$105 million and U.S.$12 million, or 17.9% and 1.7%, respectively.

The table below shows a breakdown of the Group's revenues by product for the periods indicated.

	Year ended 31 December		
	2020	**2019**	**2018**
		(in U.S.$ million)	
Revenue			
Coal	3,799	4,877	5,706
Electric capacity	832	732	720
Electricity	813	693	588
Heat	647	707	734
Railroad transportation and transshipment in ports[(1)]	231	309	—
Petroleum coke	77	153	250
Other[(1)]	284	167	298
Total	**6,683**	**7,638**	**8,296**

(1) In the Group's financial statements for the year ended 31 December 2018 and 31 December 2019, revenue from railroad transportation and transshipment in ports was presented in Other. Change in presentation was made in 2020.

Revenue from coal

The Group's revenue from coal sales decreased by U.S.$1,078 million, or 22.1%, to U.S.$3,799 million for the year ended 31 December 2020 from U.S.$4,877 million for the year ended 31 December 2019, primarily as a result of decline in coal prices by 19.0% and a decline in coal sales volumes by 1.1 million tonnes, which was primarily the result of warmer winter and spring in Russia and the impact of the COVID-19 outbreak on the global economy. See "*Certain Factors Affecting the Group's Results of Operations—COVID-19 and —Macroeconomic trends*" and "*Risk Factors—The global COVID-19*

pandemic and the disruption caused by various countermeasures to reduce its spread, could have a material adverse effect on the Group's business, financial condition and results of operations".

The Group's revenue from coal sales decreased by U.S.$829 million, or 14.5%, to U.S.$4,877 million for the year ended 31 December 2019 from U.S.$5,706 million for the year ended 31 December 2018, primarily as a result of a decline in coal prices by 28.4% and a decrease in the coal sales volume by 0.5 million tonnes.

Revenue from electric capacity

The Group's revenue from electric capacity sales increased by U.S.$100 million, or 13.7%, to U.S.$832 million for the year ended 31 December 2020 from U.S.$732 million for the year ended 31 December 2019 as a result of increase in capacity sales by 47.0% to 14.7 GW in 2020 from 10.0 GW in 2019, which was primarily driven by the expansion of the Group's operations to the Urals and the Far East, through acquisitions of new assets, including Primorskaya GRES, Reftinskaya GRES and Krasnoyarskaya GRES-2.

The Group's revenue from electric capacity sales increased by U.S.$12 million, or 1.7%, to U.S.$732 million for the year ended 31 December 2019 from U.S.$720 million for the year ended 31 December 2018, which was primarily attributable to increase in capacity sales by 9.0% to 10.0 GW in 2019 from 9.2 GW in 2018, largely driven by the acquisition of Reftinskaya GRES in October 2019 and its consolidation into the results of operations in the 2019 Consolidated Financial Statements.

Revenue from electricity

The Group's revenue from electricity sales increased by U.S.$120 million, or 17.3%, to U.S.$813 million for the year ended 31 December 2020 from U.S.$693 million for the year ended 31 December 2019, primarily as a result of increase in the electricity sales by 23.6% to 68.2 TWh in 2020 from 55.2 TWh in 2019, which was primarily driven by the expansion of the Group's assets, including Primorskaya GRES, Reftinskaya GRES and Krasnoyarskaya GRES-2.

The Group's revenue from electricity sales increased by U.S.$105 million, or 17.9%, to U.S.$693 million for the year ended 31 December 2019 from U.S.$588 million for the year ended 31 December 2018, primarily as a result of increase in the electricity sales by 10.4% to 55.2 TWh in 2019 from 50.0 TWh in 2018, which, in turn, was driven by the expansion of assets, including acquisition of Reftinskaya GRES in October 2019.

Revenue from heat

The Group's revenue from heat sales decreased by U.S.$60 million, or 8.5%, to U.S.$647 million for the year ended 31 December 2020 from U.S.$707 million for the year ended 31 December 2019 as a result of depreciation of the Russian rouble against U.S. dollar in 2020, which was partially offset by an increase in heat tariffs, and lower heat sales volumes given warmer outdoor temperature year-on-year.

The Group's revenue from heat sales decreased by U.S.$27 million, or 3.7%, to U.S.$707 million for the year ended 31 December 2019 from U.S.$734 million for the year ended 31 December 2018 as a result of warm weather conditions in 2019, which resulted in lower heat output.

Revenue from railroad transportation and transshipment in ports

The Group's revenue from railroad transportation and transshipment in ports decreased by U.S.$78 million, or 25.2%, to U.S.$231 million for the year ended 31 December 2020 from U.S.$309 million for the year ended 31 December 2019 as a result of depreciation of Russian rouble against U.S. dollar in 2020 and decrease of the volume of railroad transportation.

The Group first started separate presentation of the revenue from railroad transportation and transshipment in ports in its 2020 Consolidated Financial Statements.

Revenue from petroleum coke

The Group's revenue from selling petroleum coke decreased by U.S.$76 million, or 49.7%, to U.S.$77 million for the year ended 31 December 2020 from U.S.$153 million for the year ended 31 December 2019 as a result of decrease in volume and realised price of petroleum coke sales in 2020.

The Group's revenue from selling petroleum coke decreased by U.S.$97 million, or 38.8%, to U.S.$153 million for the year ended 31 December 2019 from U.S.$250 million for the year ended 31 December 2018 as a result of decrease in volume and realised price of petroleum coke sales in 2019.

Other revenue

Other revenue in the year ended 31 December 2020, 2019 and 2018 consisted of repair services, electricity connection services, consulting services, other services, other coal products, revenue from operations with fixed assets and inventories.

Other revenue increased by U.S.$117 million, or 70.1%, to U.S.$284 million for the year ended 31 December 2020 from U.S.$167 million for the year ended 31 December 2019 due to increase of railcars lease revenue, freight sales, other services revenue.

Cost of sales

The Group's cost of sales decreased by U.S.$455 million, or 10.6%, to U.S.$3,846 million for the year ended 31 December 2020 from U.S.$4,301 million for the year ended 31 December 2019 due to a decrease in coal and petroleum coke purchased from third parties, a decrease in labour and consumables and spares expenses, which was partially offset by an increase in depreciation and amortisation.

The Group's cost of sales increased by U.S.$191 million, or 4.6%, to U.S.$4,301 million for the year ended 31 December 2019 from U.S.$4,110 million for the year ended 31 December 2018 as a result of an increase in depreciation and amortisation and consumables and spares expenses, which were, respectively, driven by capital investment growth and new assets acquisition. The cost of sales increase was partially offset by a decrease in expenses related to coal and petroleum coke purchased from third parties due to lower prices. The table below shows the Group's cost of sales for the periods indicated:

	Year ended 31 December		
	2020	**2019**	**2018**
		(*in U.S.$ million*)	
Depreciation and amortisation	887	794	627
Coal and petroleum coke purchased from third parties	779	1,090	1,155
Labour	752	854	784
Consumables and spares	354	457	373
Purchased fuel	330	279	256
Purchased energy	187	197	223
Repairs and maintenance services	144	164	137
Property and other taxes	58	54	72
Transportation services	44	73	51
Fire and rescue brigade expenses	36	36	32
Personnel transportation services	35	37	33
Tax on mining	29	41	40
Transfer of heat	21	28	27
Drilling and blasting services	16	22	44
Special equipment services[(1)]	—	—	16
Land rent[(1)]	—	—	17
Other	174	175	223
Total	**3,846**	**4,301**	**4,110**

(1) In the years ended 31 December 2020 and 2019, special equipment services and land rent were presented as Other.

Depreciation and amortisation

The Group's depreciation and amortisation expenses increased by U.S.$93 million, or 11.7%, to U.S.$887 million for the year ended 31 December 2020 from U.S.$794 million for the year ended 31 December 2019 as a result of acquisition of new property, plant and equipment in 2020, acquisition of Reftinskaya GRES at the end of 2019, acquisition of Krasnoyarskaya GRES-2 and Primorskaya GRES in 2020.

The Group's depreciation and amortisation expenses increased by U.S.$167 million, or 26.6%, to U.S.$794 million for the year ended 31 December 2019 from U.S.$627 million for the year ended 31 December 2018 as a result of acquisition of new property, plant and equipment in 2019, revaluation of mining assets and acquisition of Reftinskaya GRES at the end of 2019.

Coal and petroleum coke purchased from third parties

The Group's coal and petroleum coke purchased from third parties expenses decreased by U.S.$311 million, or 28.5%, to U.S.$779 million for the year ended 31 December 2020 from U.S.$1,090 million for the year ended 31 December 2019 as a result of the decrease in the volume and price of the coal purchased from third parties in 2020.

The Group's coal and petroleum coke purchased from third parties expenses decreased by U.S.$65 million, or 5.6%, to U.S.$1,090 million for the year ended 31 December 2019 from U.S.$1,155 million for the year ended 31 December 2018 as a result of a decline in the coal and petroleum coke prices in 2019.

Labour

The Group's labour expenses decreased by U.S.$102 million, or 11.9%, to U.S.$752 million for the year ended 31 December 2020 from U.S.$854 million for the year ended 31 December 2019 as a result of depreciation of the rouble against the U.S. dollar and human resources optimisation measures that resulted in reduction of administrative staff and related bonuses and other benefits payable in 2020.

The Group's labour expenses increased by U.S.$70 million, or 8.9%, to U.S.$854 million for the year ended 31 December 2019 from U.S.$784 million for the year ended 31 December 2018 as a result of an increase in the Group's coal production in the previous year and related increase in bonuses and other benefits payable to the Group's employees.

Consumables and spares

The Group's consumables and spares expenses decreased by U.S.$103 million, or 22.5%, to U.S.$354 million for the year ended 31 December 2020 from U.S.$457 million for the year ended 31 December 2019 primarily due to a decrease in coal production in the year ended 31 December 2020 and related decrease in the non-capital repairs.

The Group's consumables and spares expenses increased by U.S.$84 million, or 22.5%, to U.S.$457 million for the year ended 31 December 2019 from U.S.$373 million for the year ended 31 December 2018 due to expenses attributable to relocation of mine longwalls.

Purchased fuel

The Group's fuel expenses increased by U.S.$51 million, or 18.3%, to U.S.$330 million for the year ended 31 December 2020 from U.S.$279 million for the year ended 31 December 2019 primarily as a result of increase in electricity and heat output of the Group's power generating companies in the year ended 31 December 2020.

The Group's fuel expenses increased by U.S.$23 million, or 9.0%, to U.S.$279 million for the year ended 31 December 2019 from U.S.$256 million for the year ended 31 December 2018 as a result of a growth in the purchase of coal for Reftinskaya GRES.

Purchased energy

The Group's energy expenses decreased by U.S.$10 million, or 5.1%, to U.S.$187 million for the year ended 31 December 2020 from U.S.$197 million for the year ended 31 December 2019 due to increase in electricity and heat output of the Group's power generating companies and related decrease in purchase of energy from third party suppliers.

The Group's energy expenses decreased by U.S.$26 million, or 11.7%, to U.S.$197 million for the year ended 31 December 2019 from U.S.$223 million for the year ended 31 December 2018 due to a decrease in demand for electricity in the second pricing zone and related decrease in purchase of energy from third party suppliers.

Distribution costs

The Group's distribution costs decreased by U.S.$216 million, or 10.9%, to U.S.$1,762 million for the year ended 31 December 2020 from U.S.$1,978 million for the year ended 31 December 2019 primarily as a result of a decrease in railway services expenses by U.S.$138 million, or 11.8%, due to depreciation of the rouble against the U.S. dollar in the year ended 31 December 2020, which was partially offset by a slight increase in volumes and railway tariffs. The Group's distribution costs decreased by U.S.$69 million, or 3.4%, to U.S.$1,978 million for the year ended 31 December 2019 from U.S.$2,047 million for the year ended 31 December 2018 primarily as a result of a decrease in railway tariffs.

The table below shows the Group's distribution costs for the periods indicated:

	Year ended 31 December		
	2020	**2019**	**2018**
		(*in U.S.$ million*)	
Railway services	1,034	1,172	1,234
Freight	310	289	282
Depreciation and amortisation	194	259	42
Stevedoring from third parties	112	138	139
Labour	42	44	47
Repair and maintenance services	38	44	50
Consumables and spares	16	9	20
Property and other taxes	2	2	3
Rent of rail cars	—	—	193
Customs expenses and export duties[(1)]	—	8	18
Other	14	13	19
Total	**1,762**	**1,978**	**2,047**

(1) In the year ended 31 December 2020, customs expenses and export duties was presented as other distribution costs.

Railway services expenses

The Group's railway services expenses decreased by U.S.$138 million, or 11.8%, to U.S.$1,034 million for the year ended 31 December 2020 from U.S.$1,172 million for the year ended 31 December 2019 as a result of a decrease in the cost of railcar operators' services.

The Group's railway services expenses decreased by U.S.$62 million, or 5.0%, to U.S.$1,172 million for the year ended 31 December 2019 from U.S.$1,234 million for the year ended 31 December 2018 primarily as a result of a decrease in the Group's bulk cargo turnover.

Freight expenses

The Group's freight expenses increased by U.S.$21 million, or 7.3%, to U.S.$310 million for the year ended 31 December 2020 from U.S.$289 million for the year ended 31 December 2019 as a result of increase in freight volumes of the coal exported by the Group.

The Group's freight expenses increased by U.S.$7 million, or 2.5%, to U.S.$289 million for the year ended 31 December 2019 from U.S.$282 million for the year ended 31 December 2018 as a result of increase in average freight rate.

Depreciation and amortisation

The Group's depreciation and amortisation expenses decreased by U.S.$65 million, or 25.1%, to U.S.$194 million for the year ended 31 December 2020 from U.S.$259 million for the year ended 31 December 2019 due to decrease in property plant and equipment resulting from depreciation of the rouble against the U.S. dollar as of 31 December 2020 compared to 31 December 2019.

The Group's depreciation and amortisation expenses increased by U.S.$217 million, or 516.7%, to U.S.$259 million for the year ended 31 December 2019 from U.S.$42 million for the year ended 31 December 2018 due to increase in depreciation and amortisation expenses related to right-of-use assets recognised as a result of IFRS 16 application in the year ended 31 December 2019.

Stevedoring from third parties expenses

The Group's stevedoring from third parties expenses decreased by U.S.$26 million, or 18.8%, to U.S.$112 million for the year ended 31 December 2020 from U.S.$138 million for the year ended 31 December 2019 as a result of lower transshipment volumes through third-party ports.

The Group's stevedoring from third parties expenses for the year ended 31 December 2019 were relatively flat compared to the year ended 31 December 2018.

General and administrative expenses

The Group's general and administrative expenses decreased by U.S.$44 million, or 19.2%, to U.S.$185 million for the year ended 31 December 2020 from U.S.$229 million for the year ended 31 December 2019 primarily due to a decrease in salaries, charitable donations and other expenses.

The Group's general and administrative expenses decreased by U.S.$10 million, or 4.2%, to U.S.$229 million for the year ended 31 December 2019 from U.S.$239 million for the year ended 31 December 2018 primarily due to a decrease in charitable donations, which was partially offset by an increase in salaries.

The table below shows the Group's general and administrative expenses for the periods indicated:

	Year ended 31 December		
	2020	**2019**	**2018**
		(*in U.S.$ million*)	
Salaries	127	140	131
Consulting, legal, audit and other professional services	31	38	38
Charitable donations	14	26	38
Office rent	—	—	8
Other	13	25	24
Total	**185**	**229**	**239**

Other income/(expenses), net

The Group's other income, net was U.S.$2 million for the year ended 31 December 2020, as compared to net expenses of U.S.$15 million for the year ended 31 December 2019, this overall change of U.S.$17 million, or 113.3%, was a result of certain one-off transactions occurred in 2020.

The Group's other expenses, net decreased by U.S.$13 million, or 46.4%, to U.S.$15 million for the year ended 31 December 2019 from U.S.$28 million for the year ended 31 December 2018 as a result of a decrease in rouble-denominated charity expenses in the year ended 31 December 2019 due to the depreciation of rouble against the U.S. dollar.

Operating profit

The Group's operating profit decreased by U.S.$223 million, or 20.0%, to U.S.$892 million for the year ended 31 December 2020 from U.S.$1,115 million for the year ended 31 December 2019 primarily due to a decrease in the Group's revenue partially offset by a decrease in the cost of sales and the distribution costs, in each case, for the reasons described above.

The Group's operating profit decreased by U.S.$757 million, or 40.4%, to U.S.$1,115 million for the year ended 31 December 2019 from U.S.$1,872 million for the year ended 31 December 2018 as a result of a decrease in the Group's revenue and an increase in costs of sales.

Finance costs, net

The Group's net finance costs decreased by U.S.$83 million, or 19.8%, to U.S.$337 million for the year ended 31 December 2020 from U.S.$420 million for the year ended 31 December 2019 primarily due to a decrease in the Group's interest expense, which was driven by lower interest rates on the Group's loans and borrowings and by partial repayment of certain of the Group's long-term borrowings and long-term lease liabilities.

The Group's finance costs increased by U.S.$109 million, or 35.0%, to U.S.$420 million for the year ended 31 December 2019 from U.S.$311 million for the year ended 31 December 2018 primarily as a result of recognition of the lease liabilities and related interest on leases under IFRS 16 Leases in the amount of U.S.$88 million in the year ended 31 December 2019. See "*—Adoption of New IFRS Standards and Comparability of Financial Information Between Periods*".

Foreign exchange (loss) / gain

The Group's foreign exchange loss amounted to U.S.$308 million for the year ended 31 December 2020, as compared to a foreign exchange gain of U.S.$200 million for the year ended 31 December 2019, this overall change of U.S.$508 million, or 254.0%, was primarily attributable to depreciation of Russian rouble against U.S. dollar by 19.3% in 2020 compared to 2019.

The Group's foreign exchange gain amounted to U.S.$200 million for the year ended 31 December 2019, as compared to a foreign exchange loss of U.S.$83 million for the year ended 31 December 2018, this overall change of U.S.$283 million, or 341.0%, was primarily attributable to an increase in value of Russian rouble against U.S. dollar by 10.9% in 2019 compared to 2018.

Profit before tax

The Group's profit before tax decreased by U.S.$648 million, or 72.4%, to U.S.$247 million for the year ended 31 December 2020 from U.S.$895 million for the year ended 31 December 2019 as a result of a decrease in operating profit and the recognition of a foreign exchange loss in the amount of U.S.$308 million in the year ended 31 December 2020.

The Group's profit before tax decreased by U.S.$583 million, or 39.4%, to U.S.$895 million for the year ended 31 December 2019 from U.S.$1,478 million for the year ended 31 December 2018 as a

result of a decrease in revenues and operating profit caused by lower coal prices in 2019 compared to 2018.

Income tax expense

The Group's income tax expense decreased by U.S.$93 million, or 63.7%, to U.S.$53 million for the year ended 31 December 2020 from U.S.$146 million for the year ended 31 December 2019 primarily as a result of a decrease in the current income tax expense by U.S.$82 million and an increase in the deferred income tax benefit by U.S.$11 million, which was primarily driven by a decrease in profit before tax in the year ended 31 December 2020.

The Group's income tax expense decreased by U.S.$168 million, or 53.5%, to U.S.$146 million for the year ended 31 December 2019 from U.S.$314 million for the year ended 31 December 2018 as a result of a decrease in the current income tax expense by U.S.$23 million and change from U.S.$71 million deferred income tax expense for the year ended 31 December 2018 to U.S.$75 million deferred income tax benefit for the year ended 31 December 2019, which was primarily driven by a decrease of profit before tax in the year ended 31 December 2019.

Net profit for the year

The Group's net profit decreased by U.S.$555 million, or 74.1%, to U.S.$194 million for the year ended 31 December 2020 from U.S.$749 million for the year ended 31 December 2019 as a result of a U.S.$648 million decrease in the profit before tax, which primarily reflects a decrease in revenues from coal and transportation segments and foreign exchange losses for the period.

The Group's net profit decreased by U.S.$415 million, or 35.7%, to U.S.$749 million for the year ended 31 December 2019 from U.S.$1,164 million for the year ended 31 December 2018 as a result of a U.S.$583 million decrease in the in the profit before tax, which primarily reflects a decrease in revenues from the Group's coal segment.

Segmental Information

The table below shows a breakdown of the Group's revenues by operating segments for the periods indicated.

	Year ended 31 December		
	2020	**2019**	**2018**
		(in U.S.$ million)	
Revenue			
Coal segment	4,057	5,140	6,031
Energy segment	2,374	2,189	2,130
Logistics segment	252	309	135
Corporate segment	—	—	—
Total	**6,683**	**7,638**	**8,296**

The table below shows a breakdown of the Group's revenues by operating segments for the periods indicated.

	Six months ended 30 June	
	2021	**2020**
	(in U.S.$ million)	
Revenue		
Coal segment	2,513	2,038
Energy segment	1,407	1,195
Logistics segment	279	94
Corporate segment	3	—
Total	**4,202**	**3,327**

Operating segment information for the Group at 30 June 2021 and for the six months then ended is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Segment revenue and profitability						
Segment external revenues	2,513	279	1,407	3	—	4,202
Russian Federation	217	209	1,407	3	—	1,836
Pacific region	1,562	48	—	—	—	1,610
Atlantic region	734	22	—	—	—	756
Inter-segment revenues	423	896	35	29	(1,383)	—
Segment expenses	(2,592)	(958)	(1,099)	(54)	1,383	(3,320)
Operating profit/(loss)	**344**	**217**	**343**	**(22)**	**_**	**882**
Depreciation and amortisation	(311)	(102)	(137)	(5)		(555)
Interest expense and interest on lease	(59)	(31)	(27)	(97)	106	(108)
Interest income	3	2	1	104	(109)	1
Profit before tax	295	186	314	—	—	795
Income tax expense	(72)	(43)	(67)	—	—	(182)
Net profit for the period	**223**	**143**	**247**	—	—	**613**
Capital expenditures incurred during the period	201	49	133	3	—	386
Additions of right-of-use assets	2	24	1	—	—	27
Segment assets and liabilities						
Total segment assets	**13,526**	**2,040**	**3,497**	**2,074**	**(5,053)**	**16,084**
Total segment liabilities	**5,018**	**1,371**	**1,867**	**7,274**	**(5,053)**	**10,477**

Operating segment information for the Group for the six months ended 30 June 2020 is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Segment revenue and profitability						
Segment external revenues	2,038	94	1,195	—	—	**3,327**
Russian Federation	246	94	1,195	—	—	**1,535**
Pacific region	1,264	—	—	—	—	**1,264**
Atlantic region	528	—	—	—	—	**528**
Inter-segment revenues	281	876	34	24	(1,215)	**-**
Segment expenses	(2,338)	(721)	(897)	(40)	1,215	**(2,781)**
Operating (loss)/profit	**(19)**	**249**	**332**	**(16)**	—	**546**
Depreciation and amortisation	(288)	(110)	(118)	(3)	—	**(519)**
Interest expense and interest on lease	(71)	(44)	(50)	(103)	103	**(165)**
Interest income	1	3	1	102	(103)	**4**
(Loss)/profit before tax	(89)	235	281	(258)	—	**169**
Income tax benefit/(expense)	9	(47)	(51)	52	—	**(37)**
Net (loss)/profit for the period	**(80)**	**188**	**230**	**(206)**	—	**132**
Capital expenditures incurred during the period	423	15	57	1	**—**	**496**
Segment assets and liabilities						
Total segment assets	**12,988**	**2,440**	**3,349**	**1,642**	**(4,856)**	**15,563**
Total segment liabilities	**4,783**	**1,156**	**2,114**	**7,385**	**(4,856)**	**10,582**

Operating segment assets and liabilities of the Group at 31 December 2020 is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Segment revenue and profitability						
Segment external revenues	4,057	252	2,374	—	—	6,683
Russian Federation	488	252	2,374	—	—	3,114
Pacific region	2,377	—	—	—	—	2,377
Atlantic region	1,192	—	—	—	—	1,192
Inter-segment revenues	760	1,666	65	48	(2,539)	—
Segment expenses	(4,779)	(1,542)	(1,917)	(92)	2,539	(5,791)
Operating (loss)/profit	**38**	**376**	**522**	**(44)**	**—**	**892**
Depreciation and amortisation	(637)	(207)	(228)	(9)	—	(1,081)
Interest expense and interest on lease	(136)	(76)	(83)	(227)	218	(304)
Interest income	5	6	1	214	(218)	8
(Loss)/profit before tax	(183)	387	438	(395)	—	247
Income tax benefit/(expense)	33	(77)	(88)	79	—	(53)
Net (loss)/profit for the period	**(150)**	**310**	**350**	**(316)**	**—**	**194**
Capital expenditures incurred during the period	723	64	227	12	—	1,026
Additions of right-of-use assets	8	1	11	—	—	20
Segment assets and liabilities						
Total segment assets	**13,291**	**2,565**	**3,410**	**1,748**	**(4,980)**	**16,034**
Total segment liabilities	**4,962**	**1,224**	**2,119**	**7,655**	**(4,980)**	**10,980**

Operating segment assets and liabilities of the Group at 31 December 2019 is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Segment revenue and profitability						
Segment external revenues	5,140	309	2,189	—	—	**7,638**
Russian Federation	614	309	2,189	—	—	**3,112**
Pacific region	2,712	—	—	—	—	**2,712**
Atlantic region	1,814	—	—	—	—	**1,814**
Inter-segment revenues	664	1,903	8	53	(2,628)	**-**
Segment expenses	(5,650)	(1,676)	(1,714)	(111)	2,628	**(6,523)**
Operating (loss)/profit	**154**	**536**	**483**	**(58)**	**—**	**1,115**
Depreciation and amortisation	(597)	(271)	(178)	(7)	—	**(1,053)**
Interest expense and interest on lease	(157)	(95)	(121)	(239)	206	**(406)**
Interest income	5	10	4	210	(206)	**23**
(Loss)/profit before tax	(88)	493	363	127	—	**895**
Income tax benefit/(expense)	51	(101)	(71)	(25)	—	**(146)**
Net (loss)/profit for the period	**(37)**	**392**	**292**	**102**	**—**	**749**
Capital expenditures incurred during the period	972	94	158	12	**—**	**1,236**
Additions of right-of-use assets	13	932	4	**—**	**—**	**949**
Segment assets and liabilities						
Total segment assets	**13,271**	**2,722**	**3,688**	**1,210**	**(4,292)**	**16,599**
Total segment liabilities	**5,013**	**1,434**	**2,493**	**6,348**	**(4,292)**	**10,996**

Operating segment assets and liabilities of the Group at 31 December 2018 is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Segment revenue and profitability						

Segment external revenues	6,031	135	2,130	—	—	**8,296**
Russian Federation	679	135	2,130	—	—	**2,944**
Pacific region	3,054	—	—	—	—	**3,054**
Atlantic region	2,298	—	—	—	—	**2,298**
Inter-segment revenues	568	1,875	7	54	(2,504)	—
Segment expenses	(5,406)	(1,687)	(1,746)	(89)	2,504	**(6,424)**
Operating (loss)/profit	**1,193**	**323**	**391**	**(35)**	—	**1,872**
Depreciation and amortisation	(438)	(50)	(177)	(4)	—	**(669)**
Interest expense and interest on lease	(141)	(14)	(135)	(180)	178	**(292)**
Interest income	7	16	7	171	(178)	**23**
(Loss)/profit before tax	1,032	294	259	(107)	—	**1,478**
Income tax benefit/(expense)	(224)	(59)	(52)	21	—	**(314)**
Net (loss)/profit for the period	**808**	**235**	**207**	**(86)**	—	**1,164**
Capital expenditures incurred during the period	802	80	101	7	—	990
Segment assets and liabilities						
Total segment assets	**12,727**	**952**	**2,786**	**834**	**(3,260)**	**14,039**
Total segment liabilities	**4,244**	**288**	**1,976**	**5,556**	**(3,260)**	**8,804**

Liquidity and Capital Resources

Capital resources

The Group's primary source of liquidity is cash flows generated by its operating activities. In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the Group generated net cash from operating activities of U.S.$1,247 million, U.S.$1,669 million, U.S.$2,125 million and U.S.$1,901 million, respectively.

The Group currently expects to finance its future business needs, including its additional capital expenditures in accordance with its business strategy, from cash flows generated by the Group's operating activities and external sources of financing.

Cash flows and working capital

Historically, the Group has relied on cash flows from its operating activities and external financings, in the form of loan facilities, as its main sources of liquidity. The Group had cash and cash equivalents of U.S.$152 million at 30 June 2021, U.S.$183 million at 31 December 2020, U.S.$177 million at 31 December 2019 and U.S.$166 million at 31 December 2018. Substantially all of the Group's cash is held in current accounts or on short-term deposits with several major Russian banks. The Group's cash is held primarily in foreign currency, although the Group also holds cash in Russian roubles.

The liquidity and working capital requirements of the Group are subject to fluctuations depending on the payment trends of the Group's customers. The Group's ability to generate cash from its operations depends on future operating performance, which is in turn dependent on general economic, financial, competitive, market, legislative, regulatory and other factors, many of which are beyond the Group's control, as well as the other factors discussed in this Prospectus. See "*Risk Factors*" and "*—Certain Factors Affecting Results of Operations*".

Cash flows

The table below shows a breakdown of the Group's cash flows for the periods indicated:

	Six months ended 30 June		**Year ended 31 December**		
	2021	**2020**	**2020**	**2019**	**2018**
	(*in U.S.$ millions*)				
Net cash flow from operating activities.....	1,247	950	1,669	2,125	1,901

Net cash flow used in investing activities..	(388)	(660)	(1,223)	(3,534)	(1,331)
Net cash flow (used in) / from financing activities	(899)	(170)	(421)	1,429	(888)
Foreign exchange effect on cash and cash equivalents.....	9	(12)	(19)	(10)	8
Net increase / (decrease) in cash and cash equivalents.....	(31)	108	6	10	(310)

Cash flows for the six months ended 30 June 2021 and 2020

Cash flows from operating activities

In the six months ended 30 June 2021, the Group generated net cash of U.S.$1,247 million from its operating activities, an increase of U.S.$297 million, or 31.3% from U.S.$950 million in the six months ended 30 June 2020. The increase was primarily the result of increase in the Group's profit before tax.

Cash flows used in investing activities

In the six months ended 30 June 2021, the Group's net cash used in investing activities was U.S.$388 million, a decrease of U.S.$272 million, or 41.2%, from U.S.$660 million in the six months ended 30 June 2020. The decrease was primarily attributable to a decrease in cash spent on purchase of property, plant and equipment, rescheduling of the Group's capital expenditures planned for the first half of 2021 and no spending on acquisitions in the six months ended 30 June 2021.

Cash flow from / used in financing activities

In the six months ended 30 June 2021, the Group recorded a net cash outflow of U.S.$899 million from its financing activities, an increase of U.S.$729 million, or 428.8%, from net cash outflow of U.S.$170 million in the six months ended 30 June 2020 as a result of a decrease in cash proceeds received from long-term borrowings, which was partially offset by a decrease in repayment of long-term borrowings.

Cash flows for the years ended 31 December 2020, 2019 and 2018

Cash flows from operating activities

In the year ended 31 December 2020, the Group generated net cash of U.S.$1,669 million from its operating activities, a decrease of U.S.$456 million, or 21.5% from U.S.$2,125 million in the year ended 31 December 2019. The decrease was primarily the result of a lower profit before tax and an increase in trade accounts and other receivables in the year ended 31 December 2020.

In the year ended 31 December 2019, the Group generated net cash of U.S.$2,125 million from its operating activities, an increase of U.S.$224 million, or 11.8% from U.S.$1,901 million in the year ended 31 December 2018. The increase was primarily a result of higher operating cash flows and a decrease in income tax paid.

Cash flows used in investing activities

In the year ended 31 December 2020, the Group's net cash used in investing activities was U.S.$1,223 million, a decrease of U.S.$2,311 million, or 65.4%, from U.S.$3,534 million in the year ended 31 December 2019. The decrease was primarily attributable to a decrease in cash used for purchase of property, plant and equipment, rescheduling of the Group's capital expenditures in the year ended 31 December 2020 and no material acquisition costs compared to 2019.

In the year ended 31 December 2019, the Group's net cash used in investing activities was U.S.$3,534 million, an increase of U.S.$2,203 million, or 165.5%, from U.S.$1,331 million in the year ended 31 December 2018. The increase was primarily due to an increase in the cash spent on purchase of property, plant and equipment and acquisition by the Group of certain generating and other assets,

including Reftinskaya GRES, Krasnoyarskaya GRES-2 and SGC group. See "*Business—Energy Division*".

Cash flow from / used in financing activities

In the year ended 31 December 2020, the Group recorded a net cash outflow of U.S.$421 million from its financing activities, a decrease of U.S.$1,850 million, or 129.5%, from a net cash inflow of U.S.$1,429 million in the year ended 31 December 2019 as a result of an increase in the repayment of debt and an increase in dividends paid to the shareholders of the Group.

In the year ended 31 December 2019, the Group recorded a net cash inflow of U.S.$1,429 million from its financing activities, an increase of U.S.$2,317 million, or 260.9%, from a net cash outflow of U.S.$888 million in the year ended 31 December 2018 as a result of a decrease in the repayment of debt and an increase in total debt, primarily driven by repayment of loan to AIM Capital SE in 2018.

Borrowings

As at 30 June 2021, the Group had U.S.$6,354 million of borrowings. The Group's total borrowings as at 31 December 2020, 2019 and 2018, was U.S.$7,002 million, U.S.$6,738 million and U.S.$4,353 million, respectively.

The table below sets out a breakdown by maturity of the Group's current and non-current debt under loans and bonds (excluding liabilities under leases) as at 30 June 2021, 31 December 2020, 2019 and 2018.

	Six months ended 30 June	Year ended 31 December		
	2021	2020	2019	2018
Due for repayment		(*in U.S.$ millions*)		
Short-term borrowings.....	1,685	1,732	1,799	1,081
Long-term borrowings.....	4,669	5,270	4,939	3,272
Total borrowings	**6,354**	**7,002**	**6,738**	**4,353**

The table below sets out a breakdown by currency of the Group's current and non-current debt under loans and bonds (excluding liabilities under leases) as at 30 June 2021, 31 December 2020, 2019 and 2018.

		Six months ended 30 June	Year ended 31 December		
	Effective interest rate	2021	2020	2019	2018
		(*in U.S.$ millions*)			
Long-term borrowings					
Variable rate borrowings.....		**3,664**	**4,115**	**2,952**	**3,050**
Unsecured USD-denominated borrowings.....	6M LIBOR + 0.9% to 1M LIBOR +2,5% / 3%	2,098	2,545	2,780	2,692
Unsecured RUB-denominated borrowings.....	CBR + 0.3% to CBR + 1.85%	1,298	1,286	—	217
Unsecured EUR-denominated borrowings.....	6M EURIBOR + 0.37% to 6M EURIBOR + 2.25%	268	284	172	141
Fixed rate borrowings		**2,572**	**2,843**	**3,631**	**1,241**
Unsecured USD-denominated borrowings.....	2.99% to 4%	1,104	1,404	1,814	—
Unsecured RUB-denominated bonds	6.7% to 8.3%	1,341	1,314	840	271
Unsecured EUR-denominated borrowings.....	0.05% to 4%	127	—	—	—

Unsecured RUB-denominated borrowings	8.25% to 10.5%	—	125	977	970
Current portion of long-term borrowings		(1,567)	(1,688)	(1,644)	(1,019)
Total long-term borrowings		**4,669**	**5,270**	**4,939**	**3,272**
Short-term borrowings					
Variable rate borrowings		**6**	—	—	—
Other borrowings		6	—	—	—
Fixed rate borrowings		**112**	**44**	**155**	**62**
Unsecured RUB-denominated borrowings	1.8% to 7.75%	—	41	—	60
Unsecured USD-denominated borrowings		110	—	150	—
Other borrowings		2	3	5	2
Current portion of long-term borrowings		1,567	1,688	1,644	1,019
Total short-term borrowings		**1,685**	**1,732**	**1,799**	**1,081**

The following table sets forth repayment schedule of the Group's indebtedness as at 30 June 2021.

	Local bonds[(1)]	**ECA Facilities[(1)]**	**PXF Facilities[(1)]**	**Bilateral Loans[(1)]**	**Total debt repayment[(1)]**
			(*in U.S.$ millions*)		
2021	138	27	343	442	950
2022	-	52	787	671	1,510
2023	567	47	556	95	1,263
2024	193	42	322	3	561
2025	415	37	102	732	1,286
After 2025	-	98	-	691	789

(1) For currency conversion purposes the exchange rate of RUB 72.3723 per U.S.$1.00 is used.

Non-current debt

As at 30 June 2021, the Group's non-current debt comprised loans in the total amount of U.S.$4,669 million.

Current debt

As at 30 June 2021, the Group's current debt (and current portion of non-current debt) was U.S.$1,685 million, which consisted primarily of the current portion of non-current debt (U.S.$1,567 million).

Loans and borrowings

The Group sources debt financing from Russian and foreign banks. Most of the borrowings from banks are denominated in U.S. dollars and are floating rate. As at the date of this Prospectus, average interest rate on the Group's loans and borrowing was 3.15% per annum and the average maturity was approximately 4 years.

In January 2017, IC SUEK LTD LLC and the Company entered into a revolving facilities agreement with PJSC "VTB Bank" for RUB 25 billion. In September 2019, the limit under this agreement was increased to RUB 70 billion. The facilities agreement is secured by a suretyship of the Company, IC SUEK LTD LLC and Tugnuisky Opencast Mine. As at 30 June 2021, the outstanding amount under the facilities agreement was U.S.$ 171.3 million with IC SUEK LTD LLC and RUB 40 billion with the Company.

In November 2017, SGC entered into a term facility agreement with JSC "Gazprombank" for RUB 25 billion with amortization maturing in February 2023, of which RUB 10 billion has been drawn down. The outstanding amount as at 30 June 2021 was RUB 3.9 billion. The loan is secured by the suretyship of the Company, JSC "Kuzbassenergo" and JSC "Yenisei Territorial Generating Company (TGC-13)".

In February 2018, the Company entered into a revolving facilities agreement with PJSC "Sberbank" denominated in U.S. dollars for U.S.$650 million. In July 2019, the limit under this agreement was increased to U.S.$1,730 million. As at 30 June 2021, the outstanding amount of the facilities agreement was U.S.$921 million. The facilities are secured by the suretyship of SUEK-Kuzbass, SUEK-Khakasia and Tugnuisky Opencast Mine".

In March 2018, IC SUEK LTD LLC entered into a pre-export finance facility agreement with Bank of China, China Construction Bank, Citibank, Rosbank, Bank of America Merrill Lynch, Agricultural Bank of China, Caterpillar Financial Services Corporation, UniCredit, Deutsche Bank, Commerzbank, Intesa Sanpaolo, Credit Suisse, Mizuho Bank and Raiffeisen Bank for an up to U.S.$1 billion, maturing in March 2023 ("**2018 PXF Facility**"). The facility is secured by the suretyship of the Company, SUEK-Kuzbass, SUEK-Khakasia and Tugnuisky Opencast Mine and the guarantee of SUEK AG.

In August 2018, the Group issued RUB 10 billion 8.3% domestic bonds due in August 2021, which have been fully repaid as at the date of this Prospectus.

In June 2019, IC SUEK LTD LLC entered into a pre-export finance facility agreement with Alfa-Bank, Deutsche Bank, Industrial and Commercial Bank of China (ICBC), Commerzbank, Intesa Sanpaolo, Mizuho Bank, MUFG Bank, Black Sea Trade and Development Bank, Raiffeisen Bank, Credit Suisse, Banco BPM and Agricultural Bank of China for an up to U.S.$1 billion maturing in June 2024 ("**2019 PXF Facility**"). The facility is secured by the suretyship of the Company, SUEK-Kuzbass, SUEK-Khakasia and Tugnuisky Opencast Mine and the guarantee of SUEK AG.

In September 2019, the Group issued RUB 21 billion 7.5% domestic bonds due in September 2029 with a put option in March 2023.

In October 2019, the Group issued RUB 20 billion 7.4% domestic bonds due in October 2029 with a put option in October 2023.

In January 2020, the Group issued RUB 30 billion 6.9% domestic bonds due in January 2030 with a put option in January 2025.

In June 2020, the Company entered into a term facility agreement with PJSC "VTB Bank" for RUB 50 billion maturing in March 2026. The facility is secured by the suretyship of Tugnuisky Opencast Mine and IC SUEK LTD LLC.

In July 2020, IC SUEK LTD LLC entered into a pre-export finance facility agreement with Alfa-Bank, BCS, Commerzbank, Credit Suisse, Deutsche Bank for an up to U.S.$800 million maturing in July 2025. The facility is secured by the suretyship of the Company, SUEK-Kuzbass, SUEK-Khakasia and Tugnuisky Opencast Mine and the guarantee of SUEK AG.

In October 2020, the Group issued RUB 14 billion 6.7% domestic bonds due in October 2030 with a put option in April 2024.

Compliance with covenants

The Group is subject to certain covenants related primarily to its debt such as Net debt to Covenant Adjusted EBITDA and Covenant Adjusted EBITDA to interest expense. The Group monitors compliance with such covenants semi-annually and was in compliance with them as at and for the reporting periods ended 30 June 2021, 31 December 2020, 2019 and 2018.

Capital expenditures

The Group's capital expenditures relate primarily to investments in its coal, energy and logistics assets and related infrastructure, as well as implementation of health, safety and environmental measures.

The following table sets forth the Group's capital expenditures for the periods indicated:

	Six months ended 30 June		Years ended 31 December		
	2021	2020	2020	2019	2018
	(*in U.S.$ million*)				
Cash paid for acquisition of property, plant and equipment	(391)	(506)	(965)	(1,329)	(903)

In the six months ended 30 June 2021, cash paid by the Group for acquisition of property, plant and equipment amounted to U.S.$391 million. The 22.7% decrease in cash paid for acquisition of property, plant and equipment in the six months ended 30 June 2021 compared to the same period in 2020 was primarily attributable to rescheduling of the Group's capital expenditures in the six months ended 30 June 2021.

In the years ended 31 December 2020, 2019 and 2018, cash paid by the Group for acquisition of property, plant and equipment amounted to U.S.$965 million, U.S.$1,329 million and U.S.$903 million, respectively. The 27.4% decrease in cash paid for acquisition of property, plant and equipment in the year ended 31 December 2020 compared to 2019 was primarily attributable to decreased expenditures on development of certain of the Group's coal projects. The 47.2% increase in cash paid for acquisition of property, plant and equipment in the year ended 31 December 2019 compared to 2018 was primarily attributable to increased expenditures on acquisition of 16,500 railcars of increased capacity in the year ended 31 December 2019.

The Group has budgeted U.S.$1,238 million for acquisition of property, plant and equipment in the year ending 31 December 2021. The Group's actual capital expenditures may vary significantly from its estimates and depend on a variety of factors, including market conditions, the availability of funding, operating cash flow and other factors fully or partially outside the Group's control. See "*Risk Factors—Unregulated prices for electricity and capacity may fluctuate or be subject to limitations*".

The following table sets forth capital expenditures incurred by the Group's operating segments for the periods indicated.

	Six months ended 30 June	Year ended 31 December		
	2021	2020	2019	2018
		(*in U.S.$ millions*)		
Maintenance CAPEX				
Coal Division	112	484	497	512
Energy Division	23	123	88	32
Logistics Division	14	51	63	38
Growth CAPEX				
Coal Division	92	251	487	297
Energy Division	110	104	70	69
Logistics Division	35	13	31	42
Total	**386**	**1,026**	**1,236**	**990**

Contractual Obligations and Capital Commitments

In addition to its financial liabilities, the Group has various contractual obligations and purchase commitments as summarised below.

Lease liabilities

The Group leases a number of land areas owned by local governments, production buildings, machinery, equipment, transport and railcars. Lease payments are determined by lease agreements. The land areas and production buildings leased by the Group are the territories where the Group's coal mines, power plants and other assets are located. Lease railcars are used by the Groups primarily for transportation of the coal produced on the Group's coal mines. The Group's leases, which prior to the adoption of IFRS 16 on 1 January 2019 were accounted for as operating leases under IAS 17, typically run for an initial period of 2.8 to 11.3 years with an option to renew the lease after that date.

The Group has elected not to recognise right-of-use assets and lease liabilities for short-term leases of assets that have a lease term of 12 months or less and leases of low-value assets (with a value of U.S.$5,000 or less upon purchase). The Group recognises the payments of lease associated with these leases as an expense on a straight-line basis over the lease term. See "*—Adoption of New IFRS Standards and Comparability of Financial Information Between Periods*".

The table below sets forth the breakdown for the Group's lease liabilities in the years ended 31 December 2020, 2019 and 2018.

	Year ended 31 December		
	2020	**2019**	**2018**
		(*in U.S.$ millions*)	
Opening balance	1,224	813	—
Additions	20	521	—
Modifications	74	11	—
Interest on lease	63	89	—
Payment of lease liabilities	(224)	(313)	—
Payment for purchase of leased railcars	(363)	—	—
Disposals	(14)	(16)	—
Translation difference	(163)	119	—
Closing balance	**617**	**1,224**	**—**

Capital commitments

Future capital expenditures under the Group's contractual commitments amounted to U.S.$1,110 million as at 30 June 2021, as compared to U.S.$885 million as at 31 December 2020, U.S.$1,028 million as at 31 December 2019 and U.S.$559 million in the year ended 31 December 2018.

Contingencies

Information on the principal contingencies faced by the Group is set out in note 30 to the 2020 Consolidated Financial Statements and appearing elsewhere in this Prospectus. The contingencies relate to the economic, social and political environment in which the Group operates, its exposure to uninsured risks, the risk of legal proceedings and tax risks resulting from uncertainty in inconsistently interpreted Russian tax legislation and potential exposure to environmental liability from its operating activities as a result of changes in applicable legislation or interpretation. See also "*Risk Factors*" for a discussion of these and other risks faced by the Group.

Social commitments

Group entities contribute to the maintenance and upkeep of local infrastructure and the welfare of its employees, including contributions towards the development and maintenance of housing, hospitals, transport services, recreation and other social needs in the geographical areas in which it operates.

Off-balance Sheet Arrangements

Apart from the commitments and contingencies referred to above, the Group had no other off-balance sheet arrangements as at 30 June 2021 and 31 December 2020, 2019 and 2018.

Quantitative and Qualitative Disclosures in Respect of Financial Risk Management

In the normal course of its operations, the Group is exposed to market risk (including foreign currency and interest rate risks), credit and liquidity risks. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group uses derivative financial instruments to hedge certain risk exposures.

Risk management is carried out through regular meetings of a risk management committee of operational management and by the central treasury department. The Board of Directors approves principles for overall risk management. In addition, operational management have developed policies covering specific areas, such as foreign currency risk, interest rate risk and the use of derivative and non-derivative financial instruments.

Market Risk

Market risk is the risk that changes in market prices, such as coal prices, foreign exchange rates and interest rates will negatively impact the Group's results or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on risk. Market risk management includes the analysis of foreign currency and interest rate risks.

Coal Price Risk

The Group uses coal forwards to manage the market risk related to changes in coal prices and hedges the coal price index, which is used to determine the coal price for the Group's coal sales contracts.

The table below sets for the Group's exposure under the coal forwards for the periods indicated.

	2020		**2019**		**2018**	
	Volume (million tonne)	**Derivative**	**Volume (million tonne)**	**Derivative**	**Volume (million tonne)**	**Derivative**
Derivative assets						
0 – 3 months.....	0.5	1	1.0	9	2.6	12
3 – 6 months.....	0.1	1	0.7	11	2.0	9
6 – 9 months.....	0.1	—	0.7	9	1.9	9
9 – 12 months...	—	—	0.9	8	1.7	7
Total	**0.7**	**2**	**3.3**	**37**	8.3	37
Derivative liabilities						
0 – 3 months.....	3.6	23	0.2	2	0.2	2
3 – 6 months.....	2.4	27	0.1	2	0.2	1
6 – 9 months.....	1.9	16	0.1	2	0	1
9 – 12 months...	2.3	20	0.1	1	0	—
Total	**10.2**	**86**	**0.5**	**7**	**0.4**	**4**

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely impact the financial results of the Group. The total net unhedged liability which exposes the Group to interest rate risk amounted to U.S.$4,115 million, U.S.$2,952 million and U.S.$3,050 million as of 31 December 2020, 2019 and 2018, respectively.

The Group's interest rate risk arises primarily from long-term borrowings. The Group's borrowings at variable interest rates are primarily denominated in U.S. dollars. Borrowings at variable interest rates expose the Group to a cash flow interest rate risk. The Group monitors the risk and, if necessary, manages its exposure by entering into variable-to-fixed interest rate swaps. Such interest rate swaps have the economic effect of converting borrowings from variable interest rates to fixed interest rates.

An increase or a decrease in the floating interest rate by 1 percentage point, provided that the amount of outstanding balance remained constant for the whole year, would have decreased or increased profit for the year by U.S.$41 million in the year ended 31 December 2020, U.S.$30 million in the year ended 31 December 2019 and U.S.$31 million in the year ended 31 December 2018.

Foreign Currency Risk

Foreign currency risk is the risk that the financial results of the Group will be adversely impacted by changes in exchange rates to which the Group is exposed.

A significant portion of the Group's revenues are denominated in U.S. dollars, whereas the majority of the Group's expenditures are denominated in Russian roubles. Accordingly, operating profits may be adversely impacted by the appreciation of the Russian rouble against the U.S. dollar. The risk of negative fluctuations in the USD/RUB exchange rate for future revenue streams is naturally hedged by the USD borrowings.

The following table sets forth the Group's monetary assets and liabilities denominated in currencies other than the functional currency of the respective Group entity for the periods indicated.

	2020			2019		
	RUB	USD	EUR	RUB	USD	EUR
Balances with third and related parties	**(469)**	**(1,206)**	**(380)**	**(203)**	**(1,787)**	**(312)**
Prepaid and recoverable taxes	25	—	—	137	—	—
Cash and cash equivalents	4	13	6	49	7	—
Trade accounts receivables	42	6	—	45	—	1
Other receivables	2	(2)	—	23	—	—
Borrowings	(13)	(1,221)	(304)	—	(1,772)	(185)
Other long-term liabilities	(203)	—	—	(245)	—	(6)
Trade accounts payable and Accruals	(66)	(2)	(26)	(142)	(22)	(76)
Other creditors	(193)	—	(56)	(1)	—	(46)
Taxes payable	(21)	—	—	(25)	—	—
Accrual for vacation payments	(30)	—	—	(24)	—	—
Wages and salaries	(16)	—	—	(20)	—	—
Intra-group balances	**(1,117)**	**(1,008)**	**2**	**(696)**	**(202)**	**4**
Intra-group receivables	220	9	195	254	12	160
Intra-group borrowings	(1,041)	(971)	(193)	(450)	(206)	(156)
Intra-group payables	(296)	(46)	—	(500)	(8)	—
Total net liabilities	**(1,586)**	**(2,214)**	**(378)**	**(899)**	**(1,989)**	**(308)**

A 10% strengthening of the following currencies as at 31 December 2020 would have increased / (decreased) profit and equity by the amounts shown below:

	2020			
	RUB	USD	Other	Total
(Increase)/decrease in equity	(115)	161	30	76
(Increase)/decrease in profit or loss for the year	(39)	90	30	81

The Group from time to time enters into cross-currency swap contracts to manage exposure of fluctuations in foreign exchange rates. Derivative assets amounted to U.S.$527 million and U.S.$1,245 million as at 31 December 2020 and 2019. Derivative liabilities amounted to U.S.$2,658 million and U.S.$662 million as at 31 December 2020 and 2019. There were no derivative assets or liabilities as at 31 December 2018 under cross-currency swaps.

The table below sets for the Group's exposure under the cross-currency swap contracts for the periods indicated.

	2020		2019		2018	
	Volume (U.S.$ million)	Derivative	Volume (U.S.$ million)	Derivative	Volume (U.S.$ million)	Derivative
Derivative assets						
2021	13	1	177	17	—	—
2022	256	11	676	62	—	—
2023	258	10	392	25	—	—
Total	**527**	**22**	**1,245**	**104**	—	—
Derivative liabilities						
2021	194	14	—	—	—	—
2022	937	73	—	—	—	—
2023	831	127	662	5	—	—
2024	220	35	—	—	—	—
2025	476	79	—	—	—	—
Total	**2,658**	**328**	**662**	**5**	—	—

Credit Risk

Credit risk is the risk that a counterparty may default or not meet its obligations to the Group on a timely basis, leading to a financial loss to the Group. The Group minimizes its exposure to this risk by ensuring that credit risk is spread across a number of counterparties. Trade receivables comprise international companies and large Russian companies, and credit is only extended to these customers after rigid credit approval procedures.

As of 31 December 2020, 2019 and 2018, 4%, 8% and 3% of total trade receivables were due from the Group's largest customer and 22%, 26% and 26% of the total trade receivables were due from the Group's remaining 19 largest customers.

The Group's maximum exposure to credit risk is represented by the carrying amount of each financial asset in the statement of financial position, as detailed in the table below.

	2020		2019		2018	
	Gross	Allowance for doubtful debts	Gross	Allowance for doubtful debts	Gross	Allowance for doubtful debts
Not past due	559	—	725	—	625	—
Past due for less than 12 months	150	36	153	62	107	41
Past due for more than one year	124	124	123	123	127	127
Total	**833**	**160**	**1,001**	**185**	**859**	**168**

The table below sets forth the movement in the allowance for doubtful debts in respect of the Group's trade receivables for the periods indicated.

	2020	2019	2018
Opening balance	**185**	**168**	**151**

Additional doubtful debts	69	99	94
Bad debt recovered	(51)	(95)	(70)
Bad debt written-off	(13)	(7)	(11)
Effect of translation to presentation currency	(30)	20	(9)
Adjustment of expected credit losses under IFRS 9	—	—	13
Closing balance	**160**	**185**	**168**

Liquidity Risk

Liquidity risk is the risk that the Group will not be able to settle all liabilities as they fall due.

Prudent liquidity risk management includes maintaining sufficient cash, the availability of funding from an adequate amount of committed credit facilities and the ability to close out market positions. The Group expects that cash generated from operations will be the major source of the Group's liquidity in 2021 and will be sufficient to cover the capital expenditures programme of the Group. In addition, management believes that the Group will be able to attract additional sources of financing in order to refinance existing short-term facilities.

The treasury of the Group maintains flexibility in funding by ensuring the availability of revolving credit facilities. Unused portion of these revolving credit facilities amounted to U.S.$2,395 million as of 30 June 2021, U.S.$2,499 million as of 31 December 2020, U.S.$2,889 million as of 31 December 2019 and U.S.$3,427 million as of 31 December 2018.

BUSINESS

This overview highlights certain information concerning the Group's business and this offering of Notes. It does not contain all information that may be important to you and to your investment decision. The Group urges investors to carefully read the entire Prospectus, including the financial data and related notes and the matters set forth in "Risk Factors" before deciding to invest in the Notes.

Overview

The Group is a leading vertically integrated energy and coal producer with diversified businesses spanning the energy value chain that are supported by complimentary logistics operations and infrastructure. The diversification of operations and the development of synergies between business lines that was undertaken by the Group in the last several years, as well as the Group's investments in research and development and product innovation, has strengthened its resilience to market downturns and positioned it to capture domestic economic growth and global economic recovery opportunities as they arise. The Group's mission is to provide affordable and reliable energy to customers across the world whilst adhering to the best in class principles of corporate governance, sustainability, health and environmental safety.

In the six months ended 30 June 2021, the Group's total revenue and net profit amounted to U.S.$4,202 million and U.S.$613 million compared to U.S.$3,327 million and U.S.$132 million, respectively, in the six months ended 30 June 2020. For the year ended 31 December 2020, the Group's total revenue and net profit amounted to U.S.$6,683 million and U.S.$194 million compared to U.S.$7,638 million and U.S.$749 million for the year ended 31 December 2019 and U.S.$8,296 million and U.S.$1,164 million for the year ended 31 December 2018, respectively. The Group's Adjusted EBITDA for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018 amounted to U.S.$1,437 million, U.S.$1,973 million, U.S.$2,168 million and U.S.$2,541 million, respectively. The Group's Adjusted EBITDA margin was 34.2%, 29.5%, 28.4% and 30.6% for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, respectively.

The Group's operations comprise three main divisions: (i) the Energy Division; (ii) the Coal Division; and (iii) the Logistics Division.

Energy Division

The Energy Division represents the Group's activities in the energy sector which include: (1) the generation and sale of electricity, (2) the sale of electricity capacity, and (3) the generation, transmission and sale of heat. These activities are conducted by SGC, a leading producer of electricity and heat in Siberia, which the Group acquired in 2018.

The Group operates TPPs across eight Russian regions with a combined installed electricity capacity of 17.6 GW and combined installed heat capacity of 26,500 kGcal/h. The Group's heat transportation and distribution network consists of approximately 11 thousand kilometres of double pipelines. The Group has expanded the installed electricity capacity and geographical coverage of the Energy Division's operations with the acquisition of Reftinskaya GRES in 2019, Krasnoyarskaya GRES-2 and Primorskaya GRES in 2020.

Since the majority of the Group's power plants are located in Siberia, where central heating is consumed nine months a year due to harsh weather conditions, the Group's power plants primarily operate in a combined heat cycle (as co-generation power plants with combined production of electricity and heat) which increases the production efficiency of energy consumed by customers in Siberia.

The Energy Division sells electricity and electricity capacity on the wholesale and retail electricity and capacity markets and provides a stable distribution channel for the Coal Division. The Energy Division purchased 21.8 million, 37.1 million, 33.7 million, and 30.2 million tonnes of coal supplied by the Coal

Division, or 37.0%, 33.0%, 29.0% and 26.0% of the Coal Division's sales volumes during the six months ended 30 June 2021, and the years ended 31 December 2020, 2019 and 2018, respectively.

In addition, the Energy Division operates ELSIB, a producer of turbine generators for hydroelectric, nuclear and thermal power plants in Russia and other countries. ELSIB is one of the key players in the Russian market for the production of turbine generators from 60 to 130 MW.

In the first half of 2021, the Group produced 20.7% of the total electricity generated in the Siberian IES compared to 21.2% in the same period in 2020, according to the System Operator. The Group provides heat to more than 5.5 million people living in the Novosibirsk Region, the Krasnoyarsky Krai, the Altaisky Krai, the Kemerovo Region, the Republic of Khakasia and the Republic of Tuva.

In the six months ended 30 June 2021 and 2020, the Group generated 36.5 TWh and 31.9 TWh of electricity and 28.4 million GCal and 22.4 million GCal of heat, respectively. In the years ended 31 December 2020, 2019, and 2018, respectively, the Group generated 63.7 TWh, 51.5 TWh and 46.2 TWh of electricity and 43.7 million GCal, 43.5 million GCal, and 46.0 million GCal of heat, respectively. The Group was the sixth largest producer of electricity in Russia and the third supplier of heat in Russia, according to data published by Russian energy companies. See "*Business – Energy Division*".

For the six months ended 30 June 2021 and the year ended 31 December 2020, the Energy Division's revenue accounted for 33.5% and 35.5% of the Group's total revenues, respectively. For the six months ended 30 June 2021 and the year ended 31 December 2020, the Energy Division's Adjusted EBITDA accounted for 33.4% and 38.0% of the Group's Adjusted EBITDA, respectively. The Energy Division's Adjusted EBITDA margin was 33.3% and 30.8% for the same periods.

Coal Division

The Coal Division represents the Group's coal mining, processing, sale and distribution business. The Group operates nine underground and 19 open-pit large-scale mines in Siberia and the Russian Far East. The Group also has ten washing plants and processing facilities which allow it to process all of the coal designated for export and to access premium coal markets.

As at 30 June 2021, the Group was the largest Russian coal producer and the largest supplier of thermal coal to the Russian market by volume, according to the CDU TEK. The Group was also the world's fourth largest coal exporter by volume as at 30 June 2021, according to data published by major coal companies, with supplies of high quality thermal, sized and metallurgical coal to a diversified customer base across 48 countries. See "*Business – Coal Division*".

As at 1 January 2019, the Group had proved and probable reserves of 7.7 billion tonnes, as audited by SRK, which ranked the Group as the fifth largest coal miner globally, according to data published by major coal companies. According to the Group's internal estimates, its estimated reserves amounted to 7.46 billion tonnes as at 30 June 2021.

The Group sells coal on the domestic market and on the export markets of the Asia-Pacific region, Europe and other countries through a global sales and distribution network of representative and marketing offices located in countries of strategic importance for the Group such as China, Taiwan, South Korea, Japan, Vietnam, Lithuania, Indonesia, Australia, the U.K. and the USA. In Russia, the Group primarily supplies coal to power generating companies, including its Energy Division, industrial consumers, state agencies and communal utilities. In export markets, the Group sells coal primarily to direct consumers through its global distribution network.

The Coal Division profitability is largely dependent on the cost of coal transportation and transshipment. Since most of the coal produced by the Coal Division is transported and transshipped by the Logistics Division, the Group has better control over such costs through the value chain, which enables it to improve the Coal Division's margin.

In the six months ended 30 June 2021 and 2020, respectively, the Group sold 58.9 million and 51.7 million tonnes of coal (including to the Group's Energy Division) of which the Group exported 47% and 50%, respectively. In the years ended 31 December 2020, 2019, and 2018, respectively, the Group sold 112.7 million, 113.7 million and 113.8 million tonnes of coal (including to the Group's Energy Division) of which the Group exported 47.0%, 47.0% and 48.0%, respectively. Approximately 67% and 33% of the Group's coal production in the first half of 2021 was hard and brown coal, respectively (compared to 69% and 31% of hard and brown coal, respectively, in the first half of 2020).

For the six months ended 30 June 2021 and the year ended 31 December 2020, the Coal Division's revenue (including corporate segment revenue) and Adjusted EBITDA accounted for 59.9% and 60.7% of the Group's total revenues and 44.4% and 32.4% of the Group's total Adjusted EBITDA, respectively. The Coal Division's Adjusted EBITDA margin was 21.5% and 13.2% for the same periods.

Logistics Division

The Logistics Division represents the Group's high-capacity railcar transportation and port transshipment business. The operations of the Logistics Division were consolidated under NTC in 2021, which manages the Logistics Division and provides transportation and transshipment services to the Group's other divisions and third parties. The Logistics Division assets include Tuapse Bulk Terminal, Murmansk Commercial Seaport and Murmansk Bulk Terminal in the western regions of Russia and Vanino Bulk Terminal and Maly Port in the Far East with a combined 58.6 million tonnes transshipment capacity and an extensive railway infrastructure comprising 56 thousand rolling stock, over 300 locomotives, approximately 1 thousand kilometres of railway tracks, 16 internal loading stations and other ancillary assets.

The Logistics Division underpins the vertically integrated business model of the Group by ensuring cost-efficient and reliable supplies between the divisions, including, in particular, supplies of coal from the Group's coal assets to the Group's power plants and other customers in Russia and abroad. In addition to the intra-Group supplies, the Logistics Division generates external revenue by transporting and transshipping coal, iron ore, fertilisers and other bulk cargo for third parties.

As at 30 June 2021, the Group was the second largest bulk port operator in Russia by transshipment capacity and the fourth largest Russian gondola car operator, according to the Group's calculations based on published data (see also "*Business – Logistics Division*"). In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the Group transshipped 23.7 million tonnes, 50.3 million tonnes, 48.2 million tonnes and 45.8 million tonnes of cargo, respectively, and transported 62.9 million tonnes, 109.9 million tonnes, 104.7 million tonnes and 100.3 million tonnes of cargo by railcars, respectively.

For the six months ended 30 June 2021 and the year ended 31 December 2020, the Logistics Division's revenue and Adjusted EBITDA accounted for 6.6% and 3.8% of the Group's total revenues and 22.2% and 29.5% of the Group's total Adjusted EBITDA, respectively. The Logistics Division's Adjusted EBITDA margin was 27.1% and 30.4% for the same periods. See "*Operating and Financial Review – Factors Affecting Results of the Group's Logistics Operations – Acquisitions and Disposals*".

Key Strengths

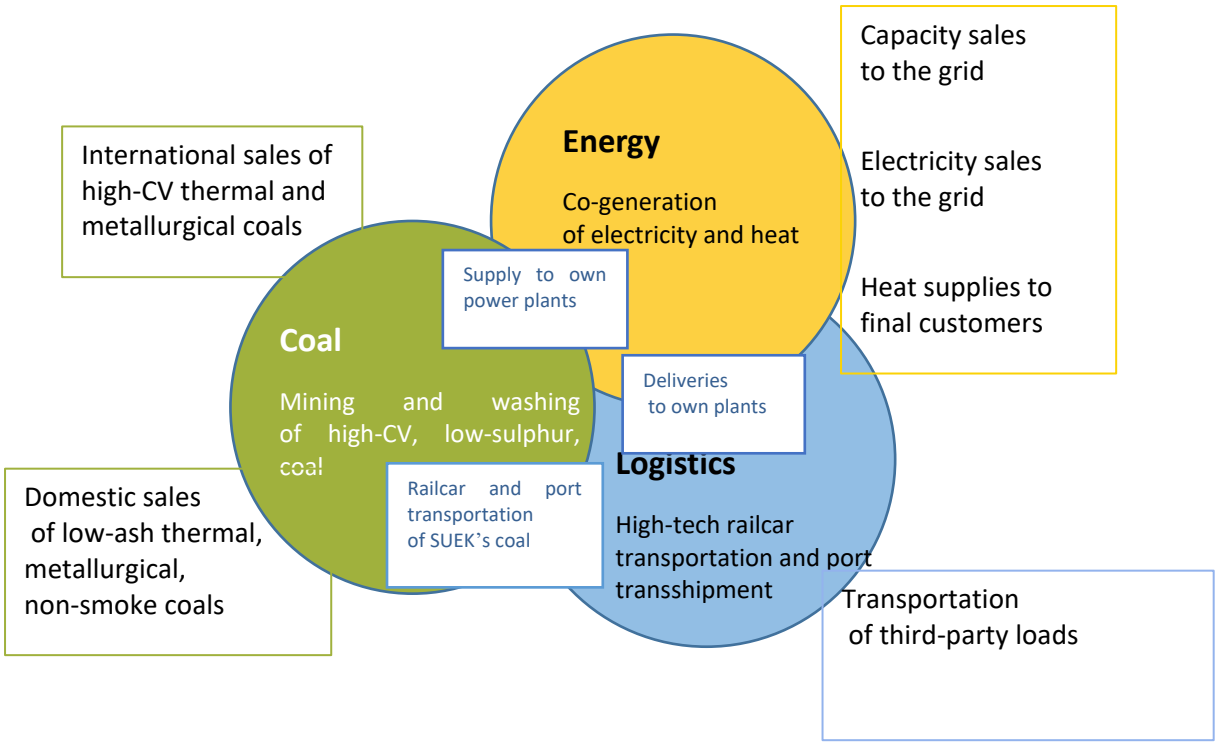
The Group believes that the following strengths and, in particular, their combination, distinguish it from its competitors and provide the Group with competitive advantages in its key businesses:

A strong multi-product fully vertically integrated business model enabling the Group to achieve both significant cost efficiencies and control of the entire value chain

The Group relies on a strong multi-product, vertically integrated business model, comprised of energy, coal and logistics businesses. The Group believes that the integration between its energy, coal and logistics businesses fosters stability of its operations across all stages of the market cycle, enhances its

operational synergies, improves flexibility and planning latitude in production and enables the Group to better control both the costs and the quality of its end-products as well as environmental and industrial safety performances throughout the value chain, from production to customer delivery.

The following is a simplified illustration of the Group's vertically integrated business operations:



During the first six months of 2021, the Coal Division provided 67% of the coal demand of the Energy Division compared to 79% in the same period of 2020. As coal production (including its mining and washing) involves use of significant volumes of electricity, the Group benefits from reliable and affordable supplies of electricity provided by its Energy Division.

The majority of the Group's power plants have been designed to burn the coal supplied primarily from the Group's coal assets located in relative proximity to such power plants (between 150 kilometres and 328 kilometres away), which allows to reduce coal transportation costs. Certain of the Group's power plants supply electricity to the Group, which allows the Group to satisfy approximately 34% of its needs in energy.

The Logistics Division underpins the vertical integration of the Group's operations by ensuring cost-efficient and reliable supplies between the Group's divisions and to other customers in Russia and abroad. The Group is substantially self-sufficient in terms of transportation needs as it is able to satisfy approximately 80% of its demand for transportation and transshipment capacity through the Logistics Division. The Group also benefits from the operational synergies produced by its integrated procurement function, reporting, information technology and other administrative and managerial functions. The Group believes that this level of self-sufficiency and synergies gives its businesses a significant competitive advantage. Furthermore, from an operational perspective, since the Group is able to utilize its established logistics infrastructure, it is less dependent on third-party providers and less susceptible to logistics bottlenecks.

The Group's power plants use coal produced by the Coal Division not only as a hedge against potential supply interruptions, but as a hedge against market volatility. From a financial perspective, this means that if the market prices of coal rise, putting pressure on Energy Division margins, the margins of the Coal Division will tend to increase. Similarly, while decreases in commodity prices tend to reduce margin of the Coal Division, they also create an opportunity for higher profitability in the Energy Division.

In 2020, coal segment revenues to the Atlantic region and the Pacific region accounted for 53.4% of the Group's revenue in 2020, coal segment revenues in the Russian Federation accounted for 7.3% of the Group's revenue in 2020. Energy segment and logistics segment revenues accounted for 35.5% and 3.8% of the Group's revenue in 2020, respectively.

Diversified energy, coal and logistics operations with leading market positions supported by logistical infrastructure and sales networks

The Group holds leading market positions in various highly attractive markets, including:

On the international coal market:

- As at 31 December 2020, the Group was the world's fourth largest coal exporter by volume, according to the Company's data (see also "*Business – Coal Division*"), with a growing presence in the Asia-Pacific region, in particular Japan, South Korea, and China, and an established presence in Europe and Mediterranean. In 2020, the Group's coal exports (particularly high-CV coal, which is in high demand in the region) to the Asia-Pacific region amounted to 37.1 million tonnes and accounted for 67% of the Group's revenues from international coal sales. In the Atlantic region, the Group supplies high-CV coal and metallurgical coal across many markets, including Germany, the Netherlands Morocco and Turkey.

On the Russian energy and logistics markets:

- As at 31 December 2020, the Group was the largest Russian coal producer by production volumes and the largest coal supplier to the Russian market by supply volumes, according to the CDU TEK.

- As at 31 December 2020, the Group was the sixth largest producer of electricity in Russia and the third largest supplier of heat in Russia, according to data published by Russian energy companies. See "*Business – Energy Division*".

- As at 31 December 2020, the Group was the second largest bulk port operator in Russia by transshipment capacity and the fourth largest Russian gondola car operator, according to the Group's calculations based on published data. See also "*Business – Logistics Division*".

The Group believes that it has been able to gain and maintain these leading market positions through its high-quality products and services that differentiate it from its competitors. The Group has close relationships with its domestic and international customers, which are fostered by the Group's knowledge of customers' needs, its global distribution network in key markets, well-established logistical infrastructure and close proximity of its assets to the relevant customer locations.

In 2020, the Group supplied coal to customers in 48 countries (see "*Business – Coal Division*"), provided central heating to more than 5.5 million people in Russia and supplied over 68.2 TWh of electricity to its customers from the Urals to the Far East. The Group's diversified products and services are often critical to its customers' functions, and its strong technology base enables it to provide expertise and value-added services in addition to its products, while its track record of reliability has helped to cement its long-term customer relationships and the Group's reputation in Russia and abroad.

Proven track record of value creation through efficient co-generation of heat and power and stable capacity sales

The majority of the Group's power plants are CHPPs which allows the Group to use a number of synergetic opportunities. Over 90% of heat produced by the Group is supplied by CHPPs, which allows the Group to save up to 50% of fuel on heat generation compared to separate production of electricity and heat and to reduce carbon emissions by 32% per unit of energy production. The Group's power assets work in a combined cycle for nine months a year and have a utilisation rate of approximately 48%. Furthermore, co-generation of heat and electricity allows the Energy Division to remain profitable and generate stable cash flow even during periods of reduced demand for electricity.

The Group regularly invests in upgrading generation capacities of its power plants to secure reliable supplies of capacity on the wholesale electricity market. As at the date of this Prospectus, approximately 12% of the Group's capacity (2.1 GW from 17.6 GW) has already been renovated or rebuilt under the DPM-1 (a Russian state programme aimed at modernisation of generating facilities in the period from 2010 to 2020, see "*Regulation of Coal, Electricity and Transportation Industries–DPM-1*"), which allows the Group to supply its capacity at a price 4-5 times higher than normal price for capacity until 2024. The Group expects to further renew approximately 16% of its capacity as part of the DPM-2 (a Russian state programme aimed at the modernisation of generating facilities in the period from 2022 until 2031, see "*Regulation of Coal, Electricity and Transportation Industries–DPM-2*") until 2027 to improve operational efficiency.

Broad coal portfolio with some of the largest coal reserves globally, strategically located to key growth markets

As at 1 January 2019, the Group's proved and probable coal reserves amounted to 7.7 billion tonnes, as audited by SRK, which made the Group the fifth largest coal producer globally by coal reserves, according to data published by major coal companies. According to the Group's internal estimates, its estimated reserves amounted to 7.46 billion as at 30 June 2021. The Group anticipates that this resource base will provide it with high-quality raw materials for over 30 years into the future.

Coal mined by the Group has a low nitrogen and sulphur content. Its processing significantly reduces ash content and increases the calorific value and environmental friendliness of the Group's products. This allows the Group to meet the requirements of consumers with highest standards, for example in Japan, South Korea and Taiwan. The Group's broad range of coal product offerings includes high-thermal coal, seized and metallurgical coal. The Group believes that its diversified product mix provides it with a competitive advantage in both Russian and international markets as its substantial degree of sales flexibility allows it to adapt to changes in customer demand and economic conditions for different products and regions over sustained periods of time. For more information, see "*Business—Coal Division—Coal mining, processing and quality*".

The Group's coal assets in Kuzbass and Khakasia are located close to railway infrastructure which allows the Group to deliver coal to seaports in western and eastern Russia. The Group's coal assets in Buryatia and Khabarovsk regions are located closer to sea ports in Russia's Far East than its competitors, which allows easy and cost-efficient shipments to the Asian markets. Approximately 32% of high-quality coal is mined and processed in close proximity to the Asian markets. The Group believes that this asset base positioning provides the Group with strategical and competitive advantage compared to its competitors and allows the Group to expand its presence in markets with significant growth potential. The Group's brown coal assets in Krasnoyarsk, Zabaikalye and Primorye regions are also located in close proximity to its energy company customers, including the Energy Division.

Prudent financial policy and resilient financial performance

The Group believes that its strong focus on business diversification, operating efficiencies and prudent financial policy has supported its ability to continue to deliver strong and stable financial performance. In 2018, 2019 and 2020, the Group's Net debt to Covenant Adjusted EBITDA ratio amounted to 1.6x,

3.1x and 3.3x, respectively, and its Adjusted EBITDA margin was 30.6%, 28.4% and 29.5%, respectively. For the twelve months ended 30 June 2021, the Group's Net debt to LTM Covenant Adjusted EBITDA ratio amounted to 2.56x. For the six months ended 30 June 2021, the Group's Adjusted EBITDA margin was 34.2%. The Group manages its exposure to market risks by entering into a variety of derivative financial instruments for purposes of hedging coal price risk, foreign currency risk, interest rate risk and risk of changes in the price of freight. In addition, the Group's strategy has been to maintain consolidated cash balances of between U.S.$100 million and U.S.$200 million, plus bank facilities, and maintain a debt structure with a balanced maturity profile.

The Group believes that its position as a low cost energy and coal producer in Russia, as well as its consistent focus on cost controls across the Group, make it well-positioned to succeed in a market environment of lower coal prices and more intense pricing pressures.

Due to the Group's comparatively resilient business model, strict cost-control and cash management initiatives, the Group has been able to generally limit the impact of the economic downturns, including the COVID-19 pandemic, upon its business. For further information, see "*Operating and Financial Review —Certain Factors Affecting the Group's Results of Operations—COVID-19*".

Strong and focused management team

The Group's management team in aggregate has more than 50 years of experience in the coal mining, energy and logistics businesses as well as accounting, financial and treasury management, and mergers and acquisitions. The Group believes that its management team was instrumental in leading the Group's successful transformation from a single-product company into a vertically integrated energy, coal and logistics business. For more details see "*Business— History and Development*". The Group's heads of divisions also have long-tenured experience in coal, energy and logistics industries.

Effective and transparent ESG programme

The Group is committed to ensuring that its environmental, social and governance systems comply with the best international standards. To achieve this, the Group's approach to sustainability and disclosure of ESG developments is guided by key international principles and standards including: UN Global Compact, SO 26000 (Guidance on Social Responsibility) and the Global Reporting Initiative Standards.

An international audit of the Group's environmental and social responsibility and corporate governance practices, conducted by S&P in 2020, showed that the Group positively compares to industry and local averages, with "good" environmental and social profiles and "strong" corporate governance practices. The Group's operations are systematically audited (internally and externally) for compliance with ISO standards including, amongst others, for occupational health and safety, environmental, anti-bribery and compliance. In 2020, the Group was certified for compliance with the requirements of ISO 55001 for the asset management systems which confirmed the Group's measures aimed at ensuring asset reliability and performance and achieving the maximum return throughout the entire life cycle. In terms of industry safety, the Group has one of the lowest LTIFR in Russia and the mining industry globally with LTIFR of 0.55, 0.50, 0.48 and 0.62 in 2018, 2019, 2020 and in the six months of 2021, respectively.

In February 2021, the Group established a dedicated Board-level HSE committee to oversee the Group's sustainability initiatives, environmental and industrial safety and formalise existing oversight with these issues and approved a new position of the Group's HSE Officer, directly reporting to the Chief Executive Officer. Furthermore, ESG-linked key performance indicators, such as the contribution to certain environmental and social aspects, along with industrial safety performance have now been established as key variable parts in determining staff remuneration. The Group believes that this is an important step in ensuring that its ESG policies and practices are aligned at the highest level within the Group and will allow its businesses to achieve the highest levels of environmental and social responsibility and corporate governance practices that its customers, shareholders, suppliers, and other counterparties would expect.

Strategy

The Group's strategy is targeted at achieving further growth by developing high-margin segments, realizing the full potential of its vertical integration and maximizing synergies between its business lines, as well as improving operational efficiency and profitability, whilst adhering to the best in class principles of corporate governance, sustainability, health and environmental safety.

As part of its overall strategy, the Group is focused on achieving certain targets and goals in respect of its financial and operational performance, including the following:

- becoming one of the top five electricity producers in the Russian market;
- increase of the Group's production in co-generation mode by 25%;
- reduction of the Group's greenhouse gas emissions by 1 million tonnes per annum starting from 2025 by replacing old boilers with heat produced by combined heat and power plants;
- increase of the Group's coal sales to Asia by 16%;
- maintaining the position at the lower end of the global coal production cost curve;
- increase of the Group's port capacity by 55%;
- expanding operations of Vanino Port to accelerate growth of the Group's coal shipments to Asia; and
- increasing transportation of third-party bulk-cargo to optimise asset utilisation and reduce transportation costs.

The Group's strategy comprises:

Focus on efficient growth and strengthening of the Group's market positions

The Group aims to strengthen its presence in resilient, margin-attractive international coal markets. Specifically, the Group seeks to increase its presence in the Asia-Pacific region, which has been identified by the Group as a continuing growth market. The Group plans to accomplish this by developing its portfolio of key customers in Japan, South Korea, China, Taiwan and other key markets in the region through its global sales and distribution network and by expanding production and logistics infrastructure in the Buryatia and Khabarovsk Regions, which are oriented to Asian regions.

In Russia, the Group is focused on continuing to maximize synergies between its energy, coal and logistics businesses and the co-generation of heat and electricity and to increase capacities in order to remain a cost-efficient and reliable energy producer.

Specifically, the Group intends to focus on efficient growth and further strengthening of its market positions across its energy, coal and logistics businesses through several key strategic initiatives:

- In the Energy Division, the Group aims to increase its supplies of co-generated heat and electricity, to improve operational efficiency and continue to focus on achieving sustainability targets throughout the energy generation cycle. In particular, the Group is participating in the DPM-2 Programme (a Russian state programme aimed at the modernisation of generating facilities in the period from 2022 until 2031, see "*Regulation of Coal, Electricity and Transportation Industries–Regulation of Electricity Industry–Investment Projects in Electricity Market–DPM-2*" for details) which provides for the construction and upgrade of 25% of the installed capacity at the Group's power plants (including Krasnoyarsk power plants 1, 2, 3, Tom-Usinskaya GRES and Primorskaya GRES). These investments are aimed at enhancing operational and fuel efficiency and reducing pollutant and carbon emissions per unit of energy produced. Further, the Group systematically renovates heat networks to reduce heat loss and is currently constructing heating mains to connect Belovskaya GRES with Belovo and

Abakanskaya CHPP with Chernogorsk in order to replace old boiler houses with efficient co-generating CHPPs.

- In the Coal Division, the Group's strategy is focused on continuing to develop its existing coal reserves, while increasing the output of high-calorific coal at the assets located closer to Asia to targeted Asian export markets. In particular, the Group is planning to increase mining and washing in the Khabarovsk Region at Urgal from 7 million tonnes per annum to 14 million tonnes per annum by 2025. The Group also intends to continue various investment projects to improve coal mining and production safety and to expand the Group's capacities whilst investing in measures aimed at reducing its carbon footprint. For example, the Group plans to continue introduction of geo-referencing systems in its underground mines and development of its mining assets, such as the Pravoberezhny open-pit mine, the Yalevsky, Taldinskaya Zapadnaya-2, November 7th New and Severnaya underground mines;

- In the Logistics Division, the Group plans to continue developing its logistics assets by increasing their operational efficiency and diversify the cargo products transported and transshiped by the Group and expanding the customer base of the Group's Logistics Division beyond the Coal Division. The Group specifically plans to further invest in the development of technology to accelerate the turnaround of railcars together with Russian Railways, reduce downtime, use more high-capacity cars on routes to Far Eastern ports to maximise port loading, transport third-party cargo to reduce empty mileage, transport third-party cargo to reduce empty mileage. With respect to its port assets, to support growing coal exports to the Asia-Pacific region, the Group is expanding the annual transshipment capacity at Vanino Bulk Terminal from 24 to 40 million tonnes. In order to meet the growing demand for transshipment of mineral fertilisers, the Group plans to expand the annual transshipment capacity at Murmansk Bulk Terminal from 8.5 million tonnes to 13.5 million tonnes and the annual transshipment capacity at Tuapse Bulk Terminal from 2.3 million tonnes to 4 million tonnes by 2025. As part of its strategic goals, the Group plans to develop the transportation and transshipment of third-party cargo using its railcar fleet and stevedoring infrastructure, expanding its customer base and attracting additional types of cargo traffic, as well as developing its system of long-term contracts to enhance revenue and margins.

The Group is using its research and development expertise to drive innovation in areas such as mine planning and mine design, turbine generators production and new product research. Through its development of new products, solutions and technologies, the Group believes it is well positioned to benefit from future growth and gain further customers, which will help to strengthen its competitive position. The Group also intends to build on and strengthen its close and long-standing customer and supplier relationships through collaboration in the development of new products and solutions. The Group believes that the combination of its existing customer and supplier relationships and its research and development capabilities can make a significant contribution to its future growth.

The Group may also continue to seek growth through selective acquisitions and partnerships complementary to the Group's production process to ensure that the Group remains competitive, innovative and at the forefront of the industry. Over the next few years, the Group will continue to identify and may from time to time act upon market opportunities with the goal of selectively broadening the Group's existing operations and enhancing synergies with existing businesses.

Further improve operational efficiency and productivity through process optimisation and technological advancements

As part of its strategy, the Group intends to continue focusing on operational efficiency and productivity across its business lines, which it expects will allow the Group to remain competitive in any rapidly changing macroeconomic and operating environment. Specifically, the Group intends to continue improving its operational efficiency through upgrading its existing facilities and implementing new technologies. The Group believes that this will allow it to reduce costs of its power generation, mining

equipment and logistics which, in turn, will further contribute to its profitability, employee safety and reduce its environmental footprint.

More specifically, in the energy business the Group's plans to increase operational efficiency of the Energy Division by increasing the share of co-generated energy, improving the energy efficiency and utilisation rate of production machinery and equipment, substituting old standalone boilers with heat supplies from co-generating power plants, including the introduction of innovations and the best available technologies, reducing the Group's fuel consumption for production needs, lowering heat losses by repairing heat networks and restoring pipe insulation and other measures. These measures are aimed at increasing cost savings, energy efficiency and reducing the Group's carbon emissions and negative environmental impact.

The return on the Group's investments in this modernisation will be secured through state-supported programmes, including DPM-2 Programme and transition of cities to the heat pricing zones. DPM-2 guarantees return on investment through higher pricing for capacity and heat generated by newly built or upgraded power plants. The Group is participating in the DPM-2 Programme and is upgrading its power plants. For more information, see "*Business–Energy Division*" and "*Regulation of Coal, Electricity and Transportation Industries–Regulation of Electricity Industry–Investment Projects in Electricity Market–DPM-2*".

The Group also plans to implement a number of measures aimed at improving operational efficiency, including speeding up the work of sinking crews and relocation work, increasing the working face load during underground mining and raising the efficiency of mining and transportation activities during open-pit mining, optimising equipment during downtime and increasing the load and speed of dump trucks and excavators at open-pit mines. In addition, digitalisation of the Group's operations is one of its core initiatives to increase commercial and operational efficiency, as well as employee safety. In this respect, the Group has invested and will continue to invest in digitalisation and develop automation technologies with the goal of creating a uniform information landscape that ensures effective management of production processes, decision making based on real-time data, risk management and digitalised monitoring of compliance with industrial and environmental safety requirements. The Group will focus on being at the forefront of robotising production processes by continuing to test and develop unmanned locomotives and dump trucks and robotics-aided drilling rigs for open-pit mining.

In addition, the Group aims to continue centralizing certain functions among the Group companies, including the information and technology management systems for all of its business lines, and implementing standardized supply chain management guidelines and procedures in order to increase cost efficiency.

Continue to exercise prudent financial management with a focus on maintaining stable cash flow and a robust balance sheet

The Group will continue to prioritize financial management and focus on maintaining healthy cash flows and a robust balance sheet to allow the Group to continue financing its diversification, investments in production assets and HSE initiatives, as well strategic acquisitions and debt service.

For this purpose, the Group plans to actively engage in balance sheet and capital structure management by, among other things, prudent selection of funding sources between internally generated cash and external financing and maintaining target leverage levels. In 2018, 2019, 2020 and the twelve months ended 30 June 2021, the Group's Net debt to Covenant Adjusted EBITDA ratio amounted to 1.6x, 3.1x, 3.3x and 2.56x, respectively. The Group intends to continue to proactively manage the maturity profile of its debt portfolio, including by seeking opportunities to refinance its existing shorter-term indebtedness on commercially reasonable terms (including through the issuance of the Notes).

The Group plans to maintain relationships with international and Russian financial institutions to ensure the Group can promptly respond to changes in the operating environment and react to business opportunities and fund growth and expansion. In addition, the Group aims to maintain a conservative

dividend policy, and generally consider its future operations and earnings, development plans, and capital requirements, before making any dividend payments. The Group believes that its prudent financial management and robust performance will underpin its commitment to maintain public credit rating not lower than "BB-" category.

Achieving high safety standards and invest in human capital

While all of the Group's facilities comply with leading international standards in occupational and industrial safety, the Group's fundamental aims are to have zero injuries and accidents. Furthermore, the Group aims to position itself as an employer of choice in the Russian mining, energy and logistic sectors. To achieve this goal, the Group will continue to maintain international standards of risk management and maintain effective mechanisms in place to evaluate, anticipate and mitigate operational and health, safety and environmental risks. The Group will continue developing the awareness and motivation of personnel for safe occupational conduct and training personnel about health and safety at work and measures aimed at preventing occupational incidents.

The international indicator of health and safety, lost time injury frequency rate, is a key performance indicator for all members of senior management. While the Group has one of the lowest LTIFR's in Russian and global mining with 0.55, 0.50, 0.48 and 0.62 LTIFR in 2018, 2019, 2020 and the six months of 2021, respectively, the Group's aim is to continue to further improve its performance. In 2020, the Group spent U.S.$83.0 million on occupational health, safety and environment (8% of its total capital expenditures). The Group plans to also continue its investment and work in talent development and knowledge management through a number of its established and new initiatives. For further description, see "*Business—Health, safety, environment and community— Health, safety, environment, climate projects, local communities and corporate governance—Personnel development*".

Further the Group's commitment to sustainable development and upholding best in class environmental, social and corporate governance practices

The Group aims to contribute to global energy security through the sustainable supplies of electricity, capacity, heat and solid fuels for the benefit of all stakeholders. The Group plans to accomplish its sustainability goals, in part, through development and introduction of new technologies for coal-fired generation and coal mining that will meet the demand for affordable energy, while reducing environmental impact and optimising energy consumption.

The Group's strategy to reduce its carbon footprint and solid particles emissions also includes: (i) maximising the generation of heat and electricity in a combined mode to reduce emissions per unit of energy (including through replacement of oil boilers with new CHPP units that are equipped with electrostatic precipitators), (ii) increasing the share of washed coal to lower the ash content and increase the calorific value of its coal, which reduces emissions during transportation and burning, (iii) introducing technologies for low-emission production and use of coal, including mine methane utilisation; and (iv) delivering carbon offset projects.

Furthermore, the Group is committed to upholding responsible and sustainable business practices and has implemented comprehensive environmental, social and corporate governance policies and initiatives. The Group will continue to maintain strong environmental practices at its operations and promote green initiatives in the respective communities. The Group has also implemented environmentally-friendly technologies in its operations, including the instalment of electrostatic precipitators at its power plants which will complement the existing battery cyclone installations for collecting particulate emissions, the increase in the share of water used in the recycling cycle and improvement of water treatment facilities and the use of best available technologies for coal dust suppression in ports, power plants, washing plants and mines. The Group is involved in various corporate social responsibility programmes, with a focus on supporting long-term economic growth and improving the quality of life in the regions where it operates and will continue to act as a leader in social

responsibility through education, health, safety and community empowerment initiatives.

The Group's measures in relation to challenges resulting from COVID-19

The Group's management took affirmative action and established a special taskforce in response to the COVID-19 pandemic. Response centres were established in Moscow and regional centres that coordinated COVID-19 prevention measures at the Group's production assets and in population centres where the Group operates.

The Group has developed and implemented a wide range of measures that ensured operations remained uninterrupted and employees were able to conduct their day-to-day functions in the ordinary course (and remotely, if necessary) as the restrictions on movement were introduced across the country.

Since the Group is tasked with ensuring uninterrupted deliveries of heat and electricity to the population and medical institutions, during the course of 2020 and early 2021 it was vital that COVID-19 infection rates at the Group's power plants and mining assets, which supply fuel for energy generation, were kept at the minimum. The Group introduced strict safety and sanitary controls for employees and conducted regular COVID-19 testing programmes for personnel, as well as their close contacts, health professionals, staff of canteens and arriving shift workers. The Group exercised preventive epidemic measures, sanitisation and disinfection of premises at industrial facilities, administration and amenity buildings, health posts, canteens, passenger and industrial transport, adjacent territories and communities. As part of the prevention measures, the Group adjusted its shift protocols and canteen working hours, minimised face-to-face meetings and business trips to enforce social distancing and transferred employees from the high-risk category and most of office staff to remote working. At the height of the COVID-19 pandemic, 6,000 to 7,000 employees were working remotely. The Group has conducted approximately 100 thousand tests in 2020 and 27,500 in 2021. Overall, less than 10% of the Group's staff were registered as having COVID-19 as at 31 December 2020. In February 2021, the Group began vaccinating its employees against COVID-19. As at the end of August 2021, 52,568 employees were vaccinated, which comprised 70% of the total number of the Group's employees.

In addition to ensuring health and safety of the Group's operations during the pandemic, the Group also developed a system of supply chain risk management, which involved: (i) in-depth analysis of possible logistics interruptions; (ii) daily monitoring of key risk indicators across the supply chain; (iii) developed risk mitigation plans in collaboration with key suppliers; (iv) optimisation of repair programmes with an emphasis on ensuring the continuity of production processes and reliable supplies of the Group's products; (v) improving the convenience of online services for heat consumers and contactless service in customer service centres. As a result of the comprehensive measures taken, the Group was able to maintain stability along the entire supply chain.

In line with the Group's strategic goals of adhering to the best ethical and social policies in its business, the Group embraced a comprehensive programme aimed at supporting its communities and retail and small business customer base. The programme involved the following: (i) customised seasonal starts of heat supply based on individual requests from households and organisations; (ii) instalment payment schemes for customers in need; (iii) supplied or financed the purchase of personal protective equipment, sanitisers and medical equipment for municipal medical institutions, including lung ventilators, mobile X-ray machines and air disinfectants; (iv) disinfection of roads, entrances, bus stops in the cities in which the Group operates; (v) promoted local employment through social entrepreneurship project and procurement from local suppliers; and (vi) volunteer assistance. The Group used its dust suppression technology to disinfect municipal territories and public spaces.

History and Development

The following table represents the key milestones of the Group's history and development:

2001	Establishment of JSC "Siberian Coal Energy Company" on the basis of coal mining operations in Zabaikalye region, Irkutsk region and Republic of Buryatia.

2004 The Group commenced consolidation of coal mining and power generating assets and expanded its presence to Kemerovo Region (Kuzbass), one of the largest coal mining areas in Russia, and Khabarovsk region (Urgal).

2005 The Group established an export trading company SUEK AG.

The Group commenced construction of Vanino Bulk Terminal.

2006 The Group published its first sustainability report.

2009 Vanino Bulk Terminal was commissioned and began commercial operation.

2011 The Group started developing Apsatskoye coalfield with 70 million tonnes of coking coal reserves.

The Group sold its energy generating assets to Siberian Generating Company (SGC).

2012 The Group became a major shareholder of Murmansk Commercial Seaport.

2013 The Group commissioned Chernogorsky washing plant and a second block at Kirov mine washing plant.

2014 The Group launched Chegdomyn washing plant at Urgal (Khabarovsk region).

2015 The Group launched a washing plant at Taldinskaya-Zapadnaya 1 mine.

2016 The Group secured U.S.$1.3 billion pre-export financing from a syndicate of major international and Russian lenders comprised of, amongst others, Sberbank of Russia, Alfa-Bank, ING Bank, Unicredit Bank, Commerzbank, Rabobank, Societe Generale Group, Intesa Sanpaolo and Nordea.

2017 The Group launched Nekkovy open-pit mine in Primorye, Magistralny site at the Ruban mine in Kuzbass and Pravoberezhny open-pit mine in Khabarovsk.

The Group secured additional U.S.$1.2 billion pre-export financing from a syndicate of major Russian and international lenders, including Bank of China, China Construction Bank, Deutsche Bank, Alfa Bank, Commerzbank, Raiffeisenbank, Intesa Sanpaolo, Rosbank, Sberbank, Credit Suisse, UniCredit bank, Societe Generale, VTB Bank.

2018 The Group acquired Siberian Generating Company (SGC).

The Group secured U.S.$1 billion pre-export financing from a syndicate of major international lenders comprised of, amongst others, Bank of China, China Construction Bank, Citibank, Bank of America Merrill Lynch, UniCredit, Deutsche Bank, Commerzbank, Intesa Sanpaolo, Credit Suisse, Mizuho Bank and Raiffeisen Bank.

2019 The Group acquired Reftinskaya GRES, increased its transshipment capacity by purchasing 16,500 high-capacity railcars and launched a second washing plant at Tugnuisky Opencast Mine.

The Group secured additional U.S.$1 billion pre-export financing from a syndicate of major Russian and international lenders.

2020 The Group acquired Krasnoyarskaya GRES-2, Primorskaya GRES, Murmansk Bulk Terminal and Tuapse Bulk Terminal.

The Group secured additional U.S.$800 million pre-export financing from a syndicate of major Russian and international lenders.

2021 The Group diversified its railcar fleet by taking 4,400 hopper railcars under management.

Recent Developments

The Group partially repaid its 2018 PXF Facility (as defined in "*Operating and Financial Review – Borrowings – Loans and borrowings*") in the amount of U.S.$33.3 million in July 2021 and U.S.$33.3 million in August 2021 and its 2019 PXF Facility (as defined in "*Operating and Financial Review – Borrowings – Loans and borrowings*") in the amount of U.S.$23.8 million in July 2021 and U.S.$23.8 million in August 2021, in each case, according to the repayment schedule.

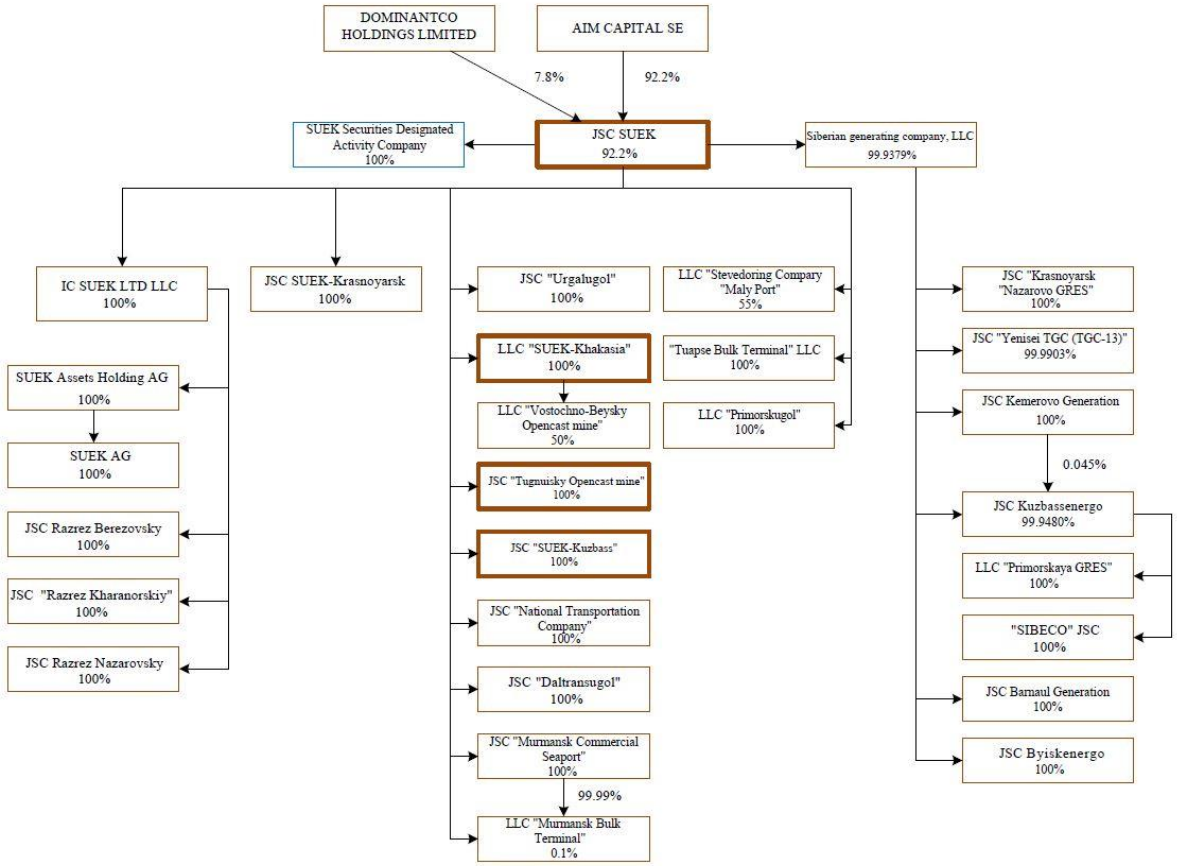
In August 2021, the Group fully repaid its RUB 10 billion 8.3% domestic bonds due in August 2021 issued in 2018

In August 2021, the Group raised short-term debt from PJSC "Sberbank" and JSC "Russian Agricultural Bank" and on the date of this Prospectus the outstanding principal amount was U.S.$240 million and U.S.$110 million, respectively.

In August 2021, the Group entered into sale and purchase agreement to purchase 5.1% stake in LLC "Stevedoring Company "Maly Port" and the sale was completed on 31 August 2021.

Group Structure

All production, sales, marketing and other operations of the Group are conducted through the Group's subsidiaries. The following chart sets forth the Group's organisational structure as at the date of this Prospectus:



The following map shows the location of the Group's principal assets:

Business Segments

The Group's operations are divided into three principal business divisions:

- Energy Division, which comprises electricity and heat generation and electricity, capacity and heat sales in the Urals, the Siberian Federal District and in the Far East Federal District of Russia;
- Coal Division, which comprises coal mining operations in the Siberian Federal District and in the Far East Federal District of Russia and domestic and international sales of coal; and
- Logistics Division, which comprises transportation operations and related services across Russia to the other divisions of the Group and to third parties.

Energy Division

The Energy Division is engaged in the generation and sale of electricity, the sale of electricity capacity, and the generation, transmission and sale of heat. The Energy Division operates 27 powers plants across eight regions of Russia with 17.6 GW of aggregate installed power capacity and 26,500 GCal/h of aggregate installed heat capacity. In 2020, the Group was the third largest heat producer and the sixth largest electricity producer in Russia by heat and electricity output, respectively, according to data from public reports of Russian energy companies. In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the Energy Division produced 36.5 TWh, 63.7 TWh, 51.5 TWh and 46.2 TWh of electricity and 28.4 million Gcal, 43.7 million Gcal, 43.5 million Gcal and 46.0 million Gcal of heat, respectively.

The following table sets forth the breakdown of the top ten electricity producers in Russia by the electricity output in the year ended 31 December 2020.

Electricity Producer	**Production, TWh**
Rosenergoatom	216

Rushydro	131
Gazprom Energoholding	127
Inter RAO	106
En+ Group	82
The Group	64
T Plus	51
Unipro	42

Source: Rosenergoatom, Rushydro, Gazprom Energoholding, Inter RAO, En+ Group, T Plus, Unipro

The following table sets forth the breakdown of the top ten heat producers in Russia by the heat output in the year ended 31 December 2020.

Heat Producer	**Production, MGcal**
Gazprom Energoholding	108.3
T Plus	91.8
The Group	43.7
Inter RAO	37.3
RusHydro	29.4
En+ Group	26.9
Kvadra	21.2
Tatenergo	10.5

Source: Gazprom Energoholding, T Plus, Inter RAO, Rushydro, En+ Group, Kvadra, Tatenergo

The Group's wholly-owned subsidiary, Siberian Generating Company or SGC, manages operations of the Energy Division and, in certain instances, serves as the sole executive body of the operating companies of the Energy Division.

Power Plants

The Group's power plants can be broadly divided into three categories: (1) combined heat and power plants (or CHPPs), which generate heat and power simultaneously; (2) condensed power plants (or CPPs), which generate only power; and (3) one gas turbine power plant (or GTPP), which is primarily intended to quickly generate gas-fired power in emergencies such as during peak loads.

Most of the Group's power plants operate as CHPPs and are predominantly located in the Kemerovo Region, the Krasnoyarsky Krai, the Novosibirsk Region, the Altaisky Krai, the Republic of Khakasia and the Republic of Tuva, which are parts of the second pricing zone of the Russian electricity market in the Siberian Federal District. The Group also operates one power plant in the Sverdlovsk Region, which is included in the first price zone of the Russian electricity market, and one power plant in the Far East Federal District of Russia, which is a non-pricing zone (see also "*Regulation of Coal, Electricity and Transportation Industries–Regulation of Electricity Industry*").

The table below sets forth the Group's power plants by region of operation, installed electricity and heat capacity and primary fuel as at 30 June 2021:

Power plant	Region of operation	Dates of installation (turbines / boilers)	Operation cycle	Primary fuel	Installed electricity capacity (MW)	Installed heat capacity (Gcal/h)
Siberian Federal District						
Belovskaya GRES	Kemerovo Region	1993-2015 / 1964-1968	Combined	Coal	1,260	229
Novokuznetskaya GTPP	Kemerovo Region	2014 / -	Condensed	Natural gas	297.44	—
Kemerovskaya GRES	Kemerovo Region	1973-2001 / 1935-2005	Combined	Coal	485	1,540
Kemerovskaya CHPP	Kemerovo Region	1994-2004 / 1939-1971	Combined	Coal	80	749
Kuznetskaya CHPP	Kemerovo Region	1954-2008 / 1947-2003	Combined	Coal	108	890
Novo-Kemerovskaya CHPP	Kemerovo Region	1966-2009 / 1964-1999	Combined	Coal	580	1,449
Tom-Usinskaya GRES	Kemerovo Region	1958-2014 / 1958-1965	Combined	Coal	1,345.4	194
Total for Kemerovo Region	—	—	—	—	**4,155.8**	**5,051**
Kanskaya CHPP	Krasnoyarsky Krai	1968-2009 / 1968-1991	Combined	Coal	24	325
Nazarovskaya GRES	Krasnoyarsky Krai	1961-1968 / 1961-1968	Combined	Coal	1,373	775
Krasnoyarskaya CHPP-1	Krasnoyarsky Krai	1952-2003 / 1952-1975	Combined	Coal	485.9	1,677
Krasnoyarskaya CHPP-2	Krasnoyarsky Krai	1979-1984 / 1975-2002	Combined	Coal	469.9	1,405
Krasnoyarskaya CHPP-3	Krasnoyarsky Krai	2012 / 1987-2012	Combined	Coal	208	582
Krasnoyarskaya GRES-2	Krasnoyarsky Krai	1961-1983 / 1961-1987	Combined	Coal	1,260	976
Minusinskaya CHPP	Krasnoyarsky Krai	1997 / 1978-1997	Combined	Coal	89.9	330.4
Total for Krasnoyarsky Krai	—	—	—	—	**3,910.7**	**6,070.4**
Novosibirskaya CHPP-2	Novosibirsk Region	1958-1987 / 1958-1970	Combined	Coal	345	920
Novosibirskaya CHPP-3	Novosibirsk Region	1942-2005 / 1971-1976	Combined	Coal	496.5	945
Novosibirskaya CHPP-4	Novosibirsk Region	1957-1970 / 1957-2014	Combined	Coal	384	1,120
Novosibirskaya CHPP-5	Novosibirsk Region	1985-2004 / 1977-2004	Combined	Coal	1,200	2,730
Barabinskaya CHPP	Novosibirsk Region	1954-2003 / 1954-2004	Combined	Coal	101	293
Total for Novosibirsk Region	—	—	—	—	**2,526.5**	**6,008**
Barnaulskaya CHPP-2	Altaisky Krai	1962-2014 / 1961-1973	Combined	Coal	300.5	1,087
Barnaulskaya CHPP-3	Altaisky Krai	1981-1986 / 1977-1994	Combined	Coal	445	1,450
Biyskaya CHPP-1	Altaisky Krai	1957-1990 / 1966-2002	Combined	Coal	529.7	1,089
Southern Thermal Power Plant	Altaisky Krai	2020 / 1964-2001	Condensed	Coal	6	327
Total for Altaisky Krai	—	—	—	—	**1,281.2**	**3,953**
Reftinskaya GRES	Sverdlovsk Region	1970-1980 / 1970-1980	Combined	Coal	3,800	350
Abakanskaya CHPP	Republic of Khakasia	1983-2014 / 1978-2014	Combined	Coal	406	700
Kyzylskaya CHPP	Republic of Tuva	1959-1969 / 1980-1989	Combined	Coal	17	310.2
Far East Federal District						
Primorskaya GRES	Primorsky Krai	1974-1990 / 1974-1990	Combined	Coal	1,467	237
Total for other regions[(1)]	—	—	—	—	**5,690**	**1,597.2**
Total for the Group	—	—	—	—	**17,564.2**	**26,500**

Fuel supply

All of the Group's power plants are coal fired except for Novokuznetskaya GTPP, which consumes gas power generation. Since the Group's power plants are mostly located in the regions with extreme climate conditions that have limited access to gas or other alternative fuel, coal-fired power generation is the only reliable and economically viable source of electricity and heat in these regions. Furthermore, heat and electricity production by the Group's CHPPs produce much lower carbon emissions compared to obsolete non-environmentally friendly boiler houses.

Most of the Group's power plants are located nearby the Group's coal assets and transportation infrastructure, which enables access to sustained coal supplies from the Coal Division. Furthermore, close proximity of the Group's power plants to each other enables the Group to benefit from the economies of scale when procuring coal. Coals supplies from the Coal Division satisfy all of the coal consumption requirements of the Group's power plants.

The table below sets forth the fuel mix of the Group's power plants for the periods indicated:

	Six months ended 30 June		Years ended 31 December		
	2021	2020	2020	2019	2018
Coal	98.7%	99.2%	99.1%	99.1%	98.6%
Natural gas.....	0.5%	0.5%	0.6%	0.6%	1.1%
Fuel oil.....	0.8%	0.3%	0.3%	0.3%	0.3%
Total.....	**100%**	**100%**	**100%**	**100%**	**100%**

The table below sets forth the Group's power plants electricity and capacity factor for the periods indicated:

	Six months ended 30 June		Years ended 31 December		
	2021	2020	2020	2019	2018
Electricity					
Specific reference fuel consumption (g/kWh).....	344.4	336.3	342.8	338.5	336.4
Capacity factor (%).....	48.1%	42.2%	41.3%	39.9%	48.2%
Heat					
Specific reference fuel consumption (kg/Gcal)	159.8	160.3	160.8	160.5	159.4
Capacity factor (%).....	22.8%	18.6%	20.9%	21.3%	24.1%

Co-generation of electricity and heat is more fuel efficient compared to separate production of electricity and heat and provides up to 50% of fuel savings on heat compared to standalone heat generation.

Power plants in the Kemerovo Region

The Group operates seven power plants in the Kemerovo Region, the largest being Belovskaya GRES, Kemerovskaya GRES, Novo-Kemerovskaya CHPP, Tom-Usinskaya GRES and Novokuznetskaya GTPP.

Belovskaya GRES is one of the largest coal-fired co-generation power plants of the Kuznetsk Basin area, with installed electricity capacity of 1,260 MW and installed heat capacity of 229 Gcal/h. The plant is equipped with six power generating units with capacity ranging from 200 and 230 MW, six direct-flow symmetrical double-furnace boilers with 640 and 670 tonnes per hour steam generation capacity, six turbine generators, a 500 kV power transforming substation and 110 and 220 kV outdoor switchgear. The primary fuel for Belovskaya GRES is hard coal supplied from Kemerovo mines. The plant was built to cover heat and electricity needs of the Kuznetsk Basin and the neighbouring areas. As of the date of this Prospectus, it accounts for about one third of all electricity generated in the Kemerovo Region. As of the date of this Prospectus, the Group is in the process of upgrading the

turbines and turbogenerators of Belovskaya GRES with a view to further increasing its heating capacity, and is constructing heating mains to connect Belovskaya GRES with the city of Belovo, which is expected to be completed by the end of 2021.

Kemerovskaya GRES is one of the first co-generation power plants built in the Kemerovo Region, with installed electricity capacity of 485 MW and installed heat capacity of 1,540 Gcal/h. The power plant is equipped with 13 steam boilers with the total steam generation capacity of 3,600 tonnes per hour and nine turbine units with capacity ranging from 10 to 110 MW. The primary fuel for Kemerovskaya GRES is grade D coal supplied by the Group from Kemerovo mines. As of the date of this Prospectus, Kemerovskaya GRES is the largest power plant in Kuzbass in terms of installed heat capacity, which supplies more than half of heat and hot water consumed in Kemerovo City.

Novo-Kemerovskaya CHPP is one of the largest co-generation power plants in Kemerovo City with installed electricity capacity of 580 MW and installed heat capacity of 1,449 Gcal/h. The power plant is equipped with nine boiler units with steam generation capacity of 420 tonnes per hour and eight turbine units. The primary fuel for Novo-Kemerovskaya CHPP is hard coal supplied from local mines. As of the date of this Prospectus, the power plant provides central heating and hot water to about one third of all consumers located in Kemerovo City, generates electricity and supplies steam to large industrial enterprises.

Tom-Usinskaya GRES is the largest thermal power plant in the Kemerovo Region with installed electricity capacity of 1,345.4 MW and installed heat capacity of 194 Gcal/h. The power plant is equipped with 14 steam boilers with steam generation capacity ranging from 220 to 640 tonnes per hour, nine steam turbines with installed electricity capacity of 100-200 MW and nine turbine generators with rated voltage of 10.5, 13.8, 15.75 kV. The primary fuel for Tom-Usinskaya GRES is grade D and G hard coal from the Kuznetsk Basin. Tom-Usinskaya GRES covers the Southern Kuzbass area with very high electricity consumption and its capacity enables the power plant to satisfy daily peak loads in this area.

Novokuznetskaya GTPP, commissioned in 2014, is the newest power plant in the Energy Division portfolio and the largest natural gas-fired power plant in the Siberian Federal District with installed electricity capacity of 297.44 MW. The power plant is equipped with two gas turbine units GTE-145 with an installed electrical capacity of 149 MW each and two turbine generators with 160 MW capacity. Novokuznetskaya GTPP is unique for the Siberian energy system, as it can quickly gain power in emergencies, which cannot be achieved at other generation facilities. Novokuznetskaya GTPP is primarily designed to cover peak loads in the power system of the Southern Kuzbass. Therefore, the efficiency of this power plant is measured not by its operating time, but instead by the ability to activate promptly and at full capacity when the Russian grid operator requests to do so. In 2020, there were 15 urgent activation requests.

Power plants in the Krasnoyarsky Krai

The Group operates seven power plants in the Krasnoyarsky Krai, the largest being Nazarovskaya GRES, Krasnoyarskaya CHPP-1, Krasnoyarskaya CHPP-2, Krasnoyarskaya CHPP-3 and Krasnoyarskaya GRES-2.

Nazarovskaya GRES is one of the largest thermal power plants in Siberia with installed electricity capacity of 1,373 MW and installed heat capacity of 775 Gcal/h. Nazarovskaya GRES mainly operates in a condensing mode producing electricity but can also switch to a combined generation mode producing both electricity and heat. The power plant is equipped with six power units with installed electricity capacity of 135 MW each and installed heat capacity of 145 Gcal/h each and one power unit with installed capacity of 489 MW. The primary fuel for Nazarovskaya GRES is coal from the Borodinsky and Nazarovsky strip mines. The power plant transmits electricity through high voltage power transmission lines to Krasnoyarsk and other cities in the Krasnoyarsky Krai, including Achinsk, Uzhur, Lesosibirsk and to neighbouring Russian regions, including the Kemerovo Region, Republic of Khakasia and Republic of Tuva.

Krasnoyarskaya CHPP-1 is one of the largest co-generation power plants in the Krasnoyarsky Krai with installed heat capacity of 1,677 Gcal/h and installed electricity capacity of 485.9 MW. The power plant is equipped with four boiler units with steam generation capacity of 230 tonnes per hour each, nine boiler units of 220 tonnes per hour, four boiler units of 270 tonnes per hour, four turbines with installed electricity capacity of 25 MW each, two 60 MW turbines, one 64.9 MW turbine, one 87 MW turbine and two 57 MW turbines. The primary fuel for Krasnoyarskaya CHPP-1 is coal from the Borodinsky strip mine. Krasnoyarskaya CHPP-1 provides central heating and hot water to more than 400 thousand residents of Krasnoyarsk and supplies energy to a number of large industrial enterprises such as JSC "Krasnoyarsk Synthetic Rubber Plant", JSC "Krasnoyarsk Nonferrous Metals Plant", and JSC "Krasmash".

Krasnoyarskaya CHPP-2 is a co-generation power plant with installed electricity capacity of 469,9 MW and installed heat capacity of 1,405 Gcal/h. The power plant is equipped with three boiler units with 380 tonnes per hour steam generation capacity each, three boiler units with 500 tonnes per hour steam generation capacity, two boiler units with 139.9 Gcal/h installed heat capacity each, three turbine units with 110 MW installed electricity capacity each and one turbine unit with 135 MW installed electricity capacity. The primary fuel for Krasnoyarskaya CHPP-2 is brown coal from the Borodinsky strip mine. Krasnoyarskaya CHPP-2 provides central heating and hot water to Sverdlovsky, Tsentralny, Zheleznodorozhny, and Oktyabrsky districts of Krasnoyarsk and supplies steam to large enterprises such as JSC Krascon, LLC Krasnoyarsk Cement, JSC FIRM Kultbytstroy, LLC Chemical and Metallurgical Plant, LLC Polipak and LLC Polipak 10.

Krasnoyarskaya CHPP-3 is a cogeneration power plant with installed electricity capacity of 208 MW and installed thermal capacity of 582 Gcal/h. The power plant is equipped with a heating power unit with turbine generator having an installed capacity of 208 MW and a thermal capacity of 140 Gcal/h, a boiler with a steam capacity of 670 t/h; four hot water boilers with installed thermal capacity of 100 Gcal/h each and three steam boilers with a steam capacity of 25 t/h each. The main fuel for the Krasnoyarsk CHPP-3 is brown coal from the Borodinsky open-pit mine. Krasnoyarsk CHPP-3 provides central heating and hot water supplies to the city of Sovetsky and a part of the Central District of Krasnoyarsk. The Group expects to increase its capacity to replace the retired capacities of Krasnoyarsk CHPP-1 and provide heat to new areas under construction in the city (see – "*DPM-2*").

Krasnoyarskaya GRES-2 is one of the largest co-generation power plants in the Krasnoyarsky Krai with installed electricity capacity of 1,260 MW and installed heat capacity of 976 Gcal/h. The power plant is equipped with three boilers, five turbines and four generators. The primary fuel for Krasnoyarskaya GRES-2 is brown coal from the Borodinsky strip mine. Krasnoyarskaya GRES-2 provides heat and electricity to the city of Zelenogorsk and operates within the unified energy system of Russia.

Power plants in the Novosibirsk Region

The Group operates five power plants in the Novosibirsk Region, the largest being Novosibirskaya CHPP-3, Novosibirskaya CHPP-4 and Novosibirskaya CHPP-5.

Novosibirskaya CHPP-3 is a co-generation power plant with installed electricity capacity of 496.5 MW and installed heat capacity of 945 Gcal/h. The power plant is equipped with nine boilers with a steam capacity of 320 t / h each and nine turbine units with capacity ranging from 4 to 110 MW. The primary fuel for Novosibirskaya CHPP-3 is brown coal from the Borodinsky strip mine. The power plant supplies heat to left-bank part of Novosibirsk city, the Leninsky district and part of the Kirovsky district of Novosibirsk.

Novosibirskaya CHPP-4 is a co-generation power plant with installed electricity capacity of 384 MW and installed heat capacity of 1,120 Gcal/h. The power plant is equipped with eight power boilers with steam capacity ranging from 170 to 420 t/h, a hot-water boiler unit with a heating capacity of 120 Gcal/h and six turbine units with capacity ranging from 22 to 110 MW. The primary fuel for Novosibirskaya CHPP-4 is hard Khakass coal from the Group's Chernogorsky washing plant. The power plant covers approximately 17% of the heat consumed in the city of Novosibirsk and supplies steam to, amongst

others, Novosibirsk Chemical Concentrates Plant.

Novosibirskaya CHPP-5 is the largest co-generation power plant in Siberia with installed electricity capacity of 1,200 MW and installed heat capacity of 2,730 Gcal/h. The power plant is equipped with six power boilers with a steam capacity of 670 t/h each, seven hot water boilers with a heating capacity of 180 Gcal/h each, two steam boilers of a boiler house with a steam capacity of 25 t/h and six turbine units of 200 MW. The primary fuel for Novosibirskaya CHPP-5 is brown coal from the Borodinsky strip mine though the power plant can also consume natural gas and fuel oil. Novosibirskaya CHPP-5 generates approximately 60% of electricity in the Novosibirsk Region and has a heat output, which covers approximately 35% of the heat consumed in Novosibirsk.

Power plants in the Altaisky Krai

The Group operates four power plants in the Altaisky Krai, the largest being Barnaulskaya CHPP-3 and Biyskaya CHPP-1.

Barnaulskaya CHPP-3 is the largest co-generation power plant in the Altaisky Krai with installed electricity capacity of 445 MW and installed heat capacity of 1,450 Gcal/h. The Power plant is equipped with five power boilers, seven hot water boilers, three turbine units and generators. The primary fuel for Barnaulskaya CHPP-3 is brown coal. Barnaulskaya CHPP-3 supplies heat energy and hot water to about one half of the residents of Barnaul and industrial steam to several major enterprises.

Biyskaya CHPP-1 is one of the largest co-generation power plants in the Siberian Federal District with installed electricity capacity of 529.7 MW and installed heat capacity of 1,085.5 Gcal/h. The power plant is equipped with eight boilers, three turbines and five generators. The primary fuel for Biyskaya CHPP-1 is hard coal. Biyskaya CHPP-1 covers approximately 17% and 16% of the region's electricity and heating needs, respectively.

Power plants in other Russian regions

The largest power plants operating in other Russian regions include Reftinskaya GRES, Abakanskaya CHPP and Primorskaya GRES.

Reftinskaya GRES is the largest coal-fired thermal power plant in Russia located in the Sverdlovsk Region with installed electricity capacity of 3,800 MW and installed heat capacity of 350 Gcal/h. The power plant is equipped with six power units with an installed electrical capacity of 300 MW and an installed thermal capacity of 25 Gcal/h each with once-through double-shell boilers with a steam capacity of 950 tons per hour, four power units with an installed electrical capacity of 500 MW and an installed thermal capacity of 50 Gcal/h with once-through boilers, steam capacity of 1650 tons per hour, turbine generators with rated voltage of 20 and 35 kV. The primary fuel for Reftinskaya GRES is coal from the Ekibastuz field located in Kazakhstan. Reftinskaya GRES generates approximately 40% of the electricity consumed in the Sverdlovsk Region.

Abakanskaya CHPP is a thermal power plant located in the Republic of Khakasia with installed electricity capacity of 406 MW and installed heat capacity of 700 Gcal/h. The power plant is equipped with six boilers, four steam turbines with a capacity ranging from 60MW to 136 MW, four turbine generators with a rated voltage of 6.3 and 10.5 kV and electrolysis plant for hydrogen production. The primary fuel for Abakanskaya CHPP is brown coal from the Irsha-Borodinsky strip mine. Abakanskaya CHPP provides heat to more than 95% of consumers in Abakan, the capital of the Republic of Khakasia, fully covers the electricity needs of the two largest cities in the republic – Abakan and Chernogorsk, and supplies industrial steam to a large number of enterprises in Abakan.

Primorskaya GRES is the largest thermal power plant in the Russian Far East located in the Primorsky Krai. The power plant has an installed electricity capacity of 1,467 MW and installed heat capacity of 237 Gcal/h. The power plant is equipped with nine power units: two double blocks with a capacity of 110 MW each, two double blocks with a capacity of 96 MW with two-shell boilers with a steam capacity of 220 tons per hour, four monoblocks with a capacity of 210 MW and one monoblock with a capacity

of 215 MW with boilers with a steam capacity of 670 tons per hour, by turbine generators with rated voltage of 10.5 and 15.75 kV. Primorskaya GRES uses a recirculated technical water supply system with a cooling reservoir (Luchegorskoye reservoir). The reservoir is fed by natural runoff from the Kontrovod River and the Bikin River. The primary fuel for Primorskaya GRES is coal from the Luchegorsk strip mine. Electricity from Primorskaya GRES is supplied to the grid via outdoor switchgears at 110, 220 and 500 kV, using four 110 kV lines, six 220 kV lines and three 500 kV lines. The power plant covers more than half of Primorsky Krai's electricity needs.

Production and distribution

Generally, the loading and overall dynamics of CHPPs are characterised by a close interrelation between electricity generation and heat production. CHPPs receive load priority for electricity generated as a by-product of heat production. The CPPs are less dependent on heat generation and receive load priority after CHPPs are loaded in accordance with their price bids submitted to the market. Accordingly, the CPPs' loads are primarily subject to the availability of other, cheaper and more efficient sources of energy (such as hydro generation during the spring thaw and thermal generation in combined mode in winter) and the transmission capabilities for such cheaper energy.

In summer, when lower demand for heat results in lower heat production and, therefore, lower electricity generation in combined generating mode, the Group's production is reduced due to the availability of other more cost efficient sources of electricity, primarily hydro power plants (or HPPs), which receive load priority from the System Operator. See "*Regulation of Coal, Electricity and Transportation Industries—Legal Structure of the Electricity Market—Wholesale Capacity Market*". Load factors are also subject to significant seasonal variations. Demand for electricity typically increases during the colder months of the winter period from October to March, while demand generally decreases in response to warmer temperatures from April to September. Also, the Group benefits from the limited ability of HPPs to generate electricity in winter due to frozen rivers which leads to increased load for CHPPs and CPPs and to increased prices for electricity in winter as compared to summer months. The Group typically reduces output over the summer months in response to reduced demand and lower prices and use that period to implement the majority of its repair and maintenance works.

In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the Energy Division produced 36.5 TWh, 63.7 TWh, 51.5 TWh and 46.2 TWh of electricity and 28.4 million Gcal, 43.7 million Gcal, 43.5 million Gcal and 46.0 million Gcal of heat, respectively.

Electricity generation and distribution

The table below sets forth the information on the electricity generation and utilisation rates per each of the Group's power plants for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018.

Power plant	Six months ended 30 June		Year ended 31 December					
	2021		2020		2019		2018	
	Generated (TGWh)	Utilisation (%)	Generated (TGWh)	Utilisation (%)	Generated (TGWh)	Utilisation (%)	Generated (TGWh)	Utilisation (%)
Siberian Federal District								
Belovskaya GRES	2,848.6	52.3%	4,778.5	43.2%	6,056.9	54.9%	6,497.7	58.9%
Novokuznetskaya GTPP	1.2	0.1%	2.7	0.1%	6.2	0.2%	3.5	0.1%
Kemerovskaya GRES	768.4	36.7%	1,438.2	33.8%	1,509.7	35.5%	1,684.4	39.6%
Kemerovskaya CHPP	124.2	53.5%	193.6	27.6%	164.2	23.4%	184.1	26.3%
Kuznetskaya CHPP	308.5	66.1%	538.5	56.8%	541.4	57.2%	573.4	60.6%
Novo-Kemerovskaya CHPP	880.4	35.1%	1,522.6	29.9%	1,637.7	32.2%	1,877.6	37.0%
Tom-Usinskaya GRES	2,737.6	47.1%	6,598.4	55.8%	6,695.9	56.8%	6,485.0	55.0%
Total for Kemerovo Region	7,668.9	42.7%	15,072.5	41.4%	16,612.0	45.6%	17,305.7	47.5%
Kanskaya CHPP	70.0	67.5%	130.7	62.0%	125.1	59.5%	120.2	57.2%
Nazarovskaya GRES	1,374.3	23.2%	2,560.2	21.6%	4,056.9	35.2%	4,053.1	35.4%
Krasnoyarskaya CHPP-1	866.8	41.3%	1,584.4	37.1%	1,817.9	42.7%	1,892.9	44.6%
Krasnoyarskaya CHPP-2	1,389.3	69.2%	2,593.6	63.5%	2,423.7	59.5%	2,381.9	58.5%
Krasnoyarskaya CHPP-3	395.6	44.0%	795.3	43.5%	851.3	46.7%	862.7	47.3%
Krasnoyarskaya GRES-2	1,093.0	19.4%	842.4	15.8%	-	-	-	-
Minusinskaya CHPP	258.3	70.3%	464.5	62.2%	437.2	58.7%	569.8	76.5%
Total for Krasnoyarsky Krai	5,447.3	32.2%	8,971.1	26.2%	9,712.1	42.8%	9,880.6	43.8%
Novosibirskaya CHPP-2	606.5	40.7%	990.6	32.7%	1,079.4	35.7%	1,133.8	37.5%
Novosibirskaya CHPP-3	1,222.1	57.0%	2,159.6	49.5%	2,848.0	65.5%	2,445.4	56.2%
Novosibirskaya CHPP-4	850.7	51.3%	1,285.3	38.1%	1,335.9	39.7%	1,305.6	38.8%
Novosibirskaya CHPP-5	2,993.1	57.7%	5,499.1	52.2%	5,700.5	54.2%	5,835.9	55.5%
Barabinskaya CHPP	93.6	22.3%	161.4	18.9%	187.3	22.0%	182.2	21.8%
Total for Novosibirsk Region	5,766.0	52.8%	10,096.0	45.7%	11,151.1	50.5%	10,905.9	49.4%
Barnaulskaya CHPP-2	593.1	45.7%	1,003.6	38.0%	1,171.5	45.8%	1,126.5	46.8%
Barnaulskaya CHPP-3	1,108.7	57.7%	2,010.8	51.4%	2,177.3	55.9%	2,635.7	67.6%
Biyskaya CHPP-1	869.0	38.7%	1,789.3	39.2%	1,949.6	43.7%	2,021.3	45.3%
Southern Thermal Power Plant	17.9	68.9%	20.7	39.4%	-	-	-	-
Total for Altaisky Krai	2,588.7	46.8%	4,824.4	43.2%	5,298.4	48.2%	5,783.5	53.7%
Reftinskaya GRES	11,028.6	56.1%	20,324.5	61.1%	6,136.3	60.7%	-	-

Abakanskaya CHPP	1,153.7	65.8%	1,953.9	54.8%	2,551.3	71.7%	2,304.4	64.8%
Kyzylskaya CHPP	14.4	29.5%	37.2	24.9%	36.4	24.4%	38.4	25.8%
Far East Federal District	2,811.4	44.4%	2,405.0	37.7%	-	-	-	-
Primorskaya GRES	2,811.4	44.4%	2,405.0	37.7%	-	-	-	-
Total for other regions	15,008.1	61.1%	24,720.6	29.7%	8,724.0	69.8%	2,342.8	63.2%
Total for the Group	**36,480.0**	**48.1%**	**63,684.6**	**41.3%**	**51,497.6**	**39.9%**	**46,218.5**	**48.2%**

In the first half of 2021 and in the year ended 31 December 2020, the Energy Division produced a total of 36.5 TWh and 63.7 TWh of electricity, respectively, which constituted 12.0% and 10.3% of the total electricity produced by thermal generation in the Russian Federation during these periods and 20.7% and 21.2% of the total electricity production in the Siberia, in each case according to the System Operator.

Electricity generated by the Group's power plants is supplied to the transmission and distribution systems owned by local grid companies (see – "*Electricity and Capacity Sales*").

Heat generation and distribution

The table below sets forth information on the heat generation and utilisation rates per each of the Group's power plants in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018.

Power plant	Six months ended 30 June		Year ended 31 December					
	2021		2020		2019		2018	
	Generated (thousand Gcal)	Utilisation (%)	Generated (thousand Gcal)	Utilisation (%)	Generated (thousand Gcal)	Utilisation (%)	Generated (thousand Gcal)	Utilisation (%)
Siberian Federal District								
Belovskaya GRES	116	11.7%	187	9.3%	200	10.0%	226	11.3%
Novokuznetskaya GTPP	-	-	-	-	-	-	-	-
Kemerovskaya GRES	1,532	23.0%	2,521	18.5%	2,587	19.2%	2,866	21.2%
Kemerovskaya CHPP	562	17.4%	875	13.3%	717	10.9%	772	11.8%
Kuznetskaya CHPP	1,216	31.6%	2,065	26.4%	2,102	27.0%	2,275	29.2%
Novo-Kemerovskaya CHPP	1,208	19.3%	1,955	15.4%	2,100	16.6%	2,400	18.9%
Tom-Usinskaya GRES	158	18.8%	248	14.5%	261	15.3%	281	16.6%
Total for Kemerovo Region	**4,792**	**22.0%**	**7,850**	**17.7%**	**7,967**	**18.0%**	**8,821**	**19.9%**
Kanskaya CHPP	329	23.4%	520	18.2%	557	19.6%	596	20.9%
Nazarovskaya GRES	333	13.0%	519	11.5%	570	8.8%	620	8.1%
Krasnoyarskaya CHPP-1	2,155	29.8%	3,508	23.8%	3,622	24.7%	4,023	27.4%
Krasnoyarskaya CHPP-2	2,251	37.1%	3,418	27.7%	3,858	31.4%	4,186	34.0%
Krasnoyarskaya CHPP-3	1,389	55.3%	1,934	37.8%	2,223	43.6%	2,038	40.0%
Krasnoyarskaya GRES-2	565	13.4%	634	7.4%	-	-	-	-
Minusinskaya CHPP	297	20.8%	490	16.9%	545	18.8%	564	19.5%
Total for Krasnoyarsky Krai	**7,319**	**33.5%**	**11,022**	**22.4%**	**11,375**	**24.7%**	**12,028**	**26.4%**
Novosibirskaya CHPP-2	1,293	32.5%	1,928	23.9%	2,069	25.7%	2,247	27.9%
Novosibirskaya CHPP-3	1,667	40.8%	2,737	33.0%	2,997	36.2%	2,939	35.5%
Novosibirskaya CHPP-4	1,521	31.4%	2,340	23.8%	2,299	23.4%	2,224	22.7%
Novosibirskaya CHPP-5	2,841	24.1%	4,464	18.6%	4,639	19.4%	4,969	20.8%
Barabinskaya CHPP	309	24.4%	472	18.4%	486	18.9%	553	21.6%
Total for Novosibirsk Region	**7,631**	**25.4%**	11,941	**22.6%**	**12,490**	**23.7%**	**12,932**	**24.5%**
Barnaulskaya CHPP-2	1,238	25.0%	1,992	19.8%	2,106	21.3%	2,255	23.7%
Barnaulskaya CHPP-3	1,776	28.4%	2,821	22.2%	2,788	22.0%	3,074	24.2%
Biyskaya CHPP-1	991	21.1%	1,715	18.0%	1,799	18.9%	1,784	18.7%
Southern Thermal Power Plant	422	29.7%	715	22.5%	743	24.1%	811	30.7%
Total for Altaisky Krai	**4,427**	**25.6%**	7,243	**20.9%**	**7,436**	**21.1%**	**7,924**	**24.9%**

Reftinskaya GRES	232	15.3%	416	13.5%	149	4.9%	-	-
Abakanskaya CHPP	985	32.6%	1 562.9	25.4%	1,658	27.0%	1,742	28.4%
Kyzylskaya CHPP	383	25.9%	644	21.5%	694	23.2%	669	22.4%
Far East Federal District	**168**	**19.7%**	**138**	**6.6%**	-	-	-	-
Primorskaya GRES	168	19.7%	138	6.6%	-	-	-	-
Total for other regions[(1)]	**1,768**	**25.1%**	**2,761**	**19.3%**	**2,501**	**20.5%**	**2,410**	**26.4%**
Total for the Group	**25,936**	**22.8%**	**40,817**	**20.9%**	**41,769**	**21.3%**	**44,115**	**24.1%**

In the first half of 2021 and in the year ended 31 December 2020, the Energy Division produced a total of 28.4 million Gcal and 43.7 million Gcal of heat, respectively.

Heat generated by the Group's power plants is distributed through heat pipeline networks to retail consumers in the form of hot water and to industrial consumers in the form of steam or hot water. The Group owns heat pipeline networks in the regions where it operates. The Group's heat pipeline network is comprised of approximately 11 thousand kilometres of single pipelines, of which approximately 2.8 thousand kilometres are trunk pipelines, and 107 boost pumping stations. Pumping stations are used to process and further distribute heat through smaller local pipeline networks to consumers. In certain areas, the Group owns the complete heat pipeline networks which allows it to transport heat directly to consumers. Heat loss in the course of this transportation process increases with the distance between the power plant and the consumer, creating a technical constraint on the distance between the Group's heat generating assets and consumers.

As part of its heat pipeline networks, the Group also owns electric boiler houses, which it operates in peak periods when the supply of heat from its other heat generating assets is insufficient to meet the required demand for heat.

The table below sets forth information on the distribution of heat by the Group for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018.

	Six months ended 30 June	Year ended 31 December		
	2021	2020	2019	2018
Heat distribution network length, km	11,168	11,053	10,109	9,544
Heat distributed, million Gcal	24.3	35.4	35.3	37.2
Heat losses,%	16.4	21.5	21.2	22.4

The Group conducts regular maintenance and repairs of its heat distribution network (both owned and leased) in order to ensure the effective utilisation of the network and a stable supply of heat to its customers. The repair and maintenance provisions under the lease agreements with municipalities and third parties vary, with the municipality or third party remaining responsible for capital repairs at its own expense under certain agreements and the Group assuming a duty to maintain the network and carry out capital repairs under certain others.

Electricity, electricity capacity and heat sales

In the six months ended 30 June 2021, the Group's revenues from sales of electricity, electricity capacity and heat amounted to U.S.$1,377 million, which represents 32.8% of the Group's revenue in the same period. In the years ended 31 December 2020, 2019 and 2018, the Group's revenues from sales of electricity, capacity and heat amounted to U.S.$2,292 million, U.S.$2,132 million and U.S.$2,042 million, which accounted for 34.3%, 27.9% and 24.6% of the Group's revenue in the respective periods.

The following table shows a breakdown of the Group's revenues from sale of electricity, capacity and heat in the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018.

	Six months ended 30 June	Year ended 31 December		
	2021	2020	2019	2018
Revenue		*(in U.S.$ million)*		
Electric capacity	457	832	732	720
Electricity	469	813	693	588
Heat	451	647	707	734
Total	**1,377**	**2,292**	**2,132**	**2,042**

Electricity and capacity sales

In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the

overall volume of electricity sold by the Group was 38.6 TWh, 68.2 TWh, 55.2 TWh and 50.0 TWh. The Group's sales of capacity in the same periods amounted to 15.6 GW, 14.7 GW, 10.0 GW and 9.2 GW, respectively

The Group sells capacity and electricity in the Russian wholesale market to four main types of customers: (1) guaranteeing suppliers (see "*Regulation of Coal, Electricity and Transportation Industries–Legal Structure of the Electricity Market–Retail Electricity Market*"); (2) independent electricity suppliers, which resell electricity to customers; (3) major industrial companies-wholesale market participants, which purchase electricity for their production needs; and (4) the state-owned Federal Grid Company of Unified Energy System. The Group also sells a marginal amount of electricity to retail customers.

The following table illustrates the Group's electricity and capacity sales volumes by category in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018.

	Six months ended 30 June	**Year ended 31 December**		
Type of agreement	**2021**	**2020**	**2019**	**2018**
	(*Percentage of volume of supplied electricity*)			
Regulated Contracts	19.7%	19.2%	18.4%	18.2%
One-day-ahead market	69.8%	71.5%	72.5%	72.8%
Balancing Market	3.9%	3.3%	9.1%	9.0%
Non-pricing zones	6.5%	5.8%	-	-
Retail	0.1%	0.1%	-	-
Total	**100%**	**100%**	**100%**	**100%**
	(*Percentage of volume of supplied capacity*)			
Regulated Contracts	22.0%	21.6%	18.9%	18.4%
Free capacity contracts	15.7%	4.5%	-	-
Mandatory capacity supply contracts (DPMs)	12.0%	12.1%	20.4%	21.2%
Competitive capacity auction (KOM)	39.9%	50.7%	57.1%	56.8%
Non-pricing zones	8.8%	8.7%	-	-
Total	**100%**	**100%**	**100%**	**100%**

Electricity and capacity generated by the Group is sold at unregulated prices, except for those sold in the non-pricing zones of the Russian Far East, where prices for electricity and electric capacity are subject to regulated tariffs (see "*link to description of pricing zones*"). In the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, share of electricity sold by the Group at regulated prices was 19.7%, 19.2%, 18.4% and 18.2%, respectively. Share of capacity sold at regulated prices in the same periods amounted to 22.0%, 21.6%, 18.9% and 18.4%, respectively.

The table below sets forth the Group's largest electricity customers for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018:

	Six months ended 30 June	**Year ended 31 December**		
	2021	**2020**	**2019**	**2018**
		(*% of electricity sales*)		
Customer				
JSC "CFR"	73.4%	75.6%	81.6%	81.8%
JSC "Far-Eastern Energy Company"	6.6%	3.4%	-	-
JSC "Novosibirsk Power Sales Company"	2.9%	4.0%	3.6%	4.5%
PAO "Kuzbass Power Sales Company".	2.8%	4.1%	4.6%	4.0%
JSC "Energosbyt Plius"	2.4%	1.8%	-	-
JSC "Chitaenergosbyt"	1.8%	1.4%	2.0%	2.5%
PJSC "Krasnoyarskenergosbyt"	1.5%	1.9%	1.4%	1.1%

JSC "EEnS".....	1.5%	0.7%	-	-
LLC "RUSENERGOSBYT".....	1.1%	0.9%	1.0%	1.3%
JSC "Altai Power Sales Company".....	0.9%	1.3%	1.4%	1.3%
Other.....	5.1%	6.5%	4.4%	3.6%
Total.....	**100%**	**100%**	**100%**	**100%**

For more information on the electricity and capacity sales, see "*Regulation of Coal, Electricity and Transportation Industries— Legal Structure of the Electricity Market*".

Heat sales

The Group sells all of its heat to private households and industrial consumers at tariff prices set by the local authorities in each region of the Group's operations. In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the overall volume of heat power sold by the Group was 24.3 million Gcal, 35.4 million Gcal, 35.3 million GCal and 37.2 million GCal, respectively.

The following table sets the breakdown of heat sales by client type in the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018.

	Six months ended 30 June	**Years ended 31 December**		
	2021	**2020**	**2019**	**2018**
	(*in U.S.$ millions*)			
Sales to:				
Individual households.....	343	504	542	550
Industrial consumers.....	156	262	294	297
Total heat sales.....	**499**	**767**	**836**	**847**

The following sets the breakdown of the regulated prices set by the local authorities in the regions of the Group's operations in the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018.

	Six months ended 30 June	**Years ended 31 December**		
	2021	**2020**	**2019**	**2018**
	(*in RUB per GCal*)			
Kemerovo Region.....	1,425.75	1,370.91	1,224.03	1,172.44
Krasnoyarsky Krai.....	1,472.08	1,407.34	1,339.36	1,262.58
Novosibirsk Region.....	1,223.18	1,153.95	1,075.07	1,043.86
Altaisky Krai	1,659.60	1,581.65	1,548.58	1,433.08
Sverdlovsk Region	927.14	878.78	-	-
Republic of Khakasia	1,284.50	1,312.91	1,290.59	1,228.67
Republic of Tuva.....	1,493.83	1,436.65	1,397.52	1,343.77
Primorsky Krai	1,598.81	1,562.34	-	-
Average.....	**1,374.28**	**1,309.34**	**1,243.46**	**1,188.16**

The table below sets forth the Group's largest heat industrial customers for the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018:

	Six months ended 30 June	**Year ended 31 December**		
	2021	**2020**	**2019**	**2018**
	(*% of heat sales*)			
Customer				
LLC MC "Housing Systems of Krasnoyarsk".....	31%	25%	1%	1%
CJSC "MC" SPAS-Dom".....	7%	8%	12%	12%
JSC "MKS-Novosibirsk".....	8%	8%	10%	11%
KAO "Azot".....	12%	12%	17%	15%

LLC “Customer Service for Housing and Communal Services of the Leninsky District”	6%	7%	9%	10%
LLC “MC” Dzerzhinets”	4%	5%	8%	8%
LLC “UKEZH” Siberian Initiative”	5%	5%	7%	7%
LLC “DEZ-2 of Leninsky District”	3%	3%	5%	5%
MUP “Directorate of a single customer No. 1” of Leninsky district of Barnaul	3%	3%	5%	5%
LLC “UKZHKh of Oktyabrsky District”	4%	5%	6%	7%
LLC “KrasCom”	4%	4%	5%	6%
LLC “UZhK of Kirovsky District”	4%	5%	3%	0%
LLC “Management Company “Oktyabrskaya”	3%	3%	4%	4%
Municipal Unitary Enterprise of Electrical Networks	4%	4%	6%	6%
LLC “Holmservice Management Company”	2%	2%	3%	4%
Total	**100%**	**100%**	**100%**	**100%**

Competition

Competition among electricity generating companies is currently limited for a number of reasons, including limitations imposed by the current regulations on sales of electricity in the unregulated market, undertakings of the generating companies to sell its electricity in line with its dispatch priority and infrastructure limitations, which restrict the ability of the generating companies to transmit electricity between the Siberian IES and other regions of Russia. On the basis of information made publicly available by the power generating companies in the region, the Group believes that its main competitors in the electricity market are EuroSibEnergo, Irkutskenergo and RusHydro.

The distinctive feature of the heat market is the limited competition between heat generation companies due to technical constraints related to the transportation and distribution of heat, as well as tariff regulation. Due to these reasons heat generation companies with operations outside of the Group’s customers locations cannot effectively compete with the Group. As a result, the main competitors of the Group are municipal and private boiler house operators, which are generally less efficient than the Group’s power plants due to smaller size of operations and their inability to benefit from economies of scale. These municipalities often operate their own less efficient heating facilities as the Group either does not have an adequate generating capacity in that area to supply heat or there is no sufficiently developed heat pipeline network connected to Group’s distribution system.

Investment Projects

To ensure stable heat supplies, decrease heat losses and improve environmental situation in the cities, the Group has launched the following key projects: (i) replacement of old standalone boiler houses and pipes in the cities of Krasnoyarsk, Kemerovo, Novosibirsk, Barnaul and Abakan; (ii) attracting new consumers, including major projects in Novosibirsk and Kemerovo; (iii) Construction of heat networks in Belovo, Kemerovo Region, to replace six boiler houses with heat supply from the Belovskaya GRES (to be completed in 2021); (iv) upgrade of the heating equipment at Belovskaya GRES and Abakanskaya CHPP to replace the old boiler houses in Belovo and Chernogorsk; and (v) replacing the equipment of a boiler plant and generator at Nazarovskaya GRES Reconstruction of the Krasnoyarskaya GRES-2 ash dump.

The following table sets forth certain of the Energy Division’s key development projects:

Project	Estimated capital expenditures (in U.S.$ million)	Capital expenditures incurred as at 30 June 2021 (in U.S.$ million)	Expected year of commissioning
Krasnoyarsk heating upgrade	630	74	2025
Tom-Usinskaya GRES upgrade	235	9	2026

Primorskaya GRES upgrade.....	270	0.1	2025
Upgrade of other power plants	270	10.3	2027

DPM-2 Programme

In 2019, the Russian government adopted a new state support programme (DPM-2 or COMMod), which is designed to enable power producers to upgrade 40 GW of capacity by 2031. COMMod projects are selected on a competitive (auction) basis and one of the key criteria is the lowest cost of future electricity supplies. The following power plants were selected for COMMod: Abakanskaya CHPP (2026); Belovskaya GRES (2027); Biyskaya CHPP-1 (2025); Krasnoyarskaya CHPP-1 (2024); Krasnoyarskaya CHPP-2 (2023); Krasnoyarskaya CHPP-3 (2024); Novo-Kemerovskaya CHPP (2026); Novosibirskaya CHPP-3 (2026-2027); Reftinskaya GRES (2026-2027); and Tom-Usinskaya GRES (2023-2026).

In 2020, the Group began the first phase of its projects under the COMMod programme. In Krasnoyarsk, with a view to improving the reliability of its heat and electricity supplies in a way that takes into consideration the city's growth potential and improving the environmental situation, the Group has begun three key projects: (i) the decommissioning of 220 MW of low-efficiency equipment at Krasnoyarskaya CHPP-1: six turbine generators and three boiler units commissioned in the 1950s; (ii) replacing these by commissioning two new, more efficient boilers and two connected turbine generators with a total capacity of 70 MW; and (iii) additionally, to replace the equipment decommissioned at CHPP-1, building a new Power Unit No. 2 at Krasnoyarskaya CHPP-3 with a capacity of 185 MW.

The project also includes the installation of modern gas cleaning equipment at Krasnoyarskaya CHPP-1 with a cleaning efficiency level of at least 99%, 14 modern electrostatic precipitators, and replacing low stacks with a new model 275 m high, in order to better disperse emissions. In 2020, the new stack was put into operation, connected to gas ducts; the Group began the installation of four electrostatic precipitators, with one also being tested.

At Tom-Usinskaya GRES, the Group started a project for the modernisation of two boilers at Power Unit 7, the replacement of the generator, the expansion of ash dump capacity and the construction of a cooling tower with a circulation pumping station to reduce water consumption and partially switch to recirculation water supply.

In 2020, the Group began design and ground preparation for the construction and installation work at Krasnoyarskaya CHPP-3 and Tom-Usinskaya GRES.

The table below sets forth information on the capital expenditures required for the implementation of the Group's projects under DPM-2 programme:

	2021	***2022***	***2023***	***2024***	***2025***	***2026***	***Total***
			(in million RUB, excluding VAT)				
Abakanskaya CHPP.....		10	145	397	537	652	1,740
Belovskaya GRES			293	1,046	1,725	2,318	5,382
Biyskenergo.....	4	228		127	570		928
Krasnoyarskaya CHPP-1	1,637	4,990	3,733	1,853			12,212
Krasnoyarskaya CHPP-2	211	459					669
Krasnoyarskaya CHPP-3	1,147	11,401	7,411	6,762			26,720
Novo-Kemerovskaya CHPP.....		91	283	378	509		1,260
Novosibirskaya CHPP-3.....		173	1,303	3,213	3,875	3,088	11,652
Reftinskaya GRES.....		270	1,137	2,033	2,683	1,563	7,685
Tom-Usinskaya GRES	2,163	2,445	3,927	4,117	2,648	1,141	16,441
**Total.....	**5,161**	**20,066**	**18,231**	**19,923**	**12,547**	**8,761**	**84,690**

For more information on the DPM-2 programme, see *"Regulation of Coal, Electricity and Transportation Industries–Regulation of Electricity Industry–Investment Projects in Electricity Market–DPM-2"*.

Coal Division

The Group mines coal in seven regions and territories of Siberia and the Russian Far East: Kemerovo, Krasnoyarsk, Khakasia, Buryatia, Zabaikalie, Primorsky and Khabarovsk.

The tables below presents information regarding the Group's resources and reserves by region of operation, coal type and mining method as at 1 January 2019, as audited by SRK:

Summary of Resources and Reserves as at 1 January 2019, Grouped by Coal Type and Mine Type

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019			
SUEK	**Measured**	**Indicated**	**Measured & Indicated**	**Proved**	**Probable**	**Proved & Probable**	**Marketable coal [1]**
Hard Coal Underground	1,529.0	1,577.2	3,106.2	704.3	1,282.2	1,986.4	1700.7
Hard Coal Open Pit	608.1	654.2	1,262.3	497.0	661.2	1,158.2	938.7
Brown Coal Open Pit	3,455.7	2,197.3	5,653.0	642.4	3,937.3	4,579.7	4579.7
Total	**5,592.8**	**4,428.7**	**10,021.5**	**1,843.6**	**5,880.7**	**7,724.3**	**7,219.1**

(1) Marketable coal is coal remaining after washing

Coal Resource and Coal Reserve Statement, as at 1 January 2019. Coal Assets Grouped by Region

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019			
SUEK Assets	**Measured**	**Indicated**	**Measured & Indicated**	**Proved**	**Probable**	**Proved & Probable**	**Marketable coal [1]**
Kemerovo Region	1310.9	1366.8	2677.6	758.5	1398.1	2156.5	1905.4
Krasnoyarsky Krai	3162.3	1827.2	4989.5	502.0	3496.4	3998.4	3998.4
Zabaikalie Krai	244.6	344.5	589.2	134.3	411.2	545.5	509.7
Republic of Buryatia	55.4	275.7	331.1	55.7	275.4	331.1	246.1
Republic of Khakasia	372.4	91.8	464.2	264.2	91.6	355.8	285.7
Primorsky Krai	65.6	56.6	122.2	25.7	83.2	108.9	108.2
Khabarovsk Territory	381.6	466.1	847.7	103.2	124.8	228.0	165.7
Total All Regions	**5592.8**	**4428.7**	**10021.5**	**1843.6**	**5880.7**	**7724.3**	**7219.1**

Kemerovo Region. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019				
	Measured	**Indicated**	**Measured & Indicated**	**Proved**	**Probable**	**Proved & Probable**	**SUEK LoMP**	**20–year Mine Plan 01/2019 – 31/12/2038 (Mt)**
Kirov Mine	274.3	480.6	754.8	99.9	494.8	594.7	594.7	99.9
Komsomolets Mine	93.0	38.6	131.6	55.5	72.3	127.7	181.5	55.5
7th November – Novaya Mine	167.4	113.1	280.5	68.9	180.4	249.4	249.4	68.9
Taldinskaya–Zapadnaya 1 Mine	69.6	42.2	111.8	67.0	79.9	147.0	147.0	67.0
Taldinskaya–Zapadnaya 2 Mine	83.6	159.3	242.9	53.3	103.5	156.8	156.8	93.3
Zarechny Severny Open Pit	32.3	25.9	58.1	25.1	20.5	45.7	45.7	40.0
Zarechny Open Pit	66.0	14.2	80.2	68.8	15.1	83.9	83.9	80.0
Polysaevskaya Mine	32.8	4.7	37.5	27.9	0.0	27.9	27.9	27.9
Ruban Mine	129.8	63.9	193.7	72.4	80.0	152.4	152.4	72.4
Yalevsky Mine	345.6	314.5	660.1	203.3	238.8	442.1	442.1	203.3
Kamyshansky Open Pit	8.7	24.2	32.9	8.1	22.4	30.4	30.4	40.8
Kamyshansky Severny Open Pit	7.8	85.7	93.5	8.2	90.4	98.6	98.6	55.5
TOTAL	**1310.9**	**1366.8**	**2677.6**	**758.5**	**1398.1**	**2156.5**	**2220.7**	**904.6**

Krasnoyarsky Krai. Coal Resource and Coal Reserve Statement as at January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019				20–year Mine Plan 01/2019 – 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable	SUEK LoMP	
Nazarovsky Open Pit	192.9	6.8	199.7	69.6	0.0	69.6	266.2	69.6
Berezovsky–1 Open Pit	2592.0	1037.1	3629.1	90.3	3284.2	3374.5	3607.0	90.3
Borodinsky Open Pit	349.0	749.5	1098.5	342.1	208.4	550.5	1026.5	550.5
Sereulsky Open Pit	1.8	1.8	3.5	0.0	1.0	1.0	0.0	1.0
Kansky Open Pit	26.6	32.0	58.7	0.0	2.8	2.8	0.0	2.8
TOTAL	**3162.3**	**1827.2**	**4989.5**	**502.0**	**3496.4**	**3998.4**	**4899.7**	**714.2**

Zabaikalie Territory. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019				20–year Mine Plan 01/2019 – 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable	SUEK LoMP	
Kharanorsky Open Pit	129.6	217.3	346.9	88.6	230.5	319.2	319.2	88.6
Vostochny Open Pit	94.6	83.9	178.4	26.0	129.7	155.7	155.7	26.00
Apsat Open Pit	20.4	43.4	63.8	19.7	51.0	70.6	80.8	60.1
TOTAL	**244.6**	**344.5**	**589.2**	**134.3**	**411.2**	**545.5**	**557.7**	**174.7**

Republic of Buryatia. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019				20–year Mine Plan 01/2019 – 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable	SUEK LoMP	
Tugnuisky Open Pit	11.3	43.9	55.3	12.7	49.4	62.1	62.1	43.8
Nikolsky Open Pit	44.1	231.8	275.8	43.0	226.0	269.0	269.0	256.5
TOTAL	**55.4**	**275.7**	**331.1**	**55.7**	**275.4**	**331.1**	**331.1**	**300.3**

Republic of Khakasia. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019				20–year Mine Plan 01/2019 – 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable	SUEK LoMP	
Chernogorsky Open Pit	117.1	33.6	150.7	100.3	49.9	150.2	150.2	150.2
Abakansky Open Pit	33.7	5.5	39.2	34.7	5.4	40.1	40.1	29.5
Vostochno–Beisky Open Pit	94.4	34.0	128.3	94.9	31.6	126.5	516.5	97.5
Izykhsky Open Pit	127.2	18.8	145.9	34.3	4.7	39.0	115.1	30.0
TOTAL	**372.4**	**91.8**	**464.2**	**264.2**	**91.6**	**355.8**	**821.9**	**307.2**

Primorsky Krai Territory. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019				20–year Mine Plan 01/2019 – 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable	SUEK LoMP	
Pavlovsky–2 Open Pit	64.9	50.0	114.9	25.1	79.3	104.4	273.6	67.0
Vostochny (Pavlovsky–1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severnaya Depressia Open Pit	0.6	1.1	1.8	0.5	1.0	1.5	1.5	1.5
Nekkovy Open Pit	0.1	2.6	2.7	0.1	2.9	3.0	3.6	3.6
Rakovsky Open Pit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Osinovsky Deposit	0.0	2.9	2.9	0.0	0.0	0.0	0.0	0.0
Vostok–2 Mine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	**65.6**	**56.6**	**122.2**	**25.7**	**83.2**	**108.9**	**278.7**	**72.1**

Khabarovsk Territory. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019				
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable	SUEK LoMP	20–year Mine Plan 01/2019 – 31/12/2038 (Mt)
Severnaya Mine (UG: Severny Urgal, Severo Zapadny Urgal, Urgal)	332.9	360.4	93.3	55.97	32.51	88.5	340.79	81.42
Severny Urgal licence (XAB 12579)	111.1	126.1	237.2					
Severo Zapadny Urgal licence (XAB 02645)	06.2	69.2	175.4					
Urgal licence (XAB 12578), Underground, +200m	54.5	37.0	91.5					
Urgal licence (XAB 12578), Underground, +200m to 0m	61.1	128.1	189.2					
Bureinsky Open Pit	6.8	22.9	29.7	5.2	17.5	22.6	22.6	22.6
Pravoberezhny Open Pit	38.2	67.8	106.0	41.9	74.4	116.3	180.4	106.5
Marekansky Open Pit	3.7	15.0	18.7	0.1	0.4	0.5	0.5	0.5
TOTAL	**381.6**	**466.1**	**847.7**	**103.2**	**124.8**	**228.0**	**544.4**	**211.1**

(1) The reporting of the Group's coal resources and reserves as at 1 January 2019 is presented using the JORC Code.

The table below presents the Company's internal estimates regarding the Group's reserves by region of operation, coal type and mining method as at dates indicated:

Regions/Assets	As at 30 June	As at 31 December	
	2021	2020	2019
	million tonnes		
Kemerovo Region (Kuzbass) — hard coal	**2,078**	**2,093**	**2,125**
Zarechny open–pit mine	69	71	76
Zarechny Severny open–pit mine	24	25	27
Kamyshansky open–pit mine	127	127	127
Komsomolets underground mine	121	122	125
Polysaevskaya underground mine	25	25	26
November 7th New underground mine	249	249	249
Taldinskaya–Zapadnaya 1 underground mine	140	142	145
Taldinskaya–Zapadnaya 2 underground mine	157	157	157
Ruban underground mine	137	140	144
Yalevsky underground mine	422	428	437
Kirov underground mine	584	587	592
Krasnoyarsk region — brown coal	**3,732**	**3,942**	**3,967**
Berezovsky open–pit mine	3,172	3,366	3,369
Borodinsky open–pit mine	499	509	528
Nazarovsky open–pit mine	67	68	70
Zabaikalie	**530**	**533**	**539**
Apsatsky open–pit mine[3] — coking coal	70	70	70
Vostochny open–pit mine — brown coal	152	153	154
Kharanorsky open–pit mine — brown coal	308	311	315
Republic of Buryatia — hard coal	**296**	**302**	**317**
Nikolsky open–pit mine	248	252	262
Tugnuisky open–pit mine	48	50	55

Regions/Assets	As at 30 June	As at 31 December	
	2021	2020	2019
	million tonnes		
Republic of Khakasia — hard coal	**322**	**329**	**342**
Abakansky open–pit mine	37	38	39
Vostochno–Beisky open–pit mine	118	120	123
Izykhsky open–pit mine	36	37	38
Chernogorsky open–pit mine	130	134	142
Primorsky Krai	**103**	**105**	**108**
Nekkovy open–pit mine — hard coal[4]	2	2	2
Pavlovsky and Severnaya Depressia open–pit mines — brown coal[2]	101	103	106
Khabarovsk region — hard coal	**209**	**215**	**222**
Bureinsky open–pit mine	19	20	22
Pravoberezhny open–pit mine	109	111	114
Severnaya underground mine	82	84	86
Total	**7,471**	**7,519**	**7,62**
Hard coal	**2,918**	**2,937**	**3,005**
Brown coal	**4,482**	**4,511**	**4,545**
Coking coal	**70**	**70**	**70**

(1) The estimates of the Group's 'Reserves' as at 30 June 2021 and 31 December 2020 and 31 December 2019 presented in this Prospectus were prepared by the Company's management taking into account the production volumes during the respective periods and were not reviewed or certified by qualified competent persons in accordance with any defined reporting code which has been aligned with CRIRSCO reporting template including the JORC Code. As a result, the Group cannot be certain that its estimated 'Reserves' are neither accurate, valid or reported in accordance with the terms and definitions of any international reporting standards. These estimates have been prepared taking into account production volumes during the respective periods.
(2) Severnaya Depressia open–pit mine is in conservation as at the date of this Prospectus.
(3) Apsatsky open–pit mine is in conservation as at the date of this Prospectus.
(4) Nekkovy open–pit mine is in conservation as at the date of this Prospectus.

Coal mining, processing and quality

The Group conducts its mining operations at nine underground and 19 open–pit mines (of which 16 are operational). The Group produced 53.7 million tonnes of coal for the six months ended 30 June 2021 as compared to 52.2 million tonnes for the six months ended 30 June 2020. In the years ended 31 December 2020, 2019, and 2018, respectively, the Group produced 101.2 million, 106.2 million and 110.4 million tonnes of coal. Approximately 65% of the Group's production for the first half of 2021 was hard coal, 55% of which was mined at the open-pit mines and 45% at the underground mines. Approximately 35% of the Group's production for the first half of 2021 was brown coal, all of which was mined at the open–pit mines.

Overall, approximately 71% of the Group's coal production in the first half of 2021 originated from its open–pit mines and 29% from underground mines (74% and 26%, respectively, in 2020).

The following table sets forth the Group's coal production by type of mine for the periods indicated.

	Six months ended 30 June	Year ended 31 December		
	2021	2020	2019	2018
	(*in million tonnes*)			
Open-pit	37.4	74.5	81.1	77.9
Underground	16.3	26.7	25.1	32.5
Total	**53.7**	**101.2**	**106.2**	**110.4**

The Group extracts various grades of brown and hard coal. The Group typically sells brown coal, being of lower quality than hard coal, on the domestic market only and hard coal on both the export and domestic markets. Depending on the quality of the coal extracted and customer specifications, the Group processes hard coal at its coal washing plants. Washing improves the quality characteristics of

hard coal—including its calorific value, ash content and moisture content levels, and the presence of volatile matter—thereby commanding higher sales prices.

Since the Group's strategic priority is to increase the production and sales of its high–CV coal, it aims to increase the volume of washed hard coal in its operations. For the first half of 2021, the Group washed 22.4 million tonnes, or approximately 62% of its total produced hard coal, which is generally in line with the amount of coal washed in the same period in 2020. In 2020, the share of washed hard coal increased by 3% and reached 44.2 million tonnes which represented 65.3% of total produced hard coal as compared to 41.3 million tonnes and 61.9%, respectively, in 2019 and 42.2 million tonnes and 58.5%, respectively, in 2018. The Group sells predominantly all of its washed coal on the export market.

All of the Group's brown coal, which it extracts in Krasnoyarsk, Zabaikalie and Primorye, is delivered to customers (mainly power generating companies) without processing. In the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018, the Group produced 17.7 million tonnes, 33.5 million tonnes, 39.5 million tonnes and 38.3 million tonnes of brown coal. During the periods under review all brown coal was produced from the open-pit mines.

The Group also produces coking coal for metallurgical industry at its Kirov washing plant in the Kemerovo Region and sized coal, which is used in households in Poland, Turkey and other countries, at its Chernogorsky washing plant in Khakasia.

The table below sets forth the coal characteristics of the coal the Group sells to domestic customers, which is unprocessed, and to export customers, which can be either washed or unwashed:

	Calorific Value	**Ash Content**	**Moisture Content**
	kCal/kg	**(%)**	**(%)**
Kemerovo	6,073	11.6	9.8
Krasnoyarsk	3,880	7.8	33.4
Khakasia	5,450	12.8	14.3
Buryatia	5,810	13.6	9.4
Zabaikalie	3,290	14.7	38.3
Primorsky	2,795	18.1	42.4
Khabarovsk	5,455	24.5	8.2

The Group operates eight coal washing plants, four of which are located in the Kemerovo Region, one in Khakasia Republic, one in Khabarovsk Krai and two in Buryatia Republic. The Group also operates two enrichment coal facilities for large coal in Khabarovsk Krai and Primorsky Krai. The Group's coal washing plants have an aggregate annual capacity of 55.4 million tonnes and processed in aggregate 22.4 million tonnes of coal in the first half of 2021 and 31.1 million, 29.2 million and 29.6 million tonnes of coal for the years ended 31 December 2020, 2019 and 2018, respectively.

The Group also operates fifteen coal–sizing and processing facilities, two of which are located in Khakasia, one in Buryatia, two in Krasnoyarsk, one in Primorsky, one in Khabarovsk, as well as two in Zabaikalie. These facilities allow the Group to size coal to customer specifications without changing its quality.

Description of the Group's coal mines

Kemerovo Region

Overview. Almost all of the Kemerovo Region is situated in the Kuznetsky basin, or Kuzbass, one of the largest coalfields in the world and the largest coal producing region in Russia in 2020, according to Rosinformugol. The table below sets forth certain operating data relating to each of the Group's Kuzbass mines for the periods indicated:

	Total Production (million tonnes)

			Six months ended 30 June		Year Ended 31 December			
Mine	**Type of Mine[1]**	**Coal Type[1]**	**2021**	**2020**	**2020**	**2019**	**2018**	**Expiry of Licence**
Kirova	UG	G	2.6	3.5	5.0	3.0	4.7	31 December 2041
								20 April 2031
								10 December 2038
Polysaevskaya	UG	G	0.0	0.7	2.5	1.5	0.8	31 December 2033
Komsomolets	UG	G	1.2	1.8	2.3	3.1	2.8	31 December 2034
November 7th New	UG	G						31 December 2035
underground mine			0.2	0.1	0.1	0.2	0.2	
								20 July 2035
								15 April 2039
Rubana	UG	DG	2.9	1.8	4.0	6.7	4.2	20 December 2023
								14 December 2032
								10 December 2038
Yalevsky	UG	D	5.1	5.3	8.5	4.6	8.6	31 December 2038
								31 January 2028
	OC	D						18 January 2041
Zarechny			2.3	2.2	4.5	4.5	4.4	31 December 2035
Taldinskaya–Zapadnaya 1	UG	D	1.8	1.8	1.1	1.6	3.1	7 November 2037
Taldinskaya–Zapadnaya 2	UG	D	0.1	0.1	3.1	0.3	0.3	20 January 2037
Kamyshansky	OC	D	0.0	0.2	3.5	2.2	0.2	31 December 2023
								31 October 2030
Total			16.2	17.6	34.7	27.6	29.5	

(1) See "*Industry— Coal Mining*" for a discussion of coal and mine types.

Geology and mining. The Group's underground Kuzbass mines utilise longwall mining techniques to extract coal from seams with a thickness ranging from 2 metres to 4.8 metres. The Group's two open–pit Kuzbass mines combine truck and shovel methods for coal mining and draglines for removal of overburden to extract coal from seams with a thickness ranging from 1.5 metres to 15 metres.

The Group has established a division for methane drainage and methane utilisation in the Kuzbass. The purpose of this division is to maximise mine safety and minimise the environmental impact of the Group's operations. Methane drainage involves the capture of methane at high concentrations from solid coal in advance of mining, and from the caving areas immediately behind longwall faces. This process also enables higher outputs from longwall faces in some mines by reducing ventilation constraints. Utilisation involves the combustion of methane to generate electricity and heat for the Group's own needs.

Coal processing. The Group has four coal washing plants at its Kuzbass mines with an aggregate annual design capacity of 12.9 million tonnes.

In June 2020, the Group put into operation a deep flotation unit at the Kirov washing plant which uses new flotation technology to increase the washing efficiency of coal fines (0 – 0.35 mm) and produce a high quality concentrate (calorific values of over 6,000 kcal) with an ash content of only 8–9% from coal with an ash content of 30–40%. The Group expects that the new flotation unit will increase annual output by 150 thousand tonnes. The new unit layout also makes it possible to process slimes coming from the plant and from the old slime tanks which is more environmentally friendly and reduces waste transportation in cities.

Customers. Approximately 84% of the coal the Group produces in the Kemerovo Region is exported to the Atlantic region and the Pacific region, with mines in the Kemerovo Region accounting for 41% of the Group's total international sales for the first half of 2021 and 46%, 38% and 47% of total international sales for the years ended 31 December 2020, 2019 and 2018, respectively. The Group also sells the premium quality coal concentrate from the Kirov mine as semi–soft coking coal to iron and steel industries. The rest of the Group's coal is supplied to domestic customers—power generation

companies (including the Energy Division) and communal utilities—located in the Kemerovo and Novosibirsk Regions, Altaisky Krai and other regions.

Investments. The Group continues to implement a development plan to increase the coal production efficiency at its existing mines and develop new high–quality coal sites. Since 2018, the Group has implemented a number of projects, including, among others, increasing the production capacity at Yalevsky mine up to 10 million tonnes per year, launching a longwall 400 metres long, completing a flotation unit at the Kirov washing plant and a filter press unit at the Polysaevskaya washing plant and launching November 7 New underground mine.

The Group seeks to continue to develop its mining assets such as the Pravoberezhny open–pit mine, as well as the Yalevsky, Taldinskaya Zapadnaya–2, November 7th — New and Severnaya underground mines. The Group expects to also accelerate the development of its underground mines, to reduce the duration of relocation work and improve production rates for the dump trucks at its open–pit mines. The Group also plans to implement in Kuzbass the first pilot projects to switch from transporting materials and people to the mine using monorail and ground transport (travelling at a speed of 2–3 km/h) to using more efficient pneumatic vehicles (with a travel speed of 20 km/h).

Krasnoyarsk Region

Overview. The Group's mines in the Krasnoyarsk region are situated in the Kansko–Achinsk basin. The table below sets forth certain operating data relating to each of the Group's operating Krasnoyarsk mines for the periods indicated:

			Total Production (million tonnes)					
			Six months ended 30 June		Year Ended 31 December			
Mine	**Type of Mine[1]**	**Coal Type[1]**	**2021**	**2020**	**2020**	**2019**	**2018**	**Expiry of Licence**
Berezovsky	OC	2B	1.9	1.9	4.3	5.0	3.4	31 December 2027
Borodinsky	OC	2B	9.9	9.0	21.6	22.4	19.3	31 December 2031
Nazarovsky	OC	2B	1.2	1.1	3.5	3.3	2.0	31 December 2038
Total			13.1	12.0	29.4	30.8	24.7	

(1) See "*Industry—Coal Mining*" for a discussion of coal and mines types.

Geology and mining. The Group's Krasnoyarsk mines have the lowest stripping ratio among all the Group's mines. The combination of coal seams with a thickness reaching up to 58.0 metres, soft overburden and flat gradients in Krasnoyarsk allows the Group to use bucket wheel excavators which load coal directly onto railway wagons or conveyor belts (for example, the Group transports coal from the Berezovsky open–pit mine to its main customer, the Berezovskaya GRES power plant, via a 15 kilometres conveyor belt). As a result, the coal mining process at these mines is relatively simple and low–cost.

Customers. Coal mined from the Krasnoyarsk sites is predominantly supplied to power generation companies and communal utilities, including the Energy Division, within the adjacent regions without washing.

Investments. At the Krasnoyarsk mines, the Group is focused on increasing overall production capacity and measures to reduce the environmental footprint. In 2020, the Group commissioned a plant for the production of smokeless briquettes for private households on the territory of the Berezovsky open–pit mine. Compared to traditional household solid fuels, smokeless briquettes are more energy efficient, cost effective and environmentally friendly.

Furthermore, the Group is increasing the production capacity of the Borodinsky open–pit mine to 26 million tonnes per year. At the Berezovsky open–pit mine, the Group plans to build water treatment facilities no later than by the end of 2022.

Republic of Khakasia

Overview. The Group's mines in the Republic of Khakasia are situated in the Minusinsk basin. The table below sets forth certain operating data relating to each of the Group's operating Khakasia mines for the periods indicated:

			Total Production (million tonnes)					
			Six months ended 30 June		Year Ended 31 December			
Mine	**Type of Mine[1]**	**Coal Type[1]**	**2021**	**2020**	**2020**	**2019**	**2018**	**Expiry of Licence**
Chernogorsky	OC	D	4.1	3.7	7.5	7.8	7.8	1 January 2028 28 December 2032
Vostochno–Beisky	OC	D	1.8	1.7	3.5	3.6	3.1	30 September 2030
Izykhsky	OC	D	0.7	0.5	1.4	1.5	0.9	31 December 2028 30 December 2024
Abakansky	OC	D	0.7	0.5	0.5	1.0	1.0	31 December 2034
Total			7.2	6.4	12.9	13.9	12.9	

* Less than 100 thousand tonnes
(1) See "*Industry—Coal Mining*" for a discussion of coal and mine types.

Geology and mining. The Group's four open–pit mines in Khakasia combine truck and shovel methods for coal mining and draglines for removal of overburden and extract coal from seams with a thickness ranging from 0.5 metres to 10.9 metres.

Coal processing. The Group owns one coal washing plant in Khakasia with a design capacity of over 10.5 million tonnes. In addition, the Group has three coal–sizing facilities in the area. The Group aims to increase sales of washed and sized coal with a calorific value of 5,500–5,700 kcal/kg from Khakasia to the Atlantic region, as well as to increase supplies of enriched coal from Khakasia to the Asian region.

Customers. The Group's mines and washing plants in Khakasia produce premium hard thermal coal with a high calorific value. More than half of the coal mined at the Group's Khakasia mines is exported to Europe and Asia.

Investments. In 2017, the Group launched an innovative project which introduced an automated cargo transportation system based on unmanned BELAZ–7513R dump trucks at select sites in Abakansky. The technology is the first of its kind for the Group's operations and aims to improve equipment efficiency and the safety of mining operations. The Group plans to continue the trial operation of unmanned dump trucks in Khakasia. In 2020, the Group completed the reconstruction of the Chernogorsky washing plant which increased its production capacity from 6 million tonnes to 10 million tonnes per year.

Republic of Buryatia

Overview. The Republic of Buryatia contains a series of coalfields in the area southwest of Lake Baikal. The table below sets forth certain operating data relating to the Group's operating mines in Buryatia for the periods indicated:

	Total Production (million tonnes)	
	Six months ended 30 June	Year Ended 31 December

Mine	Type of Mine[1]	Coal Type[1]	2021	2020	2020	2019	2018	Expiry of Licence
Tugnuisky	OC	D	2.1	2.8	11.1	6.8	4.9	31 December 2031
Nikolsky	OC	D	3.9	4.7	3.2	7.4	10.5	1 March 2025 1 July 2025
Total			6.0	7.6	14.3	14.1	15.4	

(1) See "*Industry—Coal Mining*" for a discussion of coal and mine types.

Geology and mining. The Group's Buryatia open–pit mines use truck and shovel methods for coal mining and draglines for removal of overburden to extract coal seams ranging from 2.0 metres to 12.3 metres thick.

Coal processing. The Group operates two coal washing plants at Tugnuisky with a total annual design capacity of 12 million tonnes.

Customers. Approximately 90% of Buryatia coal is exported to Asia as the Tugnuisky and Nikolsky mines produce low–nitrogen and low–sulphur high-CV hard coal, which meets the requirements of Japanese power utilities and is demanded in other key Asian markets. The rest of the Group's coal supplied to power generation companies and communal utilities located in Buryatia and other regions in the Far East of Russia.

Investments. In 2020, the Group reached the design capacity of its new Tugnuisky–2 small–class washing plant of 6.2 million tonnes in 2020, which allows the Group to improve the quality of coal shipped and increase shipments to Asian markets.

Zabaikalie Region

Overview. The Zabaikalie region contains a number of isolated coalfields, including the Apsatsky, Tataurovskoye and Kharanorskoye coalfields. The table below sets forth certain operating data relating to each of the Group's operating mines in Zabaikalie for the periods indicated:

			Total Production (million tonnes)					
			Six months ended 30 June		Year Ended 31 December			
Mine	Type of Mine[1]	Coal Type[1]	2021	2020	2020	2019	2018	Expiry of Licence
Kharanorsky	OC	2B	2.0	2.0	4.0	4.1	4.2	31 December 2021
Vostochny	OC	2B	0.7	0.7	1.3	1.4	1.5	31 December 2036
Apsatsky Open Pit	OC	C, OC	0.0	0.1	0.6	0.6	0.1	27 May 2033
Total			2.7	2.8	6.0	6.1	5.8	

(1) See "*Industry—Coal Mining*" for a discussion of coal and mine types.

Geology and mining. The Group's Zabaikalie open–pit mines use truck and shovel methods for coal mining and draglines for removal of overburden to extract coal from seams with a thickness ranging from 0.2 metres to 49.1 metres.

Customers. Coal produced at the Kharanorsky and Vostochny mines is supplied only to domestic customers and predominantly to power generation companies Zabaikalie.

Investments. The Group's main development project in Zabaikalie relates to increasing the Kharanorsky mine capacity to 4 million tonnes.

Primorsky Region

Overview. The Group's mines in the Primorsky region are situated in the Pavlovsky brown–coal basin and the Lipovetsky hard–coal deposit. The table below sets forth certain operating data relating to each of the Group's operating Primorsky mines for the periods indicated:

			Total Production (million tonnes)					
			Six months ended 30 June		Year Ended 31 December			
Mine	**Type of Mine[1]**	**Coal Type[1]**	**2021**	**2020**	**2020**	**2019**	**2018**	**Expiry of Licence**
Pavlovsky	OC	1B	1.8	1.2	2.8	2.8	3.0	1 January 2034
Nekkovy	OC	D	0.0	0.2	0.3	0.5	0.4	31 December 2036
Severnaya Depressia[2]	OC	1B	0.0	0.03	0.44	0.23	0.03	-
Total			3.6	1.5	3.6	3.5	3.4	

(1) See "*Industry—Coal Mining*" for a discussion of coal and mine types.
(2) As at the date of this Prospectus, Severnaya Depressia mine was non-operational.

Geology and mining. The Group's Primorsky open–pit mines use truck and shovel methods for coal mining and draglines for removal of overburden to extract coal from seams. Thickness ranges from 2.0 metres to 20.5 metres.

Coal processing. The Group has one processing facility at its Primorsky mines, with an aggregate annual production capacity of 0.7 million tonnes.

Customers. Coal produced in Primorye is sold on the domestic market to, among others, energy generating companies, housing and communal services.

Khabarovsk Region

Overview. The Group's mines in the Khabarovsk region are situated at the Urgal deposit in the Bureinsky basin. The table below sets forth certain operating data relating to the Group's mines in Khabarovsk for the periods indicated:

			Total Production (million tonnes)					
			Six months ended 30 June		Year Ended 31 December			
Mine	**Type of Mine[1]**	**Coal Type[1]**	**2021**	**2020**	**2020**	**2019**	**2018**	**Expiry of Licence**
Bureinsky	OC	G	1.0	1.1	1.6	1.8	2.2	31 December 2025
Pravoberezhny	OC	G	2.1	1.5	1.0	2.0	3.2	31 December 2034
Severnaya	UG	G	2.5	0.9	3.5	2.4	1.9	31 December 2036
Total			5.6	3.5	6.1	6.2	7.3	

(1) See "*Industry—Coal Mining*" for a discussion of coal and mine types.

Geology and mining. The Group's Khabarovsk open–pit mines use truck and shovel methods for coal mining and draglines for removal of overburden to extract coal from seams with a thickness ranging from 1.4 metres to 28.0 metres. The Group's underground mine in Khabarovsk applies longwall mining techniques to extract coal from seams with a thickness ranging from 1.1 metres to 6.7 metres. In 2020, the Group continued the transition from two to one high–performance longwall faces, while maintaining the production target of 4 million tonnes per year.

Coal processing. The Group operates a coal washing plant Chegdomyn with an annual design capacity of 6 million tonnes. The Group also operates one processing facility with an annual design capacity of 2 million tonnes.

Customers. Coal produced in Khabarovsk region is known as "Urgal" coal, and is primarily supplied to the Asia–Pacific region. This coal is washed at the Chegdomyn washing plant and a processing facility at the Bureinsky open–pit mine, which increases its calorific value from 4,300 kcal/kg to 5,850 kcal/kg. The Group supplies coal from Khabarovsk mines primarily to China, South Korea, Japan and other countries of the Asian region. The proximity of the Urgal assets to the Group's Vanino Bulk Terminal represents a significant competitive advantage for the Group compared to other Russian coal producers. A part of the coal mined at the Group's Khabarovsk mines is supplied to power plants and other customers located in the Khabarovsk and Primorsky Territories.

Investments. In 2020, the Group relocated some of the equipment from the Bureinsky open–pit mine to Pravoberezhny, as a more promising and efficient site. This relieves the burden on production at this site, making possible an acceleration of development of Pravoberezhny to its target capacity of 6 million tonnes. Moreover, the Group is planning to increase mining and washing in the Khabarovsk Region at Urgal from 7 million tonnes per annum to 14 million tonnes per annum. Completion is expected in 2024. Capital expenditures related to Urgal upgrade are estimated at U.S.$222 million. As at 30 June 2021, the Group spent U.S.$112 million on the implementation of the project.

The Group plans to continue investing in the modernisation of its operations in Khabarovsk region, primarily for the development of Pravoberezhny open–pit mine, Chegdomyn washing plant, increasing infrastructure capacity and environmental initiatives.

Transportation and logistics

The transportation and logistics capabilities offered by the Logistics Division is one of the central features of the Group's integrated operations and makes a critical contribution to the Group's coal sales by ensuring a stable and reliable means of delivering coal to the Group's customers as well as containing costs. The Group's coal reserves and production are primarily concentrated in Siberia and the Russian Far East, while the Group's major export markets are in Asia–Pacific and Europe. In 2020, the volume weighted average distance of rail deliveries to the Group's domestic customers was approximately 674 kilometres. During the same period, the volume weighted average distance of the Group's deliveries to export destinations travelled by rail was 4,350 kilometres.

Transportation within Russia

The Group transports almost all of its coal to domestic customers or to overland export points using the Russian Railways rail network or to seaports for further shipment to its export customers. The Group transports its coal directly to domestic customers mostly using its own or leased transportation infrastructure, either by truck, rail or conveyor belt. For more information on the Group's transportation infrastructure, please refer to "*—Logistics Division*".

Transportation of coal products from the Group's coal assets is managed by the Logistics Division which organises and carries out the receiving, loading and shipping of railcars and coordinates these plans with Russian Railways.

The use of the Russian Railways rail network is governed by agreements with Russian Railways for the transportation of coal to various locations in Russia (including to Russian seaports). Russian Railways accepts coal shipments for transportation on the basis of monthly requests that the Group submits specifying the volume of coal to be transported. The payments under these long–term agreements are calculated by reference to the standard railway tariffs set by the FAS on the basis of the detailed price list included in the regulations governing freight transportation in Russia. These tariffs are subject to annual, and occasionally interim, indexation. Generally, the total freight transportation price the Group pays consists of the following components: a charge for locomotive traction and infrastructure services, which is subject to tariff regulation, and a charge for the use of the railcar, which is subject to tariff

regulation if the Group uses Russian Railways' railcars or market pricing if the Group uses railcars provided by independent rail operators. As independent rail operators are able to set competitive prices for the use of their railcars, these prices may be lower than the regulated tariffs charged for Russian Railways' railcars. In 2020 and 2019, the FAS increased railway tariffs by 3.5%. Starting from 1 January 2021, railway tariffs have increased by an additional 3.7%. The Group pays its rail transportation costs on a monthly basis in advance to Russian Railways. In the event the Group fails to make these payments, Russian Railways may suspend the transportation of coal until all amounts owed have been paid in full. The Group agreements with Russian Railways are automatically renewed each year, subject to the ability of either party to terminate before the end of any calendar year.

The Group connects to the Russian Railways rail network through its own connecting railway stations. From these stations, the Group ships coal in (1) railcars it owns or leases; (2) railcars provided by state-owned or independent rail operators. The Group also aims to optimise the available discounts on rail tariffs by increasing the proportion of its deliveries which are consolidated shipments in order to use the maximum permitted amounts of cars on a single train.

The following table presents the Group's total coal shipments by method of delivery to domestic customers or to export points for further shipment:

	Total Shipments of Coal							
	Six months ended 30 June		Year Ended 31 December					
	2021		2020		2019		2018	
Method of Delivery	**(million tonnes)**	**% of Total**	**(million tonnes)**	**% of Total**	**(million tonnes)**	**% of Total**	**(million tonnes)**	**% of Total**
Shipments via Russian Railways rail network	28.5	90%	53.2	90%	52.3	87%	51.0	87%
Via conveyor belt	1.6	5%	2.8	5%	4.1	7%	3.5	6%
Via own railway lines	0.8	2%	1.9	3%	2.2	4%	2.4	4%
Total shipments	**31.6**	**100%**	**58.9**	**100%**	**59.9**	**100%**	**58.4**	**100%**

Seaborne shipments

To export the Group's coal, the majority of which is exported to the Asia–Pacific and European seaborne markets, the Group mainly uses facilities of its ports in western Russia and the Russian Far East as well as several third–party commercial seaports. For its coal shipments to Europe, the Group uses several port facilities, in particular Murmansk Commercial Seaport and third–party Ust–Luga and the Black Sea Terminals. For its coal shipments to Asia–Pacific, the Group uses several port facilities, in particular Vanino Bulk Terminal, Maly Port and third–party Vostochny seaport. For more information on the Group's transshipment infrastructure, please refer to "*—Logistics Division*".

The Group charters sea freight for its shipments made on either a CIF or DES basis, primarily in the Atlantic region. In the first half of 2021 and 2020, respectively, the Group chartered 17.6 million and 15 million tonnes of sea freight shipment capacity. In 2020, 2019 and 2018, the Group chartered 29.1 million, 28.2 million and 26.8 million tonnes, respectively. The Group's trading company, SUEK AG, oversees the handling and transshipment of coal at seaports and the chartering of sea freight.

The table below sets forth the Group's seaborne coal export sales volumes by port of shipment:

	Total Seaborne Export Sales Volumes[(1)] by Destination and Port of Shipment									
	Six months ended 30 June				Year Ended 31 December					
	2021		2020		2020		2019		2018	
	(million tonnes)	**% of Total**	**(million tonnes)**	**% of Total**	**(million tonnes)**	**% of Total**	**(million tonnes)**	**% of Total**	**(million tonnes)**	**% of Total**
ATLANTIC										
Seaborne shipments										
North/Northwest Russian ports	8.5	32%	7.1	29%	15.7	31%	18.7	37%	21.1	41%
Murmansk	5.5	21%	5.2	21%	11.2	22%	14.1	28%	14.1	28%

Other Russian ports	3.0	11%	1.9	8%	4.5	9%	4.6	9%	6.9	14%
Baltic States ports	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0.1	0%
CIS ports	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0.1	0%
Total Russian, CIS and Baltic ports	**8.5**	**32%**	**7.1**	**29%**	**15.7**	**31%**	**18.7**	**37%**	**21.3**	**42%**
Other Atlantic ports(2)	**0.0**	**0%**	**0.0**	**0%**	**0.0**	**0%**	**0.0**	**0%**	**0.1**	**0%**
Total Atlantic seaborne shipments	**8.5**	**32%**	**7.1**	**29%**	**15.7**	**31%**	**18.7**	**37%**	**21.3**	**42%**
Of which was on a CIF/DES basis	8.1	31%	6.9	28%	14.9	29%	16.4	32%	17.1	34%
Of which was on a FOB basis	0.4	2%	0.3	1%	0.8	2%	2.3	5%	4.2	8%
PACIFIC										
Seaborne Shipments										
Vanino	10.8	41%	11.3	45%	23.3	45%	20.7	41%	19.9	39%
Vostochny	1.5	6%	1.4	6%	2.9	6%	3.2	6%	2.8	6%
Maly	1.8	7%	1.5	6%	3.4	7%	2.7	5%	2.5	5%
Other Far Eastern ports	0.6	2%	0.0	0%	0.0	0%	0.1	0%	0.1	0%
Total Far Eastern ports of Russia	**14.7**	**55%**	**14.4**	**58%**	**29.6**	**58%**	**26.7**	**53%**	**25.3**	**50%**
Other Russian ports	**0.6**	**2%**	**0.8**	**3%**	**1.1**	**2%**	**0.5**	**1%**	**0.4**	**1%**
Other Pacific ports(3)	**2.7**	**10%**	**2.6**	**10%**	**5.0**	**10%**	**4.5**	**9%**	**3.7**	**7%**
Total Pacific seaborne shipments	**18.0**	**68%**	**17.8**	**71%**	**35.7**	**69%**	**31.7**	**63%**	**29.5**	**58%**
Of which was on a CIF/DES basis	9.5	36%	8.1	32%	14.2	28%	11.8	23%	9.7	19%
Of which was on a FOB basis	8.5	32%	9.7	39%	21.5	42%	19.9	40%	19.8	39%
Total seaborne shipments	**26.5**	**100%**	**25.0**	**100%**	**51.4**	**100%**	**50.4**	**100%**	**50.8**	**100%**
Of which was on a CIF/DES basis	17.6	67%	15.0	60%	29.1	57%	28.2	56%	26.8	53%
Of which was on a FOB basis	8.9	33%	10.0	40%	22.3	43%	22.2	44%	24.0	47%

* Less than 100 thousand tonnes
(1) Includes sales of coal purchased from third parties as part of the Group's international trading.
(2) Ports of Colombia and Europe.
(3) Ports of Australia and Indonesia.

Marketing and sales

As at 30 June 2021 the Group's market share in thermal coal domestic market was approximately 38% and, in the global thermal coal exports market, 4%.

In the first half of 2021, the Group sold 31.5 million and 27.4 million tonnes of coal to its domestic customers and on the export market, respectively, as compared to 25.7 million and 26.0 million tonnes for the same period in 2020. The Group's sales amounted to 58.9 million, 59.9 million and 28.2 million tonnes of coal to its domestic customers in the years ended 31 December 2020, 2019 and 2018 and 53.8 million, 53.8 million and 55.4 million tonnes of coal on the export market in the years ended 31 December 2020, 2019 and 2018, respectively.

Domestic sales

The Group is the largest fuel supplier to Russian coal–fired power generating companies, providing approximately 58% of the total coal uptake at domestic coal–fired power plants in the first half of 2021. The Group's sales to regional power generating companies accounted for 46% and 41% of its total coal in the six months 2021 and 2020, respectively. Approximately 83%, 82% and 79% of the Group's domestic sales by volume were made to regional power generating companies (including the Energy Division) in the years ended 31 December 2020, 2019 and 2018, respectively. The Group also sells coal to local communal utilities and federal government entities and other consumers located in the regions of the Group's coal operations and abroad.

The table below sets forth a breakdown of the domestic sales by customer groups for the periods indicated:

	Six months ended 30 June				Year Ended 31 December					
	2021		2020		2020		2019		2018	
Customer groups	(million tonnes)	% of domestic sales	(million tonnes)	% of domestic sales	(million tonnes)	% of domestic sales	(million tonnes)	% of domestic sales	(million tonnes)	% of domestic sales
Power generating companies[(1)]	27.2	86%	21.3	83%	49.0	83%	49.4	82%	46.3	79%
Of which is the Energy Division	21.8	69%	15.0	58%	37.1	63%	33.7	56%	30.2	52%
Utilities	2.9	9%	2.7	11%	6.6	11%	7.3	12%	8.6	15%
Other	1.5	5%	1.6	6%	3.3	6%	3.3	5%	3.5	6%
Total domestic sales	**31.6**	**100%**	**25.7**	**100%**	**58.9**	**100%**	**59.9**	**100%**	**58.4**	**100%**

(1) Includes coal sold to the Energy Division.

The largest consumers of the Group's coal in the six months ended 30 June 2021 and 2020 and the years ended 31 December 2020, 2019 and 2018 were its own power generating companies, RusHydro and Unipro.

The power plants of the Energy Division rely on the type of coal produced at the Group's mines as the technical specifications of these power plants have been designed to process coal of a particular grade that the Group mines.

The Group's marketing efforts and sales to domestic customers are conducted both on a centralised basis, through its headquarters in Moscow, and on a regional basis, through its regional sales offices located in the Group's branches in Barnaul, Leninsk–Kuznetsky, Chernogorsk, Krasnoyarsk, Ulan–Ude, Chita, Khabarovsk and Vladivostok. Coal sales to the Group's power generating customers and to federal government entities, as well as sales between regions in Russia, are conducted through the Group's headquarters. The Group's regional sales offices are primarily responsible for its coal sales to local communal utilities. The Group also has distributors in the Altaisky Krai, Novosibirsk and Omsk Regions, as well as in the Khabarovsk Territory, which are engaged in the development of sales of the Group's coal to municipal enterprises and private consumers in their regions.

The Group's contracts with domestic customers can be divided into contracts with: (1) power generating companies; (2) communal utilities and federal government entities; and (3) other commercial customers.

The Group's enters into bilateral contracts with power generating companies which typically have a term of more than one year, with payment dates twice a month. The Group's contracts with communal utilities and federal government entities are concluded through annual public tenders that are conducted by a centralised government procurement process. These contracts cover supply of coal for one heating season only and typically settle with 30 to 180 days credit depending on the tender terms and the customer's credit history. The Group's contracts with commercial customers, including spot sales to smaller enterprises and communal utilities, are typically for a term of up to a year and are concluded on a prepayment basis. Most of the Group's domestic coal contracts are concluded on a CPT basis. The Group's contracts for up to a year are fixed price and, over a year, with a variable price. The Group's contracts generally allow for a deviation in actual volumes delivered of approximately plus or minus 10% at the Group's discretion or the discretion of the customer. All contracts specify a range of required coal characteristics.

Export sales

The Group's exports coal to 48 countries, with China and Japan representing the Group's largest export destination. In the first half of 2021, the Group supplies to the Asia–Pacific region accounted for 66% of its international sales. All coal exported by the Group is washed coal. The Group's manages its coal

export sales through its exporting company, SUEK AG. Through SUEK AG, the Group maintains a dedicated sales force of approximately 260 professionals, including those tasked with management of the Group's relationships with export customers, as well as a team of international traders and charter professionals to manage the Group's seaborne export logistics and its exposure to risks on the international coal and sea freight markets.

In the twelve months ended 30 June 2021, the Group sold 121 million tonnes of coal with 55.2 million tonnes being sold on the export market. The Group's coal was exported to Japan (17% of coal export), China (15% of coal export), South Korea (10% of coal export), Taiwan (10% of coal export), Vietnam (5% of coal export), Morocco (6% of coal export), Germany (6% of coal export), Turkey (5% of coal export) and Poland (5% of coal export). Other countries in Pacific region and Atlantic region represented 8% and 13% of coal exports, respectively.

The following table sets forth the Group's coal export sales volumes by destination market for the periods indicated:

	Six months ended 30 June				Year Ended 31 December					
	2021		2020		2020		2019		2018	
Destination Market	Exports (million tonnes)	% of Exports	Exports (million tonnes)	% of Exports	Exports (million tonnes)	% of Exports	Exports (million tonnes)	% of Exports	Exports (million tonnes)	% of Exports
Atlantic Market										
Germany	1.6	6%	1.5	6%	3.2	6%	4.5	8%	3.9	7%
The Netherlands	0.0	0%	0.9	3%	2.0	4%	2.9	5%	2.7	5%
Poland	1.0	4%	0.7	3%	2.2	4%	1.9	4%	2.3	4%
Turkey	1.6	6%	0.6	2%	1.6	3%	1.1	2%	2.1	4%
Morocco	2.3	8%	1.5	6%	2.6	5%	2.9	5%	1.8	3%
Other	2.8	10%	2.6	10%	5.8	11%	7.0	13%	10.6	19%
Total Atlantic Market	9.3	34%	7.7	30%	17.3	32%	20.3	38%	23.3	42%
Asia–Pacific Market										
Japan	4.1	15%	3.6	14%	8.8	16%	6.9	13%	7.0	13%
China	4.8	17%	3.7	14%	7.9	15%	7.9	15%	6.9	12%
South Korea	2.5	9%	2.7	10%	5.8	11%	6.9	13%	8.9	16%
Taiwan	3.0	11%	2.5	10%	4.8	9%	2.5	5%	4.2	8%
Vietnam	1.4	5%	2.7	10%	4.0	7%	3.6	7%	1.6	3%
Other Asia–Pacific	2.3	8%	3.0	12%	5.1	10%	5.6	10%	3.4	6%
Total Asia–Pacific Market	18.1	66%	18.3	70%	36.5	68%	33.5	62%	32.0	58%
Total export sales volumes	**27.4**	**100%**	**26.0**	**100%**	**53.8**	**100%**	**53.8**	**100%**	**55.3**	**100%**

Over the past three years, the Group has sought to increase its exports in both absolute terms and as a percentage of its total sales. For the first half of 2021, the Group's export sales volume increased by 5.4% to 27.4 million tonnes from 26.0 million tonnes for the same period in 2020. In 2020, 2019 and 2018, the Group's export sales amounted to 55.1, 55.2 and 57.2 million tonnes, respectively. The Group has increased its exports to the Asia–Pacific region from 33.1 million tonnes in 2018 to 37.1 million tonnes in 2020. In order to enhance its market position, the Group has opened, and plans to continue to open, representative offices in the most dynamically developing coal markets. For example, in December 2018, the Group acquired Barter Coal in Poland, a company engaged in the distribution of assorted coal. In April 2019, the Group opened the office in the United Kingdom to promote trading of microsphere in Europe. In December 2020, the Group launched the office in Australia to develop trading in this region. The purpose of the Group's opening new offices is to increase the Group's sales in a particular region, by strengthening direct contacts with the end consumers, obtaining reliable information about the structure and dynamics of the market, increasing the Group's awareness in the local market, as well as using local logistics advantages.

During the periods under review between 80% and 90% of the Group's coal exports were sold directly to end consumers, in particular Asian and European power generating companies and cement plants.

The Group's export sales contracts are aligned with coal–price indices: API 2 (CIF ARA), as published by Argus Media Limited and IHS McCloskey, for European sales and globalCOAL® NEWC Index (FOB Newcastle) for Asia–Pacific sales. The majority of the Group's export sales contracts are for a term of six months to two years. The remainder are either for a period of three to five years or spot sales. Approximately half of the Group's export contracts are for a fixed price. The remaining half of the Group's export contracts are variable and linked to the API 2 or globalCOAL® NEWC Index coal–price indices. Of these index–linked export contracts, the Group hedged 5.6 million tonnes, in the first half of 2021. In its export price hedging activities, the Group mainly uses API 2 price index swaps, and makes limited use of options and collars, to maintain an optimal hedge term of up to one year. More than 50% of the Group's export sales contracts provide for payment of amounts due upon shipment (typically within two to fifteen days of consignment). The remainder are made on a prepayment basis or allow up to 90 days' credit, with or without a supporting letter of credit, depending on the creditworthiness of the customer. All of the Group's seaborne export contracts are on either FOB, CIF or DES terms. The Group also delivers coal to Europe and China by rail only (DAF). The Group also delivers coal to final customers on DDP terms.

International trading

In addition to the export and sale of its own coal, the Group purchases coal from other Russian coal producers, mainly to cover the local shortages of its own coal in case of production difficulties and the effective use of its port facilities, and coal produced outside of Russia on the international market to get additional profit on trading. The Group's team of international traders manages the exposure to risks on the international coal markets and gathers relevant international market pricing information. In the first half of 2021, the Group traded approximately 2.7 million tonnes of coal with coal purchased from third–party manufacturers, of which approximately 80% was Indonesian coal and the rest was from coal producers in other countries, including Russia and Australia.

Competition

The Group principally competes in three thermal coal markets: the Russian domestic market, the thermal Asia–Pacific market and the Atlantic market. In addition, the Mediterranean region also has markets with growing demand for coal, such as Turkey and Morocco, which also have the potential to increase the share of the Russian coal in the total consumption structure. In Russia, the Group believes it is able to compete successfully by reliably providing its key power generating companies and other customers with the specific types of coal they require. Internationally, the Group believes it is able to compete effectively by successfully marketing itself as a reliable supplier of consistent quality low sulphur– and nitrogen–content coal while capitalising on the relative geographic proximity of the seaports the Group uses to its export markets (such as Japan, China, South Korea and Taiwan). In particular, the low nitrogen content of the coal produced at some of the Group's mines is an important competitive advantage in the Japanese market. Moreover, the Group's geographic proximity to several of its markets allows it to arrange for prompt deliveries upon request and for shipments in various dry bulk vessels, including shallow–draft Handysize vessels, which can enter a larger number of ports than the Group's competitors in more distant locations, such as South Africa, Australia or Colombia, who, owing to the large size of the Capesize and Panamax vessels needed to travel longer distances, are only able to access deepwater ports. The Group believes this gives it a particular advantage in supplying Japan, South Korea and China.

Domestic market

The Russian thermal coal market is characterised by high concentration, and the Group is the largest producer and supplier of coal way ahead of its closest competitors. In the six months ended 30 June 2021 and 2020 and the years ended 31 December 2020, 2019 and 2018, the Group produced twice as much thermal coal as the next largest domestic producer of thermal coal, and supplied more than four times the volume of thermal coal to domestic customers as the Group's next–largest competitor, according to CDU TEK. The Group had a leading position in the Russian domestic market

supply with a market share of 47% as at 30 June 2021, according to CDU TEK and Russian Railways statistics.

The Group believes its primary competitors in the domestic thermal coal market are Vostsibugol, Russian Coal and Kuzbassrazrezugol.

Asia–Pacific market

The main suppliers to the Asia–Pacific market, which, according to Wood Mackenzie, accounted for almost 90% of the offshore thermal coal market in the first half of 2021, are Indonesia, Australia, Russia and South Africa, which compete for supplies to traditional high–margin markets such as South Korea, Taiwan and Japan, as well as to the markets of China, India, and Southeast Asian countries. Demand in the developed premium markets of Japan, South Korea and Taiwan, in which predominantly high-calorific coal with low sulphur and nitrogen content is traded, remains at a relatively stable level. The most promising markets in terms of coal consumption growth are India and countries of South Asia, which determines a steady trend of demand shifting from the Atlantic to the Asia–Pacific region. China is still the largest importer of thermal coal, exerting a strong influence on the entire international market. Informal ban on the import of Australian coal from China, introduced in 2020 and remaining in force at the moment, has led to a sharp change in the flow of international trade. China has significantly increased purchases of Russian coal, while coal suppliers from Australia were forced to reorient their supplies to other Asian markets and even to the Atlantic. In the Asian market, the Group competes primarily with the major Russian exporters, such as Kuzbassrazrezugol, as well as with coal suppliers from Australia and Indonesia, including Glencore, BHP Billiton plc, Banpu, Arutmin, Tanito, KPC, among others.

Atlantic market

Russia and Columbia are the main suppliers of thermal coal to the Atlantic market. To a much smaller extent South Africa and the United States are suppliers to this market as well. Coal consumption in Europe has been declining in recent years due to the steady trend towards decarbonisation and the development of renewable electricity generation. In the medium term, this trend will remain. At the same time, Russian coal is the most competitive in this region due to its high quality and geographical proximity. These factors allow to maintain the volume of supply if other marginal suppliers are eliminated. Thus, the Atlantic market remains an important area for the development of the Group's coal export supplies. In the Atlantic market, the Group competes primarily with the major Russian exporters, such as Kuzbassrazrezugol, as well as with coal suppliers from Colombia and South Africa, including Glencore, Drummond, BHP Billiton plc and Anglo American plc.

Licences

The Group is required to maintain subsoil licences for the natural resources that it exploits. Licences are typically issued and renewed through an auction process conducted by the Subsoil Agency of the Russian Government, which issues subsoil licences and monitors compliance with their terms. See "*Regulation of Coal, Electricity and Transportation Industries—Regulation of Coal Industry—Licensing—Subsoil Licensing*" for further discussion of the subsoil license granting process in Russia. The Group has historically bid successfully at auctions for the renewal of licences and expects to bid successfully for renewals in the future.

The subsoil licences which the Group has obtained impose certain obligations, including either minimum or average annual production quotas. The Group maintains a dedicated team of personnel responsible for monitoring ongoing compliance with the terms of its licences and currently does not believe that any of its subsoil licenses will be suspended or revoked.

Logistics Division

The Logistics Division is engaged in transshipment and railroad transportation. It operates five seaports across the far east, northwest and southwest regions of Russia and one of the largest railcar fleets in

Russia exceeding 56 thousand units as of the date of this Prospectus. In the year ended 31 December 2020, the Group was the second largest bulk port operator in Russia by transshipment capacity and the fourth largest Russian gondola car operator, according to the Group's calculations based on published data. In 2020, approximately 24% of cargo transshiped by the Group comprised non-coal cargo.

The Group's wholly-owned subsidiary, NTC, manages operations of the Logistics Division and, in certain instances, serves as the sole executive body of the operating companies of the Logistics Division.

Seaport transshipment

The Group operates Murmansk Commercial Seaport and Murmansk Bulk Terminal located in the Murmansk Region, Vanino Bulk Terminal located in the Khabarovskiy Krai, Maly Port located in the Primorsky Krai and Tuapse Bulk Terminal located in the Kransodarsky Krai.

The Group's seaports provide a full range of stevedoring services together with a variety of related services such as loading and unloading of vessels, railcars and freight trucks, the transportation of cargo to storage facilities, cargo sorting, measuring and weighing, warehouse clean-up between cargo shipments, vehicles customs clearance, documentation services and port pilot services.

As at 30 June 2021, the Group's seaports had an aggregate transshipment capacity of 58.6 million tonnes. In the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, the Group's seaports transshipped 23.7 million tonnes, 50.3 million tonnes, 48.2 million tonnes and 45.8 million tonnes of cargo, respectively. In the six months ended 30 June 2021 and in the years ended 31 December 2020 and 2019, the Group's seaports operating cash costs was U.S.$2.1 per tonne of transshiped cargo, U.S.$2.1 per tonne of transshiped cargo and U.S.$2.2 per tonne of transshiped cargo, respectively.

The following table sets forth the breakdown of the Group's transshipments by destination for the periods indicated:

	Six months ended 30 June	Years ended 31 December		
	2021	2020	2019	2018
	(*in millions of tonnes*)			
Export	23.3	49.4	47.4	44.9
Import	0.2	0.4	0.3	0.3
Cabotage	0.2	0.6	0.4	0.5
Total	**23.1**	**50.4**	**48.2**	**45.8**

The table below sets forth the breakdown of the Group's transshipments by the type of cargo for the periods indicated.

	Six months ended 30 June	Years ended 31 December		
	2021	2020	2019	2018
	(*in millions of tonnes*)			
Coal	19.3	39.7	39.6	38.0
Fertilizers	1.7	5.1	5.2	5.5
Iron ore	1.4	4.5	2.7	1.4
Other	1.2	1.0	0.8	0.8
Total	**23.7**	**50.4**	**48.2**	**45.8**

Murmansk Commercial Seaport

The Group acquired a controlling stake in Murmansk Commercial Seaport in 2017. Murmansk Commercial Seaport is the largest commercial seaport in the Barents Sea with an annual transshipment capacity of 19.8 million tonnes providing access to the Arctic Ocean, the Atlantic Ocean and certain European hubs such as seaports located in Germany, Netherlands and Poland. The port handles goods arriving by sea, rail and road all year round.

The Murmansk Commercial Seaport operates 16 mooring berths suitable for break-bulk cargo, general cargo, iron ore raw materials and other types of cargo. One of the advantages of the Murmansk Commercial Seaport is the deep-water berths which can accommodate large vessels with a capacity of more than 150 thousand tonnes.

In addition to stevedoring, Murmansk Commercial Seaport also provides auxiliary services, which include, amongst others, bunkering, coal-cleaning services and supply of fresh water to vessels.

The table below sets forth the breakdown of Murmansk Commercial Seaport transshipments by the type of cargo for the periods indicated.

	Six months ended 30 June	Years ended 31 December		
	2021	2020	2019	2018
	(*in millions of tonnes*)			
Coal	6.9	13.1	16.3	15.5
Iron ore	0.6	2.3	0.6	0.0
Other	0.3	1.0	0.8	0.8
Total	**7.8**	**16.4**	**17.6**	**16.3**

In the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, transshipment capacity of the Murmansk Commercial Seaport was utilised for 78%, 82%, 89% and 82%, respectively.

As of the date of this Prospectus, Murmansk Commercial Seaport is fully owned by the Group through JSC "Murmanskiy Morskoi Torgovyi Port".

Murmansk Bulk Terminal

Murmansk Bulk Terminal was acquired by the Group in December 2020. The bulk terminal is located in the Murmansk Region of Russia nearby Murmansk Commercial Seaport. Murmansk Bulk Terminal has an annual transshipment capacity of 8.5 million tonnes. It operates three mooring berths which can accommodate vessels with a capacity of up to 75 thousand tonnes. The terminal handles dry bulk cargo arriving by sea and rail and provides stevedoring services to exporters of iron ore, mineral fertilizers, apatite and other types of cargo.

The table below sets forth the breakdown of Murmansk Bulk Terminal transshipments by the type of cargo for the periods indicated.

	Six months ended 30 June	Years ended 31 December		
	2021	2020	2019	2018
	(*in millions of tonnes*)			
Fertilizers	1.8	3.5	3.5	3.6
Iron ore	0.9	2.3	2.1	1.4
Total	**2.6**	**5.8**	**5.6**	**5.1**

In the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, transshipment capacity of Murmansk Bulk Terminal was utilised for 63%, 68%, 66% and 60%, respectively.

In order to meet the growing demand for transshipment of mineral fertilisers, the Group plans to expand the annual transshipment capacity of its Murmansk port assets from 29 million tonnes to 31 million tonnes. Completion is expected in 2024. Capital expenditures related to the project are estimated at U.S.$41 million. As at 30 June 2021, the Group spent U.S.$3.3 million on the implementation of the project.

As of the date of this Prospectus, Murmansk Bulk Terminal is fully owned by the Group through LLC "Murmansk Bulk Terminal".

Vanino Bulk Terminal

Vanino Bulk Terminal was built by the Group and commissioned in 2009. It is one of the largest commercial seaports in the Sea of Japan with annual transshipment capacity of 24 million tonnes and it provides access to the Pacific Ocean and key logistics hubs in Asia-Pacific such as seaports in China, South Korea, Japan and Taiwan. The port handles goods arriving by sea and rail. The port is connected to the key Russian railway routes Trans-Siberian Railway and Baikal-Amur Mainline, which secures stable export supplies from the Far East and Siberia.

Vanino Bulk Terminal operates two mooring berths, which can accommodate vessels with a capacity of up to 75 thousand tonnes. In the periods under review, all transshipments at Vanino Bulk Terminal were comprised of coal. In the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, 10.7 million, 23.2 million, 20.5 million and 20 million of coal was transshipped through the Vanino Bulk Terminal, respectively. In the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, transshipment capacity of the Vanino Bulk Terminal was utilised for 89%, 97%, 86% and 83%, respectively.

To support growing coal exports to the Asia-Pacific region, the Group is planning to expand the annual transshipment capacity at Vanino Bulk Terminal from 24 to 40 million tonnes by 2025. Capital expenditures related to Vanino Bulk Terminal are estimated at U.S.$390 million. As at 30 June 2021, the Group spent U.S.$36 million on the implementation of the project.

As of the date of this Prospectus, Vanino Bulk Terminal is fully owned by the Group through JSC "Daltransugol".

Maly Port

The Group acquired 49.9% stake in Maly Port in 2010. The port has an annual transshipment capacity of 4 million tonnes and it provides access to the Pacific Ocean as well as key logistics hubs in Asia-Pacific. The port handles goods arriving by sea and rail.

Maly Port operates three mooring berths, which can accommodate vessels with a capacity of up to 38 thousand tonnes. In the periods under review, all transshipments of Maly Port were comprised of coal. In the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, 1.8 million, 3.4 million, 2.7 million and 2.5 million of coal was transshipped through Maly Port, respectively. In the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, transshipment capacity of the Maly Port was utilised for 90%, 84%, 69% and 62%, respectively.

In August 2021, the Group entered into sale and purchase agreement to purchase 5.1% stake in LLC "Stevedoring Company "Maly Port" and the sale was completed on 31 August 2021. As of the date of this Prospectus, Maly Port is 55.0% owned by the Group through LLC "Stevedoring Company "Maly Port". Another significant shareholder of Maly Port is Grigory Gladkish who owns 45.0% stake in LLC "Stevedoring Company "Maly Port".

Tuapse Bulk Terminal

Tuapse Bulk Terminal was acquired by the Group in December 2020. The port has an annual transshipment capacity of 2.3 million tonnes and it provides access to the Black Sea as well as key logistics hubs in Europe. The port handles dry bulk cargo arriving by sea and rail.

Tuapse Bulk Terminal operates one mooring berth, which can accommodate vessels with a capacity of up to 50 thousand tonnes. In the periods under review, all transshipments of Tuapse Bulk Terminal were comprised of fertilizers. In the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, 0.8 million, 1.6 million, 1.7 million and 1.9 million of fertilizers were transshipped through Tuapse Bulk Terminal, respectively. In the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, transshipment capacity of Tuapse Bulk

Terminal was utilised for 70%, 70%, 72% and 81%, respectively.

As of the date of this Prospectus, Tuapse Bulk Terminal is fully owned by the Group through LLC "Tuapse Bulk Terminal".

Rail infrastructure and transportation

The Group operates one of the largest fleets of railcars in Russia totalling 56.8 thousand units as at the date of this Prospectus, of which 25.9 thousand were owned and 30.9 thousand were leased by the Group.

The following table sets forth the breakdown of owned and leased railcars under the Group's management for the periods indicated:

	Six months ended 30 June	Years ended 31 December		
	2021	2020	2019	2018
		(thousand units)		
Owned railcars.....	25.9	20.9	11.0	10.4
Leased railcars.....	30.9	27.7	37.4	28.8
Total railcars.....	**56.8**	**48.7**	**48.4**	**39.2**

The table below sets forth the breakdown of the railcars operated by the Group as at 30 June 2021.

	Total railcars	Share of total fleet	Average age	Service life
	(thousand units)	*%*	*years*	*years*
Gondola cars.....	52.3	92%	7.1	29
70-tonnes.....	17.2	30%	11.8	22
75-tonnes.....	24.0	42%	4.0	36
77-tonnes.....	11.2	20%	8.5	27
Hopper cars.....	4.4	8%	10.1	26
70-tonnes.....	3.0	5%	18.8	26
77-tonnes.....	1.4	2%	4.6	26
Total railcars.....	**56.8**	**100%**	**7.3**	**29**

High-capacity railcars, i.e., 75 and 77 tonnes railcars, comprise the largest part of the Group's railcar fleet, totalling 64% of the Group's railcars as of 30 June 2021. High-capacity railcars were designed based on the Group's bulk cargo optimisation requirements, and enable the Group to increase a trainload from 6,300 tonnes to 7,100 tonnes and to decrease its electricity consumption per tonne. The first heavy train weighing 7,100 tonnes composed of innovative high-capacity railcars was sent from Tugnuisky to Vanino in February 2020, and by the end of 2020, the Group was sending more than six heavy trains a day to Far Eastern ports from Kuzbass and Buryatia. The Group expects that a regular operation of 7,100-tonne trains will enable it to increase shipments to Vanino by up to two million tonnes per year.

In the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, the Group's rail shipments amounted to 62.9 million tonnes, 109.9 million tonnes, 104.7 million tonnes and 100.3 million tonnes, respectively. In the periods under review, all railcar shipments were comprised of coal produced by the Coal Division.

The Group's loading and railway infrastructure also includes approximately 1 thousand km of railway tracks, 16 internal loading stations and over 300 locomotives, providing access to the national railway network.

Customers and sales

The Logistics Division provides services primarily to the Group's Coal Division and Energy Division. The revenue generated by the Logistics Division from the inter-segment operations represented 76.3%, 86.9%, 86.0% and 93.3% of the Logistics Division total revenue in the six months ended 30 June 2021 and in the years ended 31 December 2020, 2019 and 2018, respectively.

The following table shows a breakdown between intra-group and external revenue from logistics operations in the six months ended 30 June 2021 and the in the years ended 31 December 2020, 2019 and 2018.

	Six months ended 30 June	Year ended 31 December		
	2021	2020	2019	2018
Revenue	*(in U.S.$ million)*			
Logistics segment external revenues	279	252	309	135
Inter-segment revenues	896	1,666	1,903	1,875
Total	**1,175**	**1,918**	**2,212**	**2,010**

External customers of the Group's logistics services primarily include exporters of coal and mineral fertilizers. The table below sets forth information on the largest external customers of the Logistics Division in 2020.

Customer	Customer's Sector	Primary service provided to customer
Koeklirichi	Coal	Transshipment at a port
Sibantracit	Coal	Transshipment at a port
Phosagro	Fertilizers	Transshipment at a port
Akron	Fertilizers	Transshipment at a port

Competition

Currently, the Group's rail transportation is not subject to significant market competition as the Group's railcars are primarily used for transportation of its own produced coal and for other needs.

Health, safety, environment and community

As one of the largest producers of electricity, heat and coal, and a major port and railcar operator in Russia, the Group adheres to responsible and sustainable business practices. The Group strives to minimise the environmental impact of its operations and maximise its contribution to the sustainable social and economic development of the territories where it operates.

The Group is committed to full disclosure of information regarding its financial, operational, strategic results and sustainable development indicators. For fifteen years, the Group has been publishing annual reports (including integrated annual reports in the last five years) and sustainable development reports prepared in line with the requirements of Russian laws, the recommendations of the International Integrated Reporting Council (IIRC) and the Global Reporting Initiative (GRI) in order to improve the quality of disclosure of non-financial information and foster dialogue with stakeholders. Every six months, the Group also publishes financial statements prepared in accordance with International Financial Reporting Standards (IFRS) and certified by an external auditor.

The Group maintains high corporate governance standards based on the legislation of the Russian Federation and ISO international standards applicable to the Group's business. The Group's corporate policies cover the main areas of its activities related to industrial safety, environmental protection, compliance, anti-corruption, quality of coal products, information, energy efficiency and others. In particular, the Group adopted the Code of Corporate Ethics and Corporate Social Policy that describe corporate values and culture, alongside relationship with suppliers and local communities.

The Group's approach to sustainability is guided by key international principles and standards, including the UN Global Compact, the Social Charter of Russian Business and the ISO 26000 Social Responsibility Standard. Moreover, the Group also supports local sustainability reporting initiatives set out in Social Charter of Russian Business. The Group's units are systematically audited for compliance with international standards in the field of environment, health and safety, energy efficiency, compliance and anti-corruption:

- OHSAS 45001 Occupational Health and Safety Management System;

- ISO 14001 Environmental Management System;
- ISO 9001 Quality Management System;
- ISO 50001 Energy Management System;
- ISO 55001 Asset Management System;
- ISO 37001 Anti-Bribery Management System;
- ISO 19600 Compliance Management System.

The Group also recognises that its work should contribute to broader public goals, including those set out in the United Nations Sustainable Development Goals (UN SDGs). In particular, the Group has committed to contributing to the following UN SDGs:

- SDG Target 3: ensure healthy lives and promote well-being for all at all ages;
- SDG Target 4: ensure inclusive and equitable quality education and promote lifelong learning opportunities for all;
- SDG Target 5: achieve gender equality and empower all women and girls;
- SDG Target 6: ensure availability and sustainable management of water and sanitation for all;
- SDG Target 7: ensure access to affordable, reliable, sustainable and modern energy for all;
- SDG Target 8: promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all;
- SDG Target 9: build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation;
- SDG Target 10: reduce income inequality within and among countries;
- SDG Target 11: make cities and human settlements inclusive, safe, resilient, and sustainable;
- SDG Target 12: ensure sustainable consumption and production patterns;
- SDG Target 13: take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy;
- SDG Target 14: conserve and sustainably use the oceans, seas and marine resources for sustainable development;
- SDG Target 15: protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss; and
- SDG Target 17: strengthen the means of implementation and revitalize the global partnership for sustainable development.

The Health, Safety and Environment Committee at the Board of Directors level develops and monitors the Group's strategy of industrial and environmental safety. The main responsibility for this strategy rests with the Group's CEO. At the management level, the Group has specialised committees and HSE Directorate in place to support the CEO by assessing the compliance of the industrial safety system with regulatory and corporate requirements, analysing the effectiveness of controls and measures to mitigate

sustainable development risks, organising and coordinating the introduction of policies and sustainable development programmes at existing assets.

In accordance with the international best practices, the Group integrates the principles of social responsibility into decision-making processes and operational activities. The system of key performance indicators adopted by the Group motivates management and employees to effectively address both production and sustainable development tasks.

In January 2021, the Group's environmental, social and governance practices were evaluated by S&P Global Ratings. The Group's scored 28 out of 50 for environmental profile, 32 out of 50 for social profile and 46 out of 65 for governance profile. The overall ESG rating of the Group was 44 out of 100.

ESG ratings may vary amongst ESG ratings agencies as the methodologies used to determine ESG ratings may differ. The Group's ESG ratings are not indicative of its current or future operating or financial performance, or any future ability to service the Notes and are only current as of the dates on which they were initially issued. Prospective investors must determine for themselves the relevance of any such ESG ratings information contained in this Prospectus or elsewhere in making an investment decision. Furthermore, ESG ratings shall not be deemed to be a recommendation by the Group or any other person to buy, sell or hold the Notes. Currently, the providers of such ESG ratings are not subject to any regulatory or other similar oversight in respect of their determination and award of ESG ratings. For more information regarding the valuation methodologies used to determine ESG ratings, please refer to the relevant ratings agency's website (which website does not form a part of, nor is incorporated by reference in, this Prospectus).

Health and safety

The Group considers maintaining the health and safety of all employees as one of its principal responsibilities. The Group consistently improves its industrial and occupational safety policies which are based on principles and guidelines consistent with the UN Global Compact, the UN Sustainable Development Goals, the Bettercoal Code and the leading international standards, and also supports specialised initiatives such as Vision Zero (zero injuries). The management system at the Group's assets is being improved in accordance with the new ISO 14001 international standards. The Group's assets in Krasnoyarsk and Khakasia have passed ISO certification. The Group plans to complete ISO audit with respect to the other production plants by the end of 2021. As at the date of this Prospectus, approximately 69% of the Group's assets have passed the external environment audits. The Group's approach assumes that compliance with safety policies and regulations is imperative for all employees, contractors and subcontractors.

The Board of Directors monitors the progress of the health and safety strategy of the Group. In particular, since February 2021, the dedicated Health, Safety and Environment Committee of the Board of Directors regular management reports on the state of production safety, discusses strategic initiatives and their progress, evaluates the completeness and sufficiency of response measures and sets key performance indicators (KPIs) for executives in this area.

The main risks related to the Group's industry are associated with potentially explosive concentrations of methane, accumulation of fine, explosive coal dust in working areas, location of large equipment in open-pits, mines, ports and power facilities, significant electrical and fire hazards in the energy segment.

In underground mining, the Group's activities are mainly aimed at ensuring safe levels of mine methane and delivering a set of dust suppression measures. To this end, the Group closely monitors the functioning of control systems to check the presence of hazardous gas and dust in the mine air, sets up optimal ventilation and gas management schemes, provides mining sites with fresh air, carries out comprehensive gas drainage and lowers the risk of coal dust explosion by using inert dust for stone-dusting. To reduce dusting at open-pit mines, washing plants and ports, the Group uses aspiration and dust removal systems, vacuum collection, transportation and discharge of fine coal dust, and equips

production areas, warehouses, ports and adjacent territories with fog-generation units and foam generators.

The Group has developed a unified safety management information system with the Situation Analysis Centre located in Moscow and the Unified Dispatch and Analytical Centre in Kuzbass; they ensure real-time monitoring of industrial safety parameters across various mining assets. Additionally, the Group has introduced the Industrial Safety Remote Monitoring System, which aggregates information from existing information systems at mining units, predicts risks and evaluates the required response time to a particular production situation.

At energy assets, the Group focuses on raising the level of fire safety and monitoring the reliability and condition of equipment. The Group applies fire-retardant coatings on electrical power cables and installs flame arrestors in boiler coal pulverisation units and additional fire protection systems for personnel, and controls the condition of metal elements of the equipment operating under excess pressure.

As operator of hazardous industrial facilities, the Group has a range of obligations under applicable safety laws and regulations and the Labour Code of the Russian Federation No. 197-FZ dated 30 December 2001, as amended ("**Labour Code**"**)**. In accordance with such safety laws and internal policies, the Group conducts advanced training programmes at its own training centres. The Group has created dedicated systems to respond to emergencies and maintain such systems in working condition, informing the respective supervising governmental agencies about any emergencies that have occurred. The Group's productions sites are equipped with training systems that enable employees to access interactive training programmes, pass tests using special terminals and conduct express checks of their knowledge of health and safety requirements before the shift.

The Group strives to create a healthy and safe working environment at each of its production sites or facilities by assessing the potential risks faced by its employees on a regular basis and implementing appropriate safety measures. The Group manages health and safety risks through internal audits and daily monitoring, which make it possible to quickly identify hazards, risky production situations and any unsafe actions of personnel. Regular assessment of risks related to personnel, processes, working conditions and equipment is carried out at all levels of management and serves as the basis for further steps to improve the level of industrial and occupational safety.

In addition, the Group runs programmes focused on maintaining and improving employee health, in terms of overall production and specific risks. These programmes include annual and unscheduled check-ups to identify diseases early on, after which employees are placed into supervision groups and prescribed treatment or offered rehabilitation. Every employee working in harmful and/or hazardous conditions receives periodic medical check-ups.

In the Coal and Logistics Divisions, diseases related to the respiratory system, hearing and physical overload are the most common. For the prevention of occupational hearing loss, which prevails in the structure of occupational pathologies, the Group developed and use a two-stage therapeutic and preventive programme, including drug therapy and physiotherapy. To prevent diseases of the respiratory system, musculoskeletal system and vibration sickness, the employees of the Group receive post-shift rehabilitation (inhalations, whirlpool baths), halotherapy and exercise on treatment and diagnostic machines. In 2020, occupational diseases reduced by 21% compared to 2020.

All fatal accidents and serious injuries are investigated by special commissions and reviewed by the Health, Safety and Environment Committee of the Group's Board of Directors. The Group conducts detailed analysis of each case, identifies the causes of accidents related to both technical and human factors and develops comprehensive measures to prevent such incidents in the future. In 2020, four employees and one contractor's employee suffered fatal accidents. These accidents were thoroughly investigated by dedicated panels, as well as by the Group's Health and Safety Committees.

The Group regularly invests in measures and activities to improve the health and safety system and working conditions the positive effect of which is evident from the gradual decrease in LTIFR. The

Group's overall LTIFR fell from 0.55 in 2018 to 0.50 in 2019 and 0.48 in 2020. The coal segment's LTIFR decreased to 0.69 in 2020, as compared to 0.74 and 0.72 in 2019 and 2018, respectively. In the energy segment, LTIFR was 0.29, 0.24 and 0.26 in 2018, 2019 and 2020, respectively. In the logistics segment, LTIFR fell from 1.02 in 2018 to 0.51 in 2019 and 0.52 in 2020. The Group's investments in occupational health, safety and environment initiatives, including measures to improve working conditions and enhance industrial safety, amounted to U.S.$83 million, U.S.$87 million and U.S.$81 million in 2020, 2019 and 2018, respectively. In the last five years, the Group has invested over U.S.$550 million in health, safety and environment.

In response to the COVID-19 pandemic, for the effective control and coordination of activities, the Group established Response Centres for Preventing the Spread of Infections at its head office, in each regional production association and at production facilities.

Also, the Group implemented a number measures to protect its employees such as temperature checks, mandatory use of personal protective equipment, regular cleaning and disinfection, remote working schedule for office employees, health screenings and examinations, social distancing, enhanced testing and vaccination. The Group undertakes regular testing of employees for COVID-19, along with health professionals at corporate health posts, staff of canteens and arriving shift workers. In February 2021, the Group started vaccination of its employees. As at the end of June 2021, approximately 17% of the Group's employees were vaccinated against COVID-19.

Environmental protection and climate projects

The Group is highly aware of the environmental impact of its operations and considers the environmental protection as an integral part of its business. The Group contributes to solving environmental problems and combating climate change by searching for technologies that meet the growing demand for coal while reducing emissions of pollutants and greenhouse gases across the entire supply chain.

The Group's approach to environmental safety is reflected in the Group's Environmental Policy developed in accordance with Russian laws and international practice in the field of environmental management, including the ISO 14001 standards. The Group's overall environmental objectives include its commitment to: (1) operate in compliance with state, regional and local environmental legislation, as well as best practices applied internationally; (2) ensure the rational use of natural resources; (3) mitigate the adverse environmental impact of the Group's operations; (4) continually improve the Group's environmental performance and reduce its impact on global warming; and (5) achieve compliance with internationally recognised standards of environmental management systems. Environmental indicators are included in the KPI map for those managers responsible for the implementation of programmes aimed at environmental protection.

The Group's corporate environmental control system covers all stages of its operational cycle, from mine development, mining and processing to product transportation and transshipment, the generation of electricity and heat. Compliance with the Group's environmental policies and requirements is mandatory for all the contractors and subcontractors working at the Group's production sites. The Group carefully monitors the availability of the necessary permits and licenses. As of 30 June 2021, the Group had 97% of such permits, with the rest being prepared.

The Group's assets undergo regular audits to ensure that its environmental management systems comply with the ISO 14001 environmental management international standards. In 2020, following an expert appraisal, Vanino Bulk Terminal received the Russian Transport Security 2020 national award for "Best Transport Infrastructure Entity or Marine or River Carrier that Meets the Transport Security Requirements". The Murmansk Commercial Seaport received the Platinum Certificate of Compliance with the Clean Port environmental standard. Furthermore, in 2020, French Standardisation Association (AFNOR) audited the Group's units in the Krasnoyarsk region and Khakasia and confirmed the high level of the Group's environmental management practices, including risk management. Also, in 2020,

the Murmansk Commercial Seaport was recertified for compliance with the ISO 14001 international environmental standard.

The Group regularly invests in new environmental technologies and protection measures. Its investment in environmental protection totalled U.S.$41 million, U.S.$48 million and U.S.$68 million in 2020, 2019 and 2018, respectively.

Air protection

At all of its assets, the Group monitors the air in the sanitary protection zone involving both the laboratories of the Group or third-party accredited laboratories. At the power stations, the bulk of polluting emissions consists of particulate matters, sulphur and nitrogen oxides. To minimise such pollutant emissions and to improve the air quality in the cities where it operates, the Group uses advanced dust-catching equipment (electrostatic precipitators, cyclone collectors), which captures up to 99.7% of fly ash and other solids, and introduces advanced low-emission coal burning technologies. One of the key projects is expanding the Group's co-generation capacities and replacing obsolete and inefficient coal-fired boiler houses, not provided with gas cleaning units, with CHPPs that have ash filters installed. In 2020, the Group began the installation of a 24/7 emission monitoring system at the power plants, with the pilot project in Krasnoyarsk.

The main sources of air emissions from the open-pit mining and logistics are dust emissions generated during drilling, blasting and excavating operations, transportation of rock mass, dumping and coal storage. The Group minimises dusting at all stages of its operating cycle, from mining to power generation and transshipment at ports, in order to ensure safe working conditions for employees and protect nearby areas from dust. The Group uses sprinkling equipment and fog-generation units at open-pit mines and ports, as well as protected telescopic conveyors for coal loading at washing plants, ports and power plants. By relying on the best practices of international stevedoring companies, the Group has developed and implemented a project on construction of dust and wind shields at ports to prevent the wind blowing away the dust. In 2020, the Group completed the construction of dust shields at Murmansk Commercial Seaport, with the wind shields surrounding the whole border of the port on the land, and continued the installation of relevant shields at Maly Port, along with the design and research work on the construction of dust and wind shields at Vanino Bulk Terminal.

Climate projects and energy efficiency

The Group continuously develops new technologies and delivers programmes and projects to reduce the carbon footprint of its operations and products and improve the energy efficiency of the Group's assets.

The Group's strategy to reduce its carbon footprint is as follows:

- Investing in the development and introduction of technologies that improve the energy efficiency of operations;
- Maximising the generation of heat and electricity in a combined mode to reduce emissions per unit of energy;
- Increasing the share of washed coal to lower the ash content and increase the calorific value of coal, which reduces emissions during transportation and burning;
- Capturing and utilising GHGs;
- Delivering carbon offset projects.

The key project related to carbon footprint reduction consists in replacing standalone boiler houses with heat produced by combined heat and power plants. The environmental advantage of co-generation lies in the re-use of boiler steam used for electricity generation to heat water in the heating system. Co-

generation of heat and electricity helps the Group to save up to 50% of fuel resources, as compared to the separate generation of electricity and heat, and to reduce air emissions per unit of energy by 32%. As of 31 March 2021, the Group replaced 55 boiler houses out of 175 and plans to replace another 120 houses by 2024. The Group believes that starting from 2025, its modernisation programme will bring a 1 million tonnes reduction in CO_2 emissions per year.

The increasing share of higher-capacity railcars allows the Group to gradually decrease the electricity per tonne consumed and, therefore, carbon footprint of transportation.

The greenhouse gas emissions from the Group's coal mining operations are associated with methane emissions as a result of degassing mines to ensure the safety of personnel and all production processes. As part of its climate strategy, the Group utilises part of the captured mine methane to generate electricity and heat for own needs. Such specialised units operate at Kirov and Komsomolets mines.

Total greenhouse gas (the "**GHG**") emissions increased in 2020 to 66 million tonnes of carbon equivalent, as compared to 61 million tonnes of carbon equivalent and 64 million tonnes of carbon equivalent in 2019 and 2018, respectively, due to the expansion of the energy business. At the same time, the power plants included in the Group's 2019 perimeter reduced their total emissions by 18% through a set of measures to improve energy efficiency.

The following table sets forth the Group's greenhouse gas emissions per unit of heat and electricity produced.

	Year ended 31 December		
	2020	**2019**	**2018**
GHG emissions per unit of heat produced, kg CO2e/Gcal	448	447	434
GHG emissions per unit of electricity produced, g CO2e/kWh	840	822	826

Mine methane capture decreased in 2020 to 3.3 million tonnes of carbon equivalent, as compared to 5.1 million tonnes of carbon equivalent and 5.6 million tonnes of carbon equivalent in 2019 and 2018, respectively, due to adoption of measures aimed at decreasing the Group's carbon footprint. Mine methane utilisation in the same periods has increased from 1% in 2019 and 2018 to 2% in 2020.

The Group's Energy Management System was certified in compliance with the ISO 50001 international standards. The Group carries out regular internal energy audits of its facilities to analyse the structure of the total energy consumption and types of fuel used, the potential for energy saving, to identify problems that lead to the waste of resources and to develop measures for improving energy efficiency. Among the main activities carried out by the Group to enhance energy efficiency, including to reduce the consumption of electricity and fuel, are increasing the share of co-generation, optimising the operation and movement of mining machinery and transport infrastructure, timely repairing heat networks and power equipment to minimise heat losses.

Water protection

The Group operates in regions with large natural water reserves and does not place local communities or the environment at risk of fresh water shortages. The Group does not use water from vulnerable or state-protected sources, or from sources of particular importance to local communities or to biodiversity.

At coal mining facilities, most of the wastewater discharged is natural water (with quality indicators typical of the region's groundwater) collected during the development of deposits. The Russian legislation (methodological recommendations (MR 2.1.0246-21) on enforcing sanitary and epidemiological requirements for the maintenance of territories in urban and rural communities, for water bodies, drinking water and drinking water supply, air, soil, residential premises, for the use of industrial facilities and public spaces, organisation and implementation of sanitary and anti-epidemic

(preventive) measures approved by the Chief State Medical Officer of the Russian Federation adopted on 17 May 2021) requires the discharge of a high-quality wastewater. To meet these stringent requirements, as part of its environmental strategy, the Group builds or renovates wastewater treatment facilities for cleaning mine, quarry and storm water to meet those stringent regulatory requirements. More than half of the Group's coal facilities are equipped with modern water treatment facilities, and the Group continues to progress planned upgrades and the construction of additional facilities at its assets. The Group monitors discharged wastewater across all production units on a monthly basis. Part of the treated water is used by enterprises for their own production needs.

During the processing and transportation of coal, water is used for coal washing and dust suppression. Most of the Group's washing plants and ports use circulating, closed water supply systems. At the Murmansk Commercial Seaport, storm water is collected, treated and used for spraying in dust suppression systems.

The main use of water resources at power generating facilities is related to the cooling of power plant equipment. No water used for turbine cooling comes into contact with the contaminated circuit. Therefore, the Group's power plants return water to the water bodies not inferior in quality to the withdrawn one. The Group's key initiatives in the Energy Segment are aimed at reducing water consumption for production needs from surface and underground sources by increasing the share of circulating water supply and creating closed-loop water production cycles without discharging wastewater into water bodies. At around 77% of the Group's power plants, water goes after treatment to the circulating system of hydraulic ash removal, which excludes the discharge of industrial water from ash dumps into water bodies. In 2020, the Group developed a project of such system to implement it at Novosibirskaya CHPP-2 and CHPP-3.

Waste management

Approximately 99% of all waste generated during the Group's operations is classified as non-hazardous (Hazard Class IV and V under the applicable Russian categories). This is ash and slag waste, overburden and enclosing rock generated during deposit development. The Group runs projects on the involvement of waste in economic activities, e.g. for the rehabilitation of disturbed lands, dumps and the construction of roads in Khakasia, Kuzbass, the Novosibirsk and Krasnoyarsk regions.

Also, in 2020, the share of used and recycled waste totalled 53% for the coal segment and 20% for the energy segment. The potential for reuse of waste from thermal power plants is approximately 60% of the total waste.

The Group stores part of the waste from its TPPs at ash dumps. The Group regularly monitors the safety of these facilities, including the water level in ash dump beds and piezometric wells, through regular depth measurements and other checks. At least once every five years, the Group engages independent third party to analyse the safety of the Group's hydraulic structures.

The remaining 1% of waste that is classified as hazardous is transferred to special facilities for neutralisation. In order to reduce waste sent for disposal, the Group's facilities in Zabaikalye process organic waste, industrial rubber articles, polymers, rubbers, oil sludge, bitumen, roofing felt, waste oils, medical, wood and other carbon-containing waste. In Khakasia, the Group operates an upcycling plant, converting worn dump-truck tyres into tiles for injury-free sports coatings and rubber granules for road surfacing. At some assets in Khakasia and the Krasnoyarsk region, the Group arranged pilot sites for separate collection of waste, which the Group transfers to dedicated enterprises for processing.

Biodiversity

The Group works with specialised organisations to assess the state of biodiversity during engineering and environmental surveys at pre-design and design stages. The Group includes its assessment results in materials for public hearings and deposit development projects. These projects also undergo state environmental impact assessment.

The Group runs projects to protect biodiversity in several areas: protecting the fauna in water bodies, including installation of fish protection fences at plants and release of juvenile fish, carrying out reclamation activities to preserve plants on disturbed lands.

The Group is a partner of the Land of the Leopard National Park in Primorye and the Barguzinsky Nature Reserve in Buryatia. In 2020, with the support of the Group in Kuzbass, the Kokuyskoye Swamp nature reserve was created with the purpose to preserve the nature of the area where rare and endangered species of flora grow.

In 2020, the Group launched its biodiversity monitoring in the territories where the Group operates. Based on this monitoring, the Group will prepare action plans for its assets to address local biodiversity risks and regulatory requirements.

Land rehabilitation

Deposit development is associated with land disturbance. Before the start of mining, the Group carefully strips the fertile topsoil and stores it, to bring it back after rehabilitation. The Group reuses overburden resulting from coal mining for backfilling, filling sinkholes and reclaiming land disturbed by mining operations in accordance with the approved technical plans for deposit development (these include plans to restore the terrain and top soil and plant greenery). In 2020, the Group reclaimed the total of 84 hectares of disturbed lands.

Personnel development

The Group strives to create equal and fair working conditions for all employees in order to maximise their potential regardless of nationality, gender, origin, age, education, social status, religious, political and other beliefs.

Due to the complexity of production processes and the need for highly qualified personnel, the Group pays great attention to recruiting and retaining employees.

The Group develops an integrated talent management system, from attracting, recruiting and adapting to incentivisation, talent management and training. Its approach to work with employees is to select, evaluate and develop them from school age to senior managers.

To reach young people, the Group runs the Young Professionals educational programme, which includes overseeing specialised classes for high school students dedicated to coal and power industries and logistics in regional schools, cooperation with Russia's vocation-oriented colleges and universities. The Group strengthens interaction with leading specialised universities, develops educational programmes for students and accepts them for internship with the possibility of employment after graduation. Additionally, the Group promotes the employer's brand and participates in youth forums, holds professional skills contests, job fairs, and provides vocational guidance for pupils and applicants.

For existing employees, the Group sets up a performance management and review system, introduces a system of rotation between assets, functions and business units, and ensures fair appointment and promotion. Corporate education enables employees to improve their qualifications on an ongoing basis at local training centres and the Corporate University. The Group's Corporate University is an analytical, methodological and advisory centre for knowledge management and human resources development. It provides the core basis for the Group's personnel training. A distinctive feature of corporate training programmes is their project component, which enables training participants to use their new knowledge in real life and generate ideas with real economic benefits.

Also, the Group runs fourteen training centres, licensed by Russian state education, which continued their work in 2020 and conducted mandatory and advanced trainings for approximately 38 thousand employees. More than 50% of the Group's employees are annually retrained in health and safety.

Special attention is paid to supporting the transformation of key processes and creating a high-quality

organisational environment in order to achieve quick and effective changes across the Group and reduce personnel disloyalty risks (including safety culture).

The Group's personnel motivation system is based on the principles that support the attractiveness of work and the retention of talented and successful employees, and stimulate them to produce excellent results, both in individual and team work.

The Group has a system of short-term and long-term incentivisation based on KPIs, which ensures the achievement of annual goals and the completion of projects important for improving operational efficiency, expanding the business and diversifying it. This system is in line with the current strategy of the Group and the interests of its shareholders and covers all areas of business, including production, industrial safety and environmental protection. In 2020, the Group began to revise the KPI system taking into account the new strategy and aiming to add goals in the areas of talent management, corporate culture and social policy. The Group also rewards employees for participating in long-term strategic projects and operational improvement programmes, as well as for obtaining patents and implementation of cost-saving initiatives.

With such an integrated approach, the Group ensures a staffing level of 99% and low staff turnover rate, which was approximately 13% in the year ended 31 December 2020.

Community development

Understanding and responding to the concerns and priorities of regions and local communities are significant elements of the Group's corporate responsibility.

The Group performs an important infrastructural function, as it supplies heat to over 5.5 million people in regions where the temperature drops below 0 °C for more than six months a year. The Group significantly contributes to local employment by creating attractive working conditions for over 74 thousand people in 14 regions of Russia (not including Moscow and the Moscow region). The significant majority of the Group's employees in the regions are local residents. The Group stimulates the overall regional development through regular tax payments to federal, regional and municipal budgets. In 2020, the Group's tax payments amounted to U.S.$314 million, 78% of which were paid to local budgets.

Moreover, the Group is also taking other steps to make a positive and sustainable contribution to the economic and social aspects of people's lives in the regions of the Group's operations. In 2020, the Group has implemented more than 150 social and charitable programmes and facilitated creation of 51 new organisations with a view to help growing regional social infrastructure. When purchasing services and materials, the Group strives to work with local suppliers, supporting regional production and economy. In 2020, 66% of goods and services were provided to the Group by suppliers from the regions where it operates, compared to 64% in 2019 and 2018. According to the Group's estimates, total economic contribution of the Group to local communities in 2020 amounted to U.S.$1.8 billion.

The Group develops its social programmes taking into account the results of monitoring of the social situation, indicators of territorial development, satisfaction and needs of the local communities. For this, it uses sociological studies, cluster surveys, feedback on the results of projects and events. Regular auditing of implemented social programmes confirms that the results of the Group are consistent with its strategy. The effectiveness of its social projects is regularly evaluated by corporate and independent experts based on quantitative and qualitative indicators. Those involved in the assessment include experts from PricewaterhouseCoopers, the Russian Union of Industrialists and Entrepreneurs and the Public Opinion Foundation.

As a contribution to the sustainable development of the regions and local communities where the Group has a presence, the Group cooperates with regional and local authorities on issues such as investment climate and job creation; environment; healthcare and sports; education; social and community development; and culture and the arts. One of the key social responsibility tools for the Group are social entrepreneurship programmes. They contribute to the development of entrepreneurial and leadership

skills among local residents, gaining knowledge for establishing their own businesses and developing the region's economy.

The Group holds public consultations to assess its environmental and social impact in accordance with the legal requirements set by local authorities. The Group analyses the proposals received during such consultations and, if necessary, adjusts project documents in line with them. In 2020, public consultations were held to discuss the modernisation of water treatment facilities in Kuzbass, the reconstruction of a processing facility in Khakasia, the construction of new power units at the Tom-Usinskaya GRES and updated heat supply plans for the cities of Novosibirsk, Barnaul and Abakan.

The Group's charitable donations amounted to U.S.$14 million, U.S.$26 million and U.S.$38 million in 2020, 2019 and 2018, respectively.

Corporate governance

In its activities, the Group is guided by the Charter, the provisions of the Corporate Governance Code recommended by the Bank of Russia, the Regulations on the Board of Directors and Committees, the Regulation on Preparing, Convening and Holding the General Meeting of Shareholders and other internal documents based on the best international practices. The Group's corporate governance system relies on the following principles:

- Treating all shareholders equally, recognising and protecting their rights;
- Ensuring the efficiency of strategic and operational management and internal control and audit mechanisms;
- Ensuring financial and ESG transparency by providing stakeholders with accurate information in convenient formats;
- Adhering to rigorous ethical standards in business;
- Providing a decent, safe and healthy working environment for all employees.

The Group's governing bodies are the General Meeting of Shareholders, the Board of Directors and the CEO.

The General Meeting of Shareholders is the Group's supreme governing body; it makes decisions on the most important issues relating to its business, including an increase or decrease in authorised capital, the distribution of profit, the selection of members for the Board of Directors and external auditors.

The Board of Directors ensures effective management of the company and use of strategic opportunities, creates conditions for sustainable development of the Group in the long-term and an increase in the value of its assets, and guarantees the protection of shareholders' interests and disclosure of reliable information about the company. All Board members are Non-Executive Directors, with 50% being independent directors, including the Chairman of the Board and Chairmen of the most of the Committees. The Group believes that having at least half of independent directors on the Board contributes to more effective management, so it has adhered to this practice since 2005. Board members have extensive industry experience, including in international companies, and all the necessary competencies for the strategic management of the Group and its development. The Board of Directors continuously improves the quality of its work through annual performance assessment.

The Board of Directors has four committees: the Strategy Committee, the Audit Committee, the Nomination and Compensation Committee and the Health, Safety and Environment Committee, which provides the Board of Directors with strong competencies in assessing strategic development areas, own efficiency, internal control and building a safe production system.

Integrity and ethics are the Group's fundamental values with regard to all stakeholders. The Group runs a multi-level compliance system aimed at doing business in a transparent and scrupulous manner through continuous compliance with applicable laws, internal rules and regulations, external liabilities, compliance principles and standards in all business segments and all jurisdictions. The functioning and development of the Group's compliance and anti-corruption systems are based on dedicated policies; these systems are certified in accordance with the ISO 19600 and ISO 37001 international standards.

The Group's internal audit and risk management services complement its defence lines, control the efficiency of all processes and give methodological advice to the relevant departments.

Employees

In 2020, the Group was one of top ten largest private employers in Russia, according to the Group's calculations based on published statistical data. The number of personnel employed by the Group totalled 75,468 as at 30 June 2021, 73,382 as at 31 December 2020, 68,898 as at 31 December 2019 and 65,240 as at 31 December 2018.

As at 30 June 2021, 42% of the Group's employees were members of the trade unions. There have been no strikes or other cases of industrial action at any of the Group's operating subsidiaries in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018.

The Group makes defined contribution to state pension funds for its employees in accordance with the applicable legislation, and provides pension and other post-employment benefits to its employees under the collective bargaining agreements.

The Group also provides various benefits programmes and maintains the social facilities for its employees. The Group's programmes include voluntary medical insurance and insurance for industrial accidents programmes for employees; professional illness advanced care that includes medical check-ups and medical resorts treatment; medical special care meal plans for the personnel exposed to hazardous working conditions.

For more information related to employees development, see "*—Health, safety, environment and community—Health, safety, environment, climate projects, local communities and corporate governance—Personnel development*".

Significant Licenses

Mining Licenses

The Group is required to obtain and hold subsoil licenses in order to conduct its coal mining operations. The below table sets forth the Group's subsoil exploration and mining licenses as of the date of this Prospectus.

License	Area	Type of mine	Issue Date	Expiry Date
ABN-00473-TE	Ust-Abakan Area of Republic of Khakasia	Open pit	25/12/2007	01/01/2028
ABN-00578-TE	Ust-Abakan Area of Republic of Khakasia	Open pit	29/08/2011	29/08/2031
ABN-14668-TE	Ust-Abakan Area of Republic of Khakasia	Open pit and underground pit	24/04/2009	31/12/2035
ABN-14702-TE	Ust-Abakan Area of Republic of Khakasia	Open pit	26/06/2009	31/12/2034
ABN-15469-TE	Ust-Abakan Area of Republic of Khakasia	Open pit	10/01/2013	28/12/2032
KEM-15462-TE	Leninsk-Kuznetsky and Belovsky Areas of Kemerovskaya Region	Open pit	17/12/2012	14/12/2032
KEM-15184-TE	Leninsk-Kuznetsky and	Underground	05/08/2011	31/12/2034

	Belovsky Areas of Kemerovskaya Region	pit		
KEM-14712-TE	Leninsk-Kuznetsky area of Kemerovskaya Region	Underground pit	08/07/2009	31/12/2035
KEM-14707-TE	Leninsk-Kuznetsky area of Kemerovskaya Region	Underground pit	30/06/2009	31/12/ 2033
KEM-02110-TE	Leninsk-Kuznetsky area of Kemerovskaya region	Underground pit	10/12/2018	10/12/2038
KEM-01987-TE	Prokopievsky area of Kemerovskaya Region	Underground pit	28/11/2016	28/11/2036
KEM-01999-TE	Prokopievsky area and Novokuznetsky area of Kemerovskaya Region	Underground pit	11/01/2017	20/01/2037
KEM-02042-TE	Prokopievsky area and Novokuznetsky area of Kemerovskaya Region	Underground pit	13/11/2017	07/11/2037
KEM-02109-TE	Leninsk-Kuznetsky and Belovsky areas of Kemerovskaya Region	Underground pit	10/12/2018	10/12/2038
KEM-02122-TE	Leninsk-Kuznetsky and Belovsky areas of Kemerovskaya Region	Underground pit	22/04/2019	15/04/2039
KEM-14705-TP	Prokopievsky area of Kemerovskaya Region	Open pit	26/06/2009	31/12/2023
KEM-01851-TE	Prokopievsky area of Kemerovskaya Region	Open pit	04/12/2014	04/12/2034
KEM-01558-TE	Leninsk-Kuznetsky area of Kemerovskaya region	Underground pit	20/04/2011	20/04/2031
KEM-01517-TE	Prokopievsky area of Kemerovskaya Region	Open pit	01/11/2010	31/10/2030
KEM-01359-TE	Leninsk-Kuznetsky area of Kemerovskaya region	Underground pit	12/02/2008	31/12/2041
KEM-01356-TE	Prokopievsky area of Kemerovskaya Region	Underground pit	04/02/2008	31/01/2028
KEM-01343-TE	Prokopievsky area of Kemerovskaya Region	Open pit	21/12/2007	31/12/2035
KEM-01342-TE	Prokopievsky area of Kemerovskaya Region	Underground pit	18/12/2007	31/12/2028
KEM-01341-TE	Prokopievsky area and Novokuznetsky area of Kemerovskaya Region	Open pit	07/12/2007	01/07/2025
KEM-01340-TE	Leninsk-Kuznetsky area of Kemerovskaya region	Underground pit	07/12/2007	20/12/2023
KEM-01339-TE	Prokopievsky area of Kemerovskaya Region	Underground pit	07/12/2007	31/12/2038
KEM-01338-TE	Prokopievsky area of Kemerovskaya Region	Underground pit	07/12/2007	31/12/2052
KEM-01337-TE	Prokopievsky area of Kemerovskaya Region	Open pit and underground pit	07/12/2007	07/12/2027
KEM-01903-TE	Belovsky area of Kemerovskaya Region	Underground pit	23/07/2015	20/07/2035
KEM-01938-TP	Prokopievsky area of Kemerovskaya Region	Underground pit	18/01/2016	18/01/2041
MXP-00706-MC	Mukhorshibirsky Area of Republic of Buryatia	Open pit	31/10/2019	31/10/2044
UDE-13244-TE	Mukhorshibirsky Area of Republic of Buryatia	Open pit	20/07/2005	01/06/2025

CHIT–00926–TE	Petrovsk-Zabaikalsky area of Zabaikalie Region	Open pit	06/10/1998	31/12/2031
CHIT–03501–TP	Petrovsk-Zabaikalsky area of Zabaikalie Region	Open pit	10/11/2015	15/11/2040
CHIT–13019–TE	Petrovsk-Zabaikalsky area of Zabaikalie Region	Open pit	11/03/2005	01/03/2025
YAKU-04382-TP	Neryingri area of Republic of Sakha (Yakutia)	Open pit	30/06/2015	15/05/2038
CHIT–02607–TE	Borzinsky area of Zabaikalie Region	Open pit	10/11/2015	31/12/2021
CHIT–02980–TE	Uletivsky area of Zabaikalie Region	Open pit	19/11/2019	31/12/2036
KPP–02745–BP	Sharypovsky area of Zabaikalie Region	Open pit	30/11/2015	31/12/2027
KPP–02670–BP	Nazarovsky area of Krasnoyarsk Region	Open pit	14/04/2015	31/12/2021
KPP–01910–TP	Kansky area of Krasnoyarsk Region	Open pit	30/05/2008	31/12/2030
KPP–01911–TE	Kansk area of Krasnoyarsk Region	Open pit	30/05/2008	31/12/2031
KPP–03350–TE	Rybinsky area of Krasnoyarsk Region	Open pit	05/02/2020	31/01/2040
KPP–02744–TE	Rybinsky area of Krasnoyarsk Region	Open pit	30/11/2015	31/12/2031
ABN-00545-TE	Beysky area of Krasnoyarsk Region	Open pit	04/10/2010	13/09/2030
ABN-00341-TE	Beysky area of Krasnoyarsk Region	Open pit	02/06/2003	01/01/2026
ABN-00223-TE	Beysky area of Krasnoyarsk Region	Open pit	17/11/2000	31/12/2025
KPP–03211–TE	Nazarovsky area of Krasnoyarsk Region	Open pit	15/06/2019	01/02/2041
KPP–03210–TE	Nazarovsky area of Krasnoyarsk Region	Open pit	15/07/2019	31/12/2023
ABN-00719-TE	Altai area of Republic of Khakasia	Open pit	03/08/2016	30/12/2024
VLV-02540-TE	Mikhailovsky area of Primorsky Krai	Open pit	29/01/2018	01/01/2034
VLV-02541-TE	Mikhailovsky and Khorolsky areas of Primorsky Krai	Open pit	29/01/2018	31/12/2026
VLV-02542-TE	Mikhailovsky area of Primorsky Krai	Open pit	29/01/2018	18/12/2032
VLV-02543-TE	Mikhailovsky and Oktyabrsky areas of Primorsky Krai	Open pit	28/01/2018	31/12/2036
VLV-02564-TE	Mikhailovsky area of Primorsky Krai	Open pit	14/12/2018	31/12/2023
VLV-02565-TE	Mikhailovsky area of Primorsky Krai	Open pit	14/12/2018	31/12/2023
VLV-02566-TE	Mikhailovsky and Oktyabrsky areas of Primorsky Krai	Open pit	14/12/2018	27/07/2033
VLV-02567-TE	Mikhailovsky and Oktyabrsky areas of Primorsky Krai	Open pit	18/12/2018	31/12/2021

HAB-02645-TE	Verhnebureinsky area of Khabarovsk Region	Open pit	06/03/2014	31/12/2033
HAB-02696-TE	Verhnebureinsky area of Khabarovsk Region	Open pit	08/12/2014	31/12/2034
HAB-12577-TE	Okhotsky area of Khabarovsk Region	Underground pit	09/08/2004	31/12/2027
HAB-12578-TE	Verhnebureinsky area of Khabarovsk Region	Open pit	09/08/2004	31/12/2025
HAB-12579-TE	Verhnebureinsky area of Khabarovsk Region	Open pit	09/08/2004	31/12/2036
CHIT-14483-TP	Kalarsky area of Zabaikalie Region	Open pit	29/05/2008	27/05/2033

Other Licenses

Under Russian law, electricity generation and sale operations are not subject to a licensing requirement (except for the activities of guaranteeing suppliers, legislation in respect of which has been adopted, however implementing regulations are being developed) but certain other related activities may be performed only on the basis of a specific licence granted by the state authorities. The Group maintains a number of such licences that are necessary for conducting its business. These include licences for the use of explosives and chemically hazardous production facilities of I, II, III hazard classes, the storage, transportation, processing and disposal of dangerous wastes and licences for the installation and maintenance of fire safety equipment and the operation of fire suppression equipment.

The Group has not experienced and does not expect to experience any material difficulties in renewing any licences it holds as they expire. See "*Regulation of Coal, Electricity and Transportation Industries—Regulation of Coal Industry—Licensing*" for additional details on licensing regulation.

Insurance

The Group maintains at least the minimum level of insurance required under the laws of each jurisdiction in which it operates. In particular, the Group maintains insurance for, *inter alia*, directors and officers liability, compulsory public liability for hazardous industrial facilities and hydraulic structures, compulsory motor liability, voluntary medical insurance, personal accident insurance, property damage and business interruption for majority of assets, cargo insurance, motor fleet hull insurance, hull insurance for leased railcars, charterers liability, general liability insurance, terminal operator's liability, insurance of liquidation and localization costs of the consequences of emergency situations, contractors risk insurance and other types of insurance.

Litigation

The Group has been and continues to be the subject of legal proceedings and adjudications from time to time, as well as regulatory and administrative investigations, inquiries and actions regarding tax, labour, environmental and other matters, which, in the past, have resulted in damage awards, settlements or administrative sanctions, including fines.

Neither the Group nor any of its subsidiaries has been involved in any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Group is aware) during the 12 months preceding the date of this Prospectus which may have or have had in the recent past significant effects on the financial position or profitability of the Group.

MANAGEMENT

Overview

Under the charter (the "**Charter**") of JSC SUEK (the "**Company**"), the Company's management bodies are the general meeting of shareholders (the "**General Meeting of Shareholders**"), Board of Directors and the Chief Executive Officer.

General Meeting of Shareholders

The General Meeting of Shareholders is the Company's supreme governing body. The General Meeting of Shareholders is convened by the decision of the Board of Directors based on its own initiative, at the request of the Internal Audit Commission, Company's Auditor and shareholders (a shareholder) holding not less than ten (10)% of voting shares in the Company as of the date of such request. The General Meeting of Shareholders is convened at least once a year.

Board of Directors

The Board of Directors is a management body that sets out the priorities of the Company's activities, approves the Company's development strategy, defines the basic principles and approached to the organisation in the Company's internal control system and risk management, controls the activity of Company's executives, as well as perform other key functions.

In its activity, the Board of Directors is guided by the legislation of the Russian Federation, the Charter, the Regulations on the Board of Directors of the Company, as well as certain other governing documents of the Company.

The Board of Directors currently consists of 6 members. The Charter provides for election of members of the Board of Directors at the annual General Meeting of Shareholders for a one-year term until the next annual General Meeting of Shareholders. All current members of the Board of Directors were elected at the annual General Meeting of Shareholders held on 25 May 2021. The table below shows the current members of the Board of Directors. The business address for each of the members of the Board of Directors is 53/7, Dubininskaya street, Moscow, Russia, 115054.

The following table sets forth the Board of Directors composition as at the date of this Prospectus.

Name	Age	Position
Samir Brikho	63	Chairman of the Board of Directors, Independent Director
Andrey Melnichenko	49	Non-Executive Director
Vladimir Rashevsky	47	Non-Executive Director
Juerg Seiler	66	Independent Director
Mikhail Kuznetsov	52	Non-Executive Director
Michael Hogan	62	Independent Director

None of the members of the Board of Directors has any conflicts, or any potential conflicts, between their duties to the Company and their private interests or other duties.

Samir Brikho

Samir Brikho holds a degree in Thermal Technology from the Royal Institute of Technology in Stockholm (Sweden). He received an Honorary Doctorate from Cranfield University in the U.K. He is also a graduate of the Young Managers Programme at INSEAD and the Senior Executive Programme at Stanford University. Between 1983 and 2000, Mr. Brikho held senior management positions at Asea and ABB Power Generation. In 2000, he moved to Alstom where he held positions of a Chief International Operations Officer, Senior Vice-President and CEO of Alstom Kraftwerke in Germany. In 2003, he became a CEO of ABB Lummus Global. In 2006, he was appointed to the Group Executive Committee of ABB Ltd. and served as Head of the Power Systems Division at ABB Group. Between 2006 to 2016, Mr. Brikho was CEO of Amec Foster Wheeler (formerly Amec), where he was widely

regarded for the company's financial recovery. In 2009, he was member of the advisory board of LIFE Lebanon and a former member of the advisory board of SOAS University of London. In 2010, Mr. Brikho served as U.K. Business Ambassador and a co-chair of the U.K.-UAE CEO Forum and the U.K.-Korea CEO Forum. In 2009 and 2016, Brikho served as chair of the World Economic Forum's Engineering and Construction Board. In 2015, he served as chair of the Forum's Disaster Resource Partnership and was co-chair of the Forum's Infrastructure & Urban Development Industries Committee. Between 2011 and 2020, he was non-executive director of Skandinaviska Enskilda Banken (SEB). Since 2016, he is a member of the advisory board of Stena. In 2018, he was appointed to the Board of Directors of EuroChem Group AG and was elected as Chairman of the Board of Directors in 2020. Mr. Brikho is a Chairman of the Board of Directors of the Company and a member of the Strategy, Nomination and Compensation and Health, Safety and Environment Committees.

Andrey Melnichenko

Andrey Melnichenko graduated from Lomonosov Moscow State University with a degree in Physics and from Plekhanov Russian Academy of Economics with a degree in Finance. Over the past 25 years, he has co-founded a number of large businesses including fertiliser producer EuroChem, the Group and Siberian Generating Company (SGC). In the early 1990s, Mr. Melnichenko co-founded MDM Bank, which became one of Russia's largest private banks. Mr. Melnichenko is a member of the Board of Directors of EuroChem Group AG and the Company. Mr. Melnichenko is a Chairman of EuroChem's Strategy Committee, Nomination, Remuneration and Corporate Governance Committee. He holds a position on the Board of the Russian Union of Industrialists and Entrepreneurs, where he chairs Climate Policy and Carbon Regulation Committee. Mr. Melnichenko is a Member of the Board of Directors of the Company, a Member of the Strategy Committee and a Chairman of the Nomination and Compensation Committee. See "*Shareholding*".

Vladimir Rashevsky

Vladimir Rashevsky graduated from Finance Academy under the Government of the Russian Federation, majoring in Global Economics. He holds a degree in Economic Science. He began his career in 1992, holding various positions in banking, including a position of Vice-Chairman of the Management Board of Avtobank. In 2000, he joined MDM Bank where he was appointed as Deputy Chairman of the Management Board. In December 2001, he became a Chairman of the Management Board. In 2004, he became a President of the Company and was Chief Executive Officer of the Company until May 2020. In September 2020, he was appointed as Chief Executive Officer and Chairman of the Management Board of EuroChem Group AG. In 2013, Mr. Rashevsky was appointed as member of the Board of Directors of Interregional Distribution Grid Company of Siberia. He also serves on the Executive Board of the Russian Union of Industrialists and Entrepreneurs as Mining Commission chairman and as Deputy Chairman of the Climate Policy and Carbon Regulation Committee. Mr. Rashevsky is a Member of the Board of Directors of the Company and a Member of the Strategy and Health, Safety and Environment Committees. See "*Shareholding*".

Juerg Seiler

Juerg Seiler holds a degree in Economics from University of St. Gallen (Switzerland). Mr. Seiler held a number of key financial positions across different businesses and has over 30 years of international experience including assignments in South Africa, Hong Kong, USA and Switzerland. During his career, Mr. Seiler has been a global CFO at ABB Power Systems and a CFO at ABB Lummus Global. Between 2012 and 2014, he served as CFO at Ventyx, the Enterprise Software business of ABB. Since 2015, Mr. Seiler serves as member of the Board of Directors of EuroChem Group AG. He is the Member of the Board of Directors of the Company and a Chairman of the Audit Committee.

Mikhail Kuznetsov

Mikhail Kuznetsov graduated from the Physics Faculty of Lomonosov Moscow State University. In the early 1990s, Mr. Kuznetsov worked in banking. Between 1995 and 2003, he was member of the State

Duma representing the Pskov Region and a Deputy Chairman of the Budgeting, Taxes, Banking and Finance Committee of the State Duma. Between 2004 and 2009, Mr. Kuznetsov was Governor of the Pskov Region. Mr. Kuznetsov established the Grazhdanskaya Pressa association of independent media in Pskov. Between 2013 and 2018, Mr. Kuznetsov was Chief Executive Officer of Siberian Generating Company (SGC). He is the Member of the Board of Directors of the Company and a Member of the Strategy and Nomination and Compensation Committees.

Michael Hogan

Michael Hogan holds a Mining Engineering degree from Queens University. He also has completed Executive programmes at the Queen's University and the University of Western Ontario. In 1989, he joined Potash Corporation of Saskatchewan where he held several operational roles prior to serving as General Manager at a number of mines. Between 2007 and 2009, he served as General Manager for Arab Potash Company in Jordan. Between 2010 and 2014, Mr. Hogan served as Vice-President, Senior Vice-President and President in Potash Corp's Potash Division. In January 2020, he was elected to the Board of Directors and Strategy Committee of EuroChem Group AG. Since December 2020, he has been a Chairman of the Health, Safety and Environment Committee of EuroChem Group AG. He is a member of the Association of Professional Engineers and Geoscientists of Saskatchewan. Mr. Hogan is a Member of the Board of Directors of the Company and a Chairman of the Health, Safety and Environment Committee.

Committees of the Board of Directors

The Charter of the Company provides for the creation of committees of the Board of Directors. The chairmen and members of committees are elected by the Board of Directors for a term until the next annual General Meeting of Shareholders.

As at the date of this Prospectus, the Board of Directors has established a Strategy Committee, an Audit Committee, a Nomination and Compensation Committee and a Health, Safety and Environment Committee, the details of each of which are shown below.

Strategy Committee

The Strategy Committee is a consultative and advisory body to the Board of Directors. The tasks of the Strategy Committee include the preparation and presentation of recommendations to the Board of Directors on issues concerning the Group's strategic goals and development, evaluating the operational efficiency of management, carrying out investment planning and improving key business processes.

The members of the Strategy Committee, as approved by the resolutions of the Board of Directors on 25 May 2021, are as follows:

Name	**Position**
Andrey Melnichenko	Member of the Strategy Committee
Samir Brikho	Member of the Strategy Committee
Vladimir Rashevsky	Member of the Strategy Committee
Mikhail Kuznetsov	Member of the Strategy Committee

Nomination and Compensation Committee

The Nomination and Compensation Committee is a consultative and advisory body to the Board of Directors. The tasks of the Nomination and Compensation Committee include the development of principles and criteria for the determination of remuneration and incentive schemes for the members of the Board of Directors, the Chief Executive Officer and senior management of the Group, as well as providing recommendations to the Board of Directors on the matters of corporate governance and social policy.

Members of the Nominations and Remuneration Committee, as approved by the resolution of the Board of Directors 25 May 2021, are as follows:

Name	Position
Andrey Melnichenko	Chairman of the Nominations and Remuneration Committee
Samir Brikho	Member of the Nominations and Remuneration Committee
Mikhail Kuznetsov	Member of the Nominations and Remuneration Committee

Audit Committee

The Audit Committee is a consultative and advisory body to the Board of Directors established mainly for the purpose of supporting the Board of Directors in its supervision of the Group's financial and economic operations. The tasks of the Audit Committee include the control over financials, assess of the internal control system, risk management, monitoring implementation of the budget policy and planning and ensuring independent and reliable internal and external audit.

Members of the Audit Committee, as approved by the resolution of the Board of Directors on 25 May 2021, are as follows:

Name	Position
Juerg Seiler	Chairman of the Audit Committee

Health, Safety and Environment Committee

The Health, Safety and Environment Committee is a consultative and advisory body to the Board of Directors established mainly for the purpose of supporting the Board of Directors in its oversight and supervision of the Group's compliance with industrial and environmental safety strategy and standards at the Group's enterprises and monitoring system of key performance indicators in this area. The Health, Safety and Environment Committee is responsible for reviewing and evaluating reports on the effectiveness of safety and sustainable development policies, implementation of safety strategy and standards and monitoring performance and governance across the Group. The committee assesses the compliance of the Group's industrial safety system with regulatory and corporate requirements, as well as the efficiency of controls in this area.

Members of the Health, Safety and Environment Committee, as approved by the resolution of the Board of Directors on 25 May 2021, are as follows:

Name	Position
Michael Hogan	Chairman of the Health, Safety and Environment Committee
Samir Brikho	Member of the Health, Safety and Environment Committee
Vladimir Rashevsky	Member of the Health, Safety and Environment Committee

Senior Management

Senior management comprises the Chief Executive Officer and other executives, which carry out operational management, ensure the efficient operation of the Group and implement the strategy tasks set by the Board of Directors.

The Chief Executive Officer is, in general, responsible for all executive management matters of the Company and its subsidiaries. All members of executive management report directly to the Chief Executive Officer, and the Chief Executive Officer reports to the Board of Directors.

The following table sets forth the senior management of the Group as at the date of this Prospectus.

Name	Age	Position
Stepan Solzhenitsyn	48	Chief Executive Officer of the Company and Siberian Generating Company
Sergey Petrov	39	Coal Division Director
Alexander Sapronov	68	Director of Logistics, General Director of National Transportation Company
Andrei Vanyushin	43	Chief Financial Officer
Igor Gribanovsky	48	Chief Commercial Officer

Sergei Grigoriev	64	Public Relations and Communications Director
Oleg Nikolaenko.....	50	HSE Director
Alexander Redkin.....	59	General Counsel and Compliance Officer
Natalia Yamshchikova.....	48	Director of HR and Organisational Development
Irina Zaytseva	44	Procurement Director

None of the Company's directors, executive officers or senior managers have any conflicts, or any potential conflicts, between their duties to the Company and their private interests or other duties.

Stepan Solzhenitsyn

Stepan Solzhenitsyn graduated from the Massachusetts Institute of Technology and Harvard University. Between 2004 and 2018, he worked at the Russian office of McKinsey and Co. where he was in charge of advisory for electric power and heat supply companies in Russia and the CIS. In 2018, Mr. Solzhenitsyn was appointed as general director of Siberian Generating Company. In this role, he was responsible for, amongst other things, upgrading the energy facilities, developing heat supply infrastructure and improving the environmental efficiency of power plants. In May 2020, Mr. Solzhenitsyn was appointed as Chief Executive Officer of the Company.

Sergey Petrov

Sergey Petrov holds a degree in Economics from the Higher School of Economics (Russia) and an MBA from Tuck School of Business of Dartmouth College (USA). Between 2002 and 2012, Mr. Petrov held various consulting positions at PwC, KPMG and McKinsey. Between 2012 and 2014, he served as Strategy Director at TNK-BP. Between 2014 and 2017, Mr. Petrov held various strategy development in State Atomic Energy Corporation Rosatom. Between 2017 and 2020, he worked as Vice President for Asset Management of the Volga Group investment company. In May 2020, Mr. Petrov was appointed as Coal Division Director of the Company.

Alexander Sapronov

Alexander Sapronov graduated from Russian Academy of Management and Kutafin Moscow State Law University. He holds an MBA in Logistics and Supply Chain Management from the Higher School of Economics (Moscow). Between 2005 and 2007, Mr. Sapronov served as Vice President of Rosneft Oil Company. Between 2008 and 2009, he worked as Deputy General Director for Strategy and Corporate Development at Freight One, a major private railway freight operator. In 2014-2019, he was appointed as Executive Director and then the General Director of Freight One. Between 2009 and 2014, he was General Director of the Independent Transport Company, and a Vice President for Logistics and a member of the Management Board of NLMK. In 2019-2020, Mr. Sapronov was Senior Vice President of Eurocement Group. Since December 2020, he serves as Logistics Director of the Company in charge of loading and transport departments.

Andrei Vanyushin

Andrei Vanyushin graduated from Finance Academy under the Government of the Russian Federation with a degree in Finance in 1999. In 2004, he obtained a PhD in Economics. In 2011, Mr. Vanyushin graduated from the INSEAD Executive MBA programme. In 1998, Mr. Vanyushin began his career as an auditor at PricewaterhouseCoopers. In 2003, he moved to join the financial services department of OJSC TNK-BP Management. He joined the Group in 2005. Between 2005 and 2017, Mr. Vanyushin held various positions, including position of Head of Financial Services Department and position of a Deputy Chief Financial Officer of the Company. Since 2017, he serves as Chief Financial Officer of Siberian Generating Company. Between March 2019 and March 2020, Mr. Vanyushin was also a Chief Information Officer of the Company. In March 2020, he was appointed as Chief Financial Officer of the Company.

Igor Gribanovsky

Igor Gribanovsky graduated from the Moscow State Institute of Steel and Alloys with a degree in Metal Forming. He completed his postgraduate studies at the Faculty of Economics of Lomonosov Moscow State University, where he majored in Public Sector Economics. Between 1996 and 2001, Mr. Gribanovsky worked at the Moscow office of the Japanese Nichimen Corporation in its Coal and Metals Department. Between 2001 and 2005, he headed the export divisions of Vostsibugol, Rosuglesbyt and the Company. In 2005, Mr. Gribanovsky was appointed as Managing Director of SUEK AG. Since 2007, he serves as Chief Commercial Officer of the Company. In 2017, he received a state award for his personal contribution to development of the national fuel and energy sector.

Sergei Grigoriev

Sergei Grigoriev is a graduate of the Institute of Asian and African Countries at Lomonosov Moscow State University. He holds a Master of Public Administration degree from Harvard's John F. Kennedy School of Government and PhD from Tufts University. Mr. Grigoriev's early career was spent with the Soviet Union Association of Friendship Societies. Between 1984 and 1990, he worked for the International Department of the Central Committee of the Communist Party, subsequently joining the USSR President's Press Office. Between 1990 and 2003, he was a political consultant and commentator. His roles also included adviser to the Chairman of the All-Russian State Television and Broadcasting Company and, Chief of Staff of the Department of Presidential Affairs of the Russian Federation. Between 2004 and 2006, Mr. Grigoriev was Vice President of the National Reserve Bank and a Deputy General Director of the National Reserve Corporation. In February 2007, Mr. Grigoriev was appointed as Public Relations and Communications Director of the Company. Between 2014 and 2017, he served as member of the Council of the Public Chamber of the Russian Federation and headed the Commission on Developing the Real Sector of Economy. Mr. Grigoriev has several state and industrial awards.

Oleg Nikolaenko

Oleg Nikolaenko graduated from Academy of Labour and Social Relations with a degree in Occupational Safety and from Lomonosov Moscow State University with a degree in Environmental Safety. He also obtained an MBA from the Higher School of Economics with a major in Logistics and Supply Chain Management. Between 1995 and 2005, Mr. Nikolaenko held various positions at Schlumberger in Russia, the CIS and Turkey, including a position of an HSE Director for Russia. Between 2005 and 2007, he was Director of the HSE Department at TNK-BP Management OJSC. Between 2008 and 2020, he served as Head of the Industrial Safety Department at PJSC Gazprom Neft. In December 2020, Mr. Nikolaenko was appointed as HSE Director of the Company. In the past, Mr. Nikolaenko served as Deputy Head of the Industrial Safety Committee of the Russian Union of Industrialists and Entrepreneurs, a member of the Scientific and Technical Council of the Federal Service for Environmental, Technological and Nuclear Supervision ("**Rostechnadzor**"), a member of the Scientific and Technical Council of the Federal Service for Supervision of Natural Resources ("**Rosprirodnadzor**"), a member of the working groups formed by the Government of the Russian Federation for administrative reform of the industrial safety, fire safety and emergency situations control and supervision.

Alexander Redkin

Alexander Redkin graduated from Saratov Law Institute in 1986. Between 1986 and 2001, Mr. Redkin worked in the Office of the Public Prosecutor in Saratov. Between 2001 and 2005, he held various positions at SIDANCO - TNK-BP Management, including a position of a General Counsel of SIDANCO's branch in Saratov and a position of Head of the Legal Department. In 2005, Mr. Redkin joined the Company as Deputy General Counsel. Since 2008, he serves as General Counsel of the Company. In 2017, Mr. Redkin received a state award from the Ministry of Energy of the Russian Federation for his personal contribution to the development of the national fuel and energy sector.

Natalia Yamshchikova

Natalia Yamshchikova holds a degree in economics and linguistics. She also obtained an Executive MBA from Antwerp Business School, Corporate EMBA from INSEAD and IMD Business Schools. Between 1997 and 2009, Mrs. Yamshchikova worked in human resources executive positions at Coca-Cola and the Automobile Dealers' Association Musa Motors Corp. Between 2009 and 2020, she held various positions at Sibur, a large Russian petrochemical company, including position of Head of Human Resources (Synthetic Rubbers Directorate) and Head of Sibur's Production System Implementation Programme (PSS). In 2013, Mrs. Yamshchikova became Head of Sibur's Corporate University and Organizational Development. In July 2020, she was appointed Director of Human Resources and Organisational Development of the Company.

Irina Zaytseva

Irina Zaytseva graduated from Perm State University's Faculty of Law in 1998 and from the Higher School of Economics (Moscow) in 2001. Between 2002 and 2011, Ms. Zaytseva worked at Uralkali, a potash mining company, where she held a number of senior positions, including Director of Inventory and Logistics. In May 2011, she was appointed as Procurement Director of the Company. Ms. Zaytseva was honoured by the Ministry of Energy of the Russian Federation for her personal contribution to the development of the national fuel and energy sector.

Remuneration of Directors and Management

The aggregate amount of remuneration accrued in respect of the payments to the Board of Directors and key management personnel was U.S.$12 million, U.S.$16 million and U.S.$18 million in the years ended 31 December 2020, 2019 and 2018, respectively. Remuneration of directors and management in the respective periods included salary, bonuses, social security taxes, share-based payments, termination benefits and other.

SHAREHOLDING

The following table sets forth information regarding the ownership of the Company's shares as at the date of this Prospectus:

Owner	Number of ordinary shares	Percentage of ordinary shares
AIM Capital SE[(1)]	217,647,320	92.2%
Dominantco Holdings Limited[(2)]	18,412,680	7.8%
Total.....	**236,060,000**	**100%**

(1) AIM Capital SE, registered in the Republic of Cyprus, is a shareholder of the Company with 92.2% interest in the Company's share capital. A company that holds business interests beneficially for Mr. Andrey Melnichenko indirectly owns 100% of AIM Capital SE.

(2) Dominantco Holdings Limited, registered in the Republic of Cyprus, is a shareholder of the Company with 7.8% interest in the Company's share capital. A company that holds business interests beneficially for Mr. Vladimir Rashevsky indirectly owns 100% of Dominantco Holdings Limited.

Since 25 June 2018, the Company has not received any notifications from its shareholders on any change of ownership in the Company's shares.

The Company is not aware of any arrangements in existence as at the date of this Prospectus which could reasonably be expected to result in a change of control of the Company.

None of the Company's shareholders has voting rights different from any other holder of its shares.

RELATED PARTY TRANSACTIONS

The following is a summary of the Group's most significant transactions with related parties for six months ended 30 June 2021 and for the years ended 31 December 2020, 2019 and 2018. For further details of these and other transactions, see Note 9 to the Interim Financial Statements, Note 28 to the 2020 Consolidated Annual Financial Statements and Note 28 to the 2019 Consolidated Annual Financial Statements.

According to IFRS, parties are considered to be related if one party has the ability to control the other party, is under common control with, or exercises significant influence over, the other party's financial or operational decisions, as defined by International Accounting Standard 24 "Related Party Disclosures". In considering each possible related party relationship, attention is directed to the substance of the relationship, not merely the legal form.

Related parties are considered to include the ultimate beneficiary, affiliates and entities under common ownership and control of the same principal ultimate beneficiary. The Group, in the ordinary course of their business, enters into various sales, purchases and service transactions with related parties.

The Group believes that these transactions will continue in the foreseeable future.

Transactions with Related Parties

The following table sets forth the Group's transactions with related parties in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018.

	For the six months ended 30 June	For the year ended 31 December		
	2021	2020	2019	2018
		(*in U.S.$ million*)		
Sales of logistics services to EuroChem Group[(1)]	195	77	73	-
Coal sales to DEC group, which was an associate of the Company with the same principal ultimate beneficiary until June 2020	-	44	134	136
Other coal sales	-	-	-	36
Other energy sales	4	64	61	58
Other sales to EuroChem group	6	67	19	7
Purchases of goods and services from EuroChem group	89	68	21	-
Purchases of goods and services from other companies	41	34	9	-
Other expenses[(2)]	-	2	4	64

(1) For the years ended 31 December 2020 and 31 December 2019, amounts represent revenue from Transshipment in the ports from EuroChem group.

(2) For the year ended 31 December 2018 all purchases from related parties were shown as "Other expenses". Starting from the annual financial statements for the year ended 31 December 2020 purchases were divided by types and comparative financial information for the year ended 31 December 2019 was changed accordingly.

The following table sets forth the outstanding balances with related parties in the six months ended 30 June 2021 and the years ended 31 December 2020, 2019 and 2018.

	For the six months ended 30 June	For the year ended 31 December		
	2021	2020	2019	2018
		(*in U.S.$ million*)		
Trade accounts and other receivables from DEC group	-	-	-	14
Trade accounts and other receivables from EuroChem group	22	13	3	-
Payables to EuroChem group for the acquisition of subsidiaries	294	282	-	-
Payables for the acquisition of SGC group to a related company	-	-	-	1,916

Trade accounts and other payables to EuroChem group....	58	28	12	-
Lease liabilities from EuroChem group.....	19	-	-	-
Loans received.....	5	-	-	-
Other receivables.....	3	5	14	30

INDUSTRY

Certain of the projections and other information set forth in this section "Industry" has been derived from external sources. Industry publications generally state that the information they contain has been obtained from sources believed to be reliable, but that the accuracy and completeness of such information is not guaranteed. Market research, while believed to be reliable by the Group for the purposes of this Prospectus, has not been independently verified. The Group accepts responsibility for accurately reproducing such information and as far as the Group is aware, no facts have been omitted which would render the reproduced information misleading or inaccurate.

The projections and forward-looking statements in this section are not guarantees of future performance and actual events and circumstances could differ materially from current expectations. Numerous factors could cause or contribute to such differences. See "Risk Factors" and "Forward-looking Statements".

Global Coal Market Fundamentals

Coal is a fossil fuel formed from dead and decaying plant matter which has been subject to heat and pressure under the earth's surface for millions of years. Coal is made up mainly of carbon, along with differing quantities of other elements, chiefly hydrogen, with smaller quantities of sulphur, oxygen, and nitrogen.

Coal is an abundant, reliable and inexpensive natural resource, making it a leading source for the world's energy consumption and steel production needs. Coal has historically been a relatively inexpensive fuel for power generation and remains a major fuel for global energy.

The accumulated plant matter buried during the Tertiary Era (less than 65 million years ago) is generally less mature, has a lower carbon and calorific content, the fuel is dirtier, and the moisture is higher as compared to plants buried during the Carboniferous Period (300 million years ago).

World coal reserves in 2020 stood at 1,074.1 billion tonnes and are heavily concentrated in just a few countries: United States (23.2%), Russia (15.1%), Australia (14.0%) and China (13.3%). Most of the reserves are anthracite and bituminous (approximately 70%). The current global reserves to production ratio shows that coal reserves in 2020 accounted for 139 years of current production with North America (484 years) and CIS (367 years) the regions with the highest ratios.

Thermal coal, which is also known as non-coking coal, energy coal, steam coal or boiler coal, is used to provide heat energy in combustion to generate electricity. In 2020, 35% of global power generation came from thermal coal. Thermal coal is also used to produce steam for use in industrial plants in the chemical and paper industries. Metallurgical coal is used in coke making for steel production.

Coal is mined by two methods: surface or "opencast" mining, and underground mining. The choice of mining method largely depends on the geology of the coal deposit. Underground mining accounts for a bigger share of world coal production than opencast; although, in several important coal-producing countries, surface mining is more common.

The most significant uses of coal are in electricity generation, steel production, and cement manufacturing. Nearly 85% of the global coal production is used in the country in which it was produced. The remaining 15% is exported predominately through the seaborne trade.

According to the BP Statistical Review of World Energy, in 2020 the United States, Russia and Australia had the world's largest coal reserves of 248.9 billion tonnes, 162.2 billion tonnes and 150.2 billion tonnes, respectively. The European countries have coal reserves of approximately 137.2 billion tonnes, including Ukraine's coal reserves of approximately 34.4 billion tonnes, accounting for 12.8% and 3.2% of the world's coal reserves, respectively, according to the BP Statistical Review of World Energy. North America has coal reserves of approximately 256.7 billion tonnes, accounting for 23.9% of the world's coal reserves, according to the BP Statistical Review of World Energy. Asia Pacific has

coal reserves of approximately 459.8 billion tonnes, accounting for 42.8% of the world's coal reserves, according to the BP Statistical Review of World Energy. The CIS have coal reserves of approximately 190.7 billion tonnes, accounting for 17.8% of the world's coal reserves, according to the BP Statistical Review of World Energy.

Global Coal Production

In 2020, the worldwide coal production have decreased by 5.1%, to 7,741.6 million tonnes from 8,133.4 million tonnes in 2019, which was primarily a result of the outbreak of the COVID-19, related global economic downturn and decrease in global consumption of coal. Global coal production amounted to 8,075.2 million tonnes in the year ended 31 December 2018. Thermal coal and lignite made up around 82% of worldwide coal production in 2020 and the remainder was metallurgical coal.

China – the world's largest coal producer – accounted for about 50.7% of global coal production in 2020, according to BP Statistical Review of World Energy. The decrease in coal production in 2020 was driven mostly by countries in the North America region (7.4% of global production), particularly United States.

The largest coal producing countries are not confined to one region; the five largest coal-producing countries in order of production volumes are China, Indonesia, India, the United States and Australia.

The following table sets forth the coal production for the five largest coal-producing countries for the periods indicated.

	As of 31 December			**Change**	
	2020	**2019**	**2018**	**2020/2019**	**2019/2018**
	(***in million tonnes***)			(***in %***)	
China	3,902	3,846	3,697	1.4%	4.0%
Indonesia	562	616	558	(8.7)%	10.5%
India.....	757	754	760	0.3%	(0.9)%
United States.....	485	641	686	(24.4)%	(6.6)%
Australia	478	504	502	(5.4)%	0.4%

Source: BP Statistical Review of World Energy

Global Coal Consumption

In 2020, the worldwide coal consumption have decreased by 3.9%, to 7,344.75 million tonnes from 7,646.2 million tonnes in 2019, which was primarily a result of the outbreak of the COVID-19 and related global economic downturn. Global coal consumption amounted to 7,724.8 million tonnes in the year ended 31 December 2018. Thermal coal and lignite made up around 82% of worldwide coal consumption in 2020 and the remainder was metallurgical coal.

According to the BP Statistical Review of World Energy, 5,867.7 million tonnes of coal was consumed in Asia Pacific in 2020, which accounted for 79.9% of world's coal consumption in the same period. In 2020, 480.5 million tonnes of coal was consumed in North America which accounted for 6.5% of world's coal consumption, 455.8 million tonnes of coal was consumed in Europe which accounted for 6.2% of world's coal consumption, 250.0 million tonnes of coal was consumed in the CIS which accounted for 3.4% of world's coal consumption. The remainder of the worldwide coal consumption was attributable to other geographic regions, which jointly accounted for 3.9% of world's coal consumption in 2020.

The following table sets forth the breakdown of the coal consumption by ten largest coal-consuming countries for the periods indicated.

	As of 31 December			**Change**	
	2020	**2019**	**2018**	**2020/2019**	**2019/2018**
	(***in million tonnes***)			(***in %***)	

China	3,990.5	3,967.1	3,934.2	0.6%	0.8%
India.....	850.6	902.1	901.6	(5.7)%	0.1%
United States.....	446.4	550.1	644.2	(18.9)%	(14.6)%
Japan.....	221.9	237.9	242.1	(6.7)%	(1.7)%
South Africa	168.9	176.6	171.2	(4.4)%	3.2%
Russia	158.8	173.0	176.0	(4.6)%	20.3%
Indonesia	157.9	165.6	137.7	(11.9)%	(5.2)%
South Korea.....	146.9	166.8	176.0	(18.0)%	(22.6)%
Vietnam	101.9	100.3	76.7	0.6%	0.8%
Germany	89.4	109.0	140.9	(5.7)%	0.1%

Source: BP Statistical Review of World Energy

Global Coal Trade

Traditionally coal trade could be split into two principal geographical markets: the Pacific Basin, where China, India, Japan and South Korea are the key importers; and the Atlantic Basin, where Germany and Poland are the key players. Russia links the two basins in coal trade with exports to Atlantic and Pacific markets representing approximately 48% and 52% of Russia's coal export in 2020, respectively, according to CDU TEK and Russian Railways statistics. This no longer portrays international coal trade patterns, as the Atlantic market has separated from Asian market, with the latter representing approximately 88% of the global coal trade.

The following table sets forth the breakdown of the coal imports by four largest coal-importing countries for the periods indicated.

	Geographical Market	**As of 31 December**			**Change**	
		2020	**2019**	**2018**	**2020/2019**	**2019/2018**
		(***in million tonnes***)			(***in %***)	
China	Pacific Basin	320.8	310.4	297.6	3.4%	4.3%
Japan.....	Pacific Basin	221.0	237.5	242.8	(6.9)%	(2.2)%
India.....	Pacific Basin	204.9	228.1	275.4	(10.2)%	(17.2)%
South Korea.....	Pacific Basin	158.2	181.1	190.1	(12.6)%	(4.7)%

Source: BP Statistical Review of World Energy

In the year ended 31 December 2020, China remained the largest coal importer in the world with imports amounting to 320.8 million tonnes, or 20.8% of the worldwide coal imports. Japan and India ranked second and third with imports of coal amounting to 221.0 million tonnes and 204.9 million tonnes in 2020, respectively. In 2020, imports of Japan and India accounted for 14.3% and 13.3% of the worldwide coal imports, respectively. China, Japan and India are the major importers of the coal in the world as their coal imports comprise approximately 48% of the worldwide coal imports and their aggregate coal consumption account for around 68% of the global coal consumption, according to BP Statistical Review of World Energy.

The following table sets forth the breakdown of the coal exports by five largest coal-exporting countries for the periods indicated.

	Export Market	**As of 31 December**			**Change**	
		2020	**2019**	**2018**	**2020/2019**	**2019/2018**
		(***in million tonnes***)			(***in %***)	
Australia.....	Pacific Basin	448.5	467.2	474.1	(4.0)%	(1.5)%
Indonesia.....	Pacific Basin	412.9	412.0	415.1	0.2%	(0.7)%
Russia.....	Pacific Basin / Atlantic Basin	274.6	280.7	280.4	(2.1)%	0.1%
Colombia.....	Pacific Basin / Atlantic Basin	80.6	101.1	117.7	(20.3)%	(14.1)%
South Africa.....	Pacific Basin / Atlantic Basin	79.7	78.8	146.8	1.1%	(46.3)%

Source: BP Statistical Review of World Energy

In the year ended 31 December 2020, Australia was the world's largest exporter of coal with total exports of 448.5 million tonnes, which accounted for 29.1% of the worldwide coal exports. In 2020, Indonesia ranked second with total exports of 412.9 million tonnes, which accounted for 26.8% of the worldwide coal exports and Russia ranked third with total exports of 274.6 million tonnes, which accounted for 17.8% of the worldwide coal exports. Australia, Indonesia and Russia are major coal exporters in the world as their coal exports comprise approximately 74% of the worldwide coal export, according to BP Statistical Review of World Energy.

Coal Mining

There are two primary methods of mining coal: underground and surface mining. Underground mining methods are used when coal is located deep beneath the surface. Underground mining employs one of the following two methods: longwall mining or continuous (or room and pillar) mining. Longwall mining is a highly automated method using a mechanical shearer to extract coal from long rectangular blocks of medium to thick seams. Continuous miners are utilized to develop access to blocks of coal. A rotating drum mechanically advances, cuts coal from the face, and a conveyor belt transports coal to the preparation plant.

The other type of underground mining is continuous mining. In this method, rooms are cut into the coal seam leaving a series of coal pillars that help support the mine roof and control airflow. Continuous mining equipment is used to cut coal from the face, and shuttle cars are generally used to transport coal to a conveyor belt for subsequent delivery to the surface.

Types of Coal

The main types of coal include thermal (steam) coal and metallurgical (coking and pulverized coal for injection ("**PCI**")) coal.

Coal is classified based on its usage — metallurgical coal and thermal coal. Metallurgical coal or coking coal is used in the process of creating coke necessary for iron and steel-making.

Thermal Coal

Thermal coal (steam), or steaming coal, is burned for steam to run turbines to generate electricity. Thermal coal is extracted through surface and underground mining. It is benchmarked based on its energy content, moisture, volatility and ash, as well as any deleterious elements such as sulphur and can be divided into different market tiers based on such energy content and is commonly measured in kcal/kg.

Steam coal is an abundant resource that is crucial to global electricity needs. Steam coal producers compete primarily with natural gas and increasingly with renewable forms of energy around the world. In 2020, steam coal accounted for approximately 27% of the world's energy consumption, according to the BP Statistical Review of World Energy. Despite increasing competition from other forms of energy, steam coal is expected to continue playing a significant role in satisfying growing global energy needs, primarily in base load power generation. At current production rates, proven coal reserves are expected to last for over 146 years, according to the BP Statistical Review of World Energy, which is by far the largest reserve life of any fossil fuel.

Steam coal is used in electricity generation and industrial applications. Coal is one of the world's most important sources of energy, fuelling almost 40% of electricity worldwide, according to U.S. Energy Information Administration ("**EIA**"). During power generation, coal is ground to a powder and fired into a boiler to produce steam to drive turbines to produce electricity. Coal is classified based on its rank or energy content:

- Peat: very low energy level, moisture approx. 60%, calorific value approx. 2,600 kcal/kg;
- Brown Coal: moisture approximately 50%, calorific value approx. 2,800 kcal/kg;

- Lignite: moisture content 40-50%, calorific value between 3,000-4000 kcal/kg;
- Sub-bituminous: moisture content 20-40%, calorific value 4,000 kcal/kg to 5,400 kcal/kg;
- Bituminous: moisture content 8-20%, calorific value 5,400 to 6,900 kcal/kg; and
- Anthracite: shiny, repels moisture, burns without smoke, calorific value 6,900-8,000 kcal/kg.

Market and Pricing of Thermal Coal

In 2020, 940 million tonnes of thermal coal were traded internationally, which was a decrease from 1,046 million tonnes of thermal coal in 2019. Approximately 860 million tonnes (91%) of the thermal coal trade in 2020 was seaborne. Internationally traded thermal coal as a share of global consumption was stable at 13%.

The majority of seaborne thermal coal trade occurs in the Asia Pacific region, where both the largest importers and exporters are concentrated. Indonesia provided 41.5% of globally traded thermal coal in 2020. Australia ranked second with 23.1%, and has potential to increase its market share. Other important market participants include Russia (15%), South Africa (8%), Colombia (6%) and the United States (3%).

China was the largest importer of thermal coal in 2020 accounting for 21%, followed by India (17%) and Japan (14%), according to Wood Mackenzie.

The seaborne thermal coal market is reasonably transparent, with prices generally related to agreed reference prices or indices. Major thermal coal price indices are FOB Newcastle in the Asia-Pacific market, for the Pacific and FOB Richards Bay (RB1 equivalent to Market Price grade thermal coal) and CIF Northwest Europe (API 2) in the Atlantic market.

Sulphur

The sulphur content of coal can vary from seam to seam and within a single seam. The chemical composition and concentration of sulphur in coal affects the amount of sulphur dioxide produced in combustion. Coal-fuelled power plants can comply with sulphur dioxide emission regulations by burning coal with low sulphur content, blending coals with various sulphur contents and/or with high calorific value coals (such as Russian coal), purchasing emission allowances on the open market in certain jurisdictions and/ or using sulphur dioxide emission reduction technology, such as scrubbers and electronic precipitators, which can reduce sulphur dioxide emissions by up to 95% or more.

Ash

Ash is the inorganic residue remaining after the combustion of coal. As with sulphur content, ash content varies from seam to seam. Ash content is an important characteristic of coal because it impacts boiler performance and electricity generating plants must handle and dispose of ash following combustion. The composition of the ash, including the proportion of sodium oxide, as well as the ash fusion temperatures are important characteristics of coal and help determine the suitability of the coal to specific end users. The total moisture content of coal consists of inherent and superficial moisture and varies by the type of coal and the region where it is mined. In general, high moisture content is associated with lower heat values and generally makes the coal heavier and more expensive to transport.

Volatile Matter

Some of the carbon and most of the hydrogen and oxygen contained in coal is considered volatile matter as it converts to a gas or vapour during the heating or combustion of coal. Such volatile matter is therefore an important variable in the ignition phase of combustion and plays an important role when determining whether coal is suitable for specific end uses. Mercury and chlorine, among others, are

trace elements within coal that are of primary consideration relative to utility plant emissions and performance.

Metallurgical Coal

Metallurgical coal is a grade of coal that can be used to produce coke for use in steelmaking and other metallurgical and non-metallurgical applications. Coke is an essential fuel and reactant in the blast furnace process for primary steelmaking. The demand for metallurgical coal is highly coupled to the demand for steel.

Approximately 400-500 kilograms of coke is used per tonne of hot metal produced. Coke is sometimes supplemented by the direct injection of pulverised coal (pulverised coal injection, or PCI) to a blast furnace, at rates of 100-200 kilograms per tonne of hot metal. PCI uses less expensive thermal and semi-soft coking coal to reduce costs.

Metallurgical coal differs from thermal coal, used for energy and heating, by its carbon content and its caking ability. Caking refers to the coal's ability to be converted into coke. The grade of coal and its caking ability is determined by the coal's rank — a measure of volatile matter and degree of metamorphism — as well as mineral impurities and the ability of the coal to melt, swell and re-solidify when heated. The three main categories of metallurgical coal are:

- Semi-soft coking coal;
- Hard coking coal; and
- PCI coal.

In the Atlantic Basin, met coal is sold according to its volatile matter ("**Vol.**") specification as Low-Vol., Mid-Vol., High-Vol. A and High-Vol. B., High quality Mid-Vol and High-Vol A coals are typically the most valuable coals in coking coal blends. Steel producers procure a mix of coals based on the quality requirements of each blast furnace.

High quality met coal is a scarce commodity, with large scale reserves found primarily in the eastern U.S., western Canada, eastern Australia, Russia and China. Met coal is consumed domestically and sold into the seaborne market.

Market and Pricing of Metallurgical Coal

According to Wood Mackenzie, world production of metallurgical coal started to increase rapidly in the beginning of the 21st century amid growing steel production in China as a key coking coal consumer. World coking coal production increased from 77 million tonnes in 2001 to 642 million tonnes in 2020. Extremely low prices in 2015-2016 caused financial difficulties for many coal-mining companies. Most of them were forced to curtail their capital expenditure programmes.

The four countries that supply the majority of met coal for the seaborne market are Australia, the United States, Canada and Russia. These countries exported 267 million tonnes, which represented 95% of total 2020 seaborne exports, according to Wood Mackenzie. The world's largest metallurgical coal producers (excluding coal producers located in China) include BHP (including BHP-Mitsubishi Alliance and BHP Mitsui Coal), Teck, Anglo American and Rio Tinto.

Russia is one of the few regions that has shown noticeable met coal supply growth in recent years. Russia's growth has primarily been due to its proximity to the growing Asia market and the sharp decline in the Russian rouble value that has made production more profitable. The exchange rate decreased from 32.7292 Russian roubles per U.S. dollar as of 31 December 2013 to 73.8757 Russian roubles per U.S. dollar as of 31 December 2020. Russia is expected to account for 14% of seaborne met exports in 2021 and is expected to see annual compound growth of approximately 10% in 2021, according to Wood Mackenzie.

Historically, the majority of metallurgical coal sold in the seaborne market was priced based on a quarterly benchmark set between Australian suppliers and major Japanese steel producers. The quarterly benchmark has been largely replaced by the use of published indices for met coal. Typically, an index, with a reference period, is agreed to between the buyer and seller with adjustments for coal quality and transportation costs. Similar to the coal market, these indices can experience some volatility during market transitions.

Typically, a supply contract specifies a benchmark coal price with adjustments based on the energy content and deleterious elements (such as ash and sulphur) that are contained in the thermal coal that is for sale. In general, a higher energy content will command a higher price, while higher concentrations of deleterious elements will reduce the price of the thermal coal.

Overview of the Coal Market in Russia

General Overview of the Coal Market in Russia

Russia is the third largest coal exporter in the world with its proved coal reserves ranking second after the United States. According to CDU TEK, Russia produced 401.6 million tonnes of coal in 2020, with its coal production growing at compound average growth rate of 2.2% from 2010. At current production rates Russian coal reserves are expected to deplete only within 407 years. Approximately 46% of coal produced in Russia is consumed domestically with the remaining 54% being exported.

The following table sets forth the breakdown of coal production in Russian by type of coal for the periods indicated.

	As of 31 December 2020		
	2020	**2019**	**2018**
		(***in million tonnes***)	
Thermal coal	303.1	323.0	326.1
Export	173.8	173.3	176.9
Domestic consumption	129.3	149.8	149.2
Metallurgical coal	56.4	50.6	47.9
Export	21.6	19.1	16.3
Domestic consumption	34.7	31.5	31.6

Source: CDU TEK

According to the CDU TEK, in 2020, the Russian coal mining industry was represented by 179 companies, which operated 58 underground mines and 121 open pit mines. As a result of the privatisation in 1990s and subsequent mergers and acquisitions, the Russian coal mining industry has become more concentrated. Based on the Central Dispatching Department's data, the largest ten coal mining companies in Russia accounted for approximately 67% of the overall coal production in 2020.

The following table sets forth the main Russian thermal coal producers, their coal production volumes and their share of total Russian production volume for the periods indicated.

	As of 31 December					
	2020		**2019**		**2018**	
	Production volume	**% of total production**	**Production volume**	**% of total production**	**Production volume**	**% of total production**
	(***in million tonnes, except for percentage data***)					
The Group	99.5	31.8%	99.9	29.2%	103.0	29.6%
Kuzbassrazrezugol.	36.1	11.5%	40.9	11.9%	41.4	11.9%
SDS-Ugol	20.2	6.5%	24.3	7.1%	24.1	6.9%
Sibanthracite	17.3	5.5%	23.0	6.7%	23.8	6.8%
KTK	9.4	3.0%	15.6	4.6%	15.7	4.5%
Other	130.4	41.7%	138.7	40.5%	139.9	40.2%
Total	**312.9**	**100.0%**	**342.5**	**100.0%**	**347.8**	**100.0%**

Source: CDU TEK

According to CDU TEK, the main producers of the thermal coal in Russia are SUEK, Kuzbassrazrezugol, SDS-Ugol, Sibanthracite and KTK, which jointly accounted for 58.3% of total thermal coal production in Russia in 2020.

The following table sets forth the main Russian metallurgical coal producers, their coal production volumes and their share of total Russian production volume for the periods indicated.

	As of 31 December					
	2020		2019		2018	
	Production volume	% of total production	Production volume	% of total production	Production volume	% of total production
	(*in million tonnes, except for percentage data*)					
Evraz	20.6	23.3%	25.0	25.3%	23.1	24.5%
Severstal	10.3	11.6%	10.1	10.3%	9.6	10.2%
Mechel	9.6	10.8%	9.7	9.9%	9.7	10.2%
Kuzbassrazrezugol	7.1	8.0%	6.0	6.1%	6.4	6.7%
Kolmar	6.3	7.0%	7.2	7.2%	4.6	4.9%
Other	34.9	39.3%	40.8	41.3%	40.9	43.4%
Total	**88.7**	**100.0%**	**98.9**	**100.0%**	**94.2**	**100.0%**

Source: CDU TEK

According to CDU TEK, the main producers of the metallurgical coal in Russia are Evraz, Severstal, Mechel, Kuzbassrazrezugol and Kolmar, which jointly accounted for 60.7% of total metallurgical (coking) coal production in Russia in 2020.

In the domestic thermal coal market, the competition between coal producers is based primarily on price, whilst the quality of coal is secondary factor for Russian coal consumers. In the domestic metallurgical coal market the quality of coal is a key factor affecting customer purchasing decisions. The domestic coal prices are driven primarily by market forces and factors such as coal demand, coal production levels, weather, natural gas prices and other. Competition in the thermal coal market is also affected by the proximity of the power generation units to thermal coal deposits, as well as customisation of the equipment at power generation units to utilize particular type of coal produced at the relevant local coal deposit.

Overview of the Electricity Market in Russia

The Russian power sector comprises the producers and consumers of electric power, guaranteeing suppliers, energy retail companies, export-import operators, power transmission and distribution grids and related facilities, as well as technological and commercial infrastructure. The Unified Energy System of Russia ("**UES**") covers most of the Russian Federation and is supplemented by isolated power systems in the northerly and far eastern parts of the Russian Federation. The UES consists of seven integrated energy systems: the North-West, Central, South, Urals, Volga, Siberia and Far East.

As of 31 December 2020, UES' total installed electricity capacity amounted to 245.3 GW. Thermal power generation, including natural gas, coal, oil and other types of fossil fuels, accounted for approximately 66.6% of the total electricity capacity as of 31 December 2020. The table below shows the installed electricity capacity of Russian thermal, hydro, nuclear and renewable power plants within UES as of 31 December 2020:

	As of 31 December 2020	
	Installed electricity capacity (GW)	Share (%)
Thermal power plants	163.3	66.6%
Hydro power plants	49.9	20.3%
Nuclear power plants	29.4	12.0%

Renewables (solar, wind)	2.7	1.1%
Total (UES)	**245.3**	**100%**

Source: System Operator

According to System Operator, from 2011 to 2020 UES electricity output grew at annual rate of approximately 0.3%, reaching its maximum level in 2019 amounting to 1,080.6 million MWh up from the previous year level of 1,070.9 million MWh. Of this amount, thermal power plants accounted for 616.8 million MWh, hydro power generation for 190.3 million MWh, and nuclear generation for 208.6 million MWh.

The table below shows total electricity generation in the UES for the periods indicated:

	As of 30 June	**As of 31 December**		
	2021	**2020**	**2019**	**2018**
		(***in million KWh***)		
Thermal power plants	304,868.9	555,519.3	616,778.7	620,110.5
Hydro power plants	104,330.4	207,416.3	190,295.4	183,759.8
Nuclear power plants	110,300.1	215,472.8	208,570.4	204,062.6
Renewables (solar, wind)	2,729.4	3,366.4	1,605.7	976.2
Other[(1)]	33,758.3	65,255.1	63,305.2	62,013.3
Total (UES)	**555,987.1**	**1,047,029.9**	**1,080,555.4**	**1,070,922.4**

(1) Other is represented by electricity output of generation units installed at certain production facilities of manufacturing companies in Russia.

Source: System Operator

The Russian power industry was established in the 1920s and 1930s with Russia's electrification plan, which envisioned construction of large-scale thermal and hydro power plants and electricity grid infrastructure in the European part of the country. In the 1950s, advancements in nuclear technology led to the development and construction of nuclear power plants. Over subsequent years, the extensive development of hydro energy was also launched in Siberia.

The current distribution of generating capacity by type results from the history of the country's power industry development. The European part of the country is characterised by the balanced distribution of the three main types of generation (thermal, hydro and nuclear) while the generating capacity in Siberia consists of coal thermal power plants (51%) and hydro power plants (49%). The isolated Far East is dominated by thermal generation.

Currently, a significant part of the electricity demand in Russia is satisfied by power plants using natural gas and coal as their primary fuel source. Most thermal power plants also use fuel oil as a backup fuel source in cases of delivery disruptions of their primary fuel source supply.

Fossil fuel-fired plants are expected to continue to maintain their role as the primary source for electricity generation. The Russian Federation's current energy strategy promotes the construction of new energy infrastructure to support the development of East Siberia and the Far East and decrease of infrastructural differences of particular regions of the Russian Federation.

Electricity Consumption

Until the onset of the global economic crisis, the Russian Federation had experienced significant economic growth since the end of the 1990s. Between 1999 and 2008, the Russian Federation's GDP grew at a compounded annual growth rate of 7.0%, making the Russian Federation one of the fastest growing economies in the world. The Russian economy has experienced significantly fluctuating growth rates over the last two decades, including significant recent declines.

Year	***GDP growth rate (% per year)***	***Electricity consumption (million MWh)[(1)]***	***Electricity demand growth rate (%)***	***Electricity consumption elasticity to GDP growth[(2)]***
2005.....	6.4%	908	1.8%	0.3

2006.....	8.2%	949	4.5%	0.6
2007.....	8.5%	971	2.3%	0.3
2008.....	5.2%	990	2.0%	0.4
2009.....	(7.8)%	943	(4.7)%	0.6
2010.....	4.5%	989	4.9%	1.1
2011.....	4.3%	1,000	1.1%	0.3
2012.....	3.7%	1,017	1.6%	0.4
2013.....	1.8%	1,010	(0.7)%	(0.4)
2014.....	0.7%	1,014	0.4%	0.5
2015.....	(2.8)%	1,008	(0.6)%	0.2
2016.....	(0.2)%	1,027	1.8%	(9.2)
2017.....	1.5%	1,040	1.3%	0.8
2018.....	2.3%	1,056	1.0%	0.4
2019.....	1.3%	1,059	0.3%	0.2
2020.....	(3.0)%	1,034	(2.4)%	0.8

(1) Demand within UES

(2) Calculated by dividing electricity consumption growth rate by GDP growth rate

Sources: System Operator, Rosstat

The elasticity of electricity demand to GDP growth depends, to a large extent, on the composition of the electricity consumption market. Electricity consumption in Russia is characterised by a relatively large share of demand coming from the industry and transportation sectors of the market. According to Rosstat, in 2020 nearly 53% of electricity consumed was delivered to industrial consumers. Household consumption amounted to only 15% of the total consumption in 2020 whereas household consumption in developed countries generally constitutes a significantly larger share of the total electricity consumption.

The table below sets out a breakdown of electricity consumption by type of consumer for 2020:

	As of 31 December 2020	
Consumer	**Consumption (million MWh)**	**Share (%)**
Industrial and similar.....	575.9	53.1
Households.....	163.4	15.1
Transportation and telecommunications.....	85.2	7.9
Wholesale and retail trade	29.5	2.7
Agriculture.....	19.7	1.8
Construction	11.8	1.1
Information and communication ...	6.9	0.6
Other.....	96.9	8.9
Electricity losses.....	95.6	8.8
Total.....	**1,085**	**100%**

Source: Rosstat

The table below shows a geographical breakdown of electricity consumption within UES, by volume and share of total consumption and by IES for the periods indicated:

	As of 30 June				**As of 31 December**					
	2021		**2020**		**2020**		**2019**		**2018**	
	Volume	**Share**	**Volume**	**Share**	**Volume**	**Share**	**Volume**	**Share**	**Volume**	**Share**
	(***billion kWh; share in %***)									
North West IES	57.6	10.4%	46.9	9.1%	106.3	10.2%	112.8	10.3%	113.3	10.4%
Central IES.....	123.7	22.2%	118.9	23.0%	230.8	22.0%	236.3	21.6%	231.8	21.2%
South IES	54.7	9.9%	49.4	9.5%	102.9	9.8%	103.1	9.4%	104.7	9.6%
Middle Volga IES.....	58.3	10.5%	51.5	9.9%	109.4	10.5%	110.2	10.1%	114.4	10.4%
Urals IES	129.2	23.2%	124.7	24.1%	246.8	23.6%	265.6	24.2%	263.7	24.2%
Siberia IES	109.2	19.6%	105.3	20.3%	207.0	19.8%	216.4	19.7%	213.1	19.5%
Far East IES.....	23.3	4.2%	21.1	4.1%	43.9	4.2%	52.1	4.8%	50.6	4.6%

Total (UES)	**556**	**100%**	**517.7**	**100%**	**1,047.1**	**100%**	**1,096.5**	**100%**	**1,091.6**	**100%**

Source: System Operator

Electricity Demand and Supply

The fluctuating nature of electricity demand, which varies widely season by season and within any given day, makes it essential that the Russian Federation's energy system be able to cover peak moments of demand in every region to avoid blackouts. The recent slow-down of the economy growth in Russia in combination with the new construction during the period of 2008–2020 made the Russian energy system generally more reliable, and currently, there is no deficit in generation capacity in Russia.

The UES peak load for the year ended 31 December 2020 (150 GW) accounted for 61% of the UES total installed capacity (245 GW).

Structure of the Electricity Market in Russia

The electricity generation sector is currently principally comprised of the following types of power plants:

- *Thermal power plants*. This type of generator includes fossil-fuel-powered plants using natural gas, coal and/or fuel oil, producing either electricity or both electricity and heat. The thermal power plants are owned by the Group, Gazprom Energoholding subsidiaries (Mosenergo, TGK-1, OGK-2), as well as by Inter RAO, Enel Russia, Unipro, Fortum and other energy companies, including Tatenergo, Irkutskenergo and Far-Eastern Generating Company (RusHydro Group).

- *Hydropower plants.* Hydropower plants ("**HPPs**") are owned by RusHydro, which owns more than 50% of the installed capacity of Russian HPPs, Eurosibenergo, TGK-1 and others.

- *Nuclear generation complexes*. Russian nuclear generators are owned and operated by Rosenergoatom Concern.

Generation Companies

In the course of the power sector reform during 2006-2008, state controlled holding RAO UES Russia and its subsidiaries were split in order to separate the electricity generation, transmission, distribution and electricity supply businesses. During the reform of the sector a number of private new investors obtained control in the generation and supply companies, among them EON, Enel Russia, Fortum, Renova, Onexim. Some of the generation companies such as Inter RAO, Mosenergo, TGK-1, OGK-2, TGK-14 and RusHydro remain indirectly controlled by the State through State-controlled enterprises. The reform did not impact the nuclear energy generation, with the State remaining the 100% owner of Rosenergoatom.

Company	**Installed power capacity (GW)**	**% of total installed capacity**
Group.....	10.9	4.4%
RusHydro	39.4	16.1%
Gazprom Energoholding	39.0	15.8%
Inter RAO.....	33.7	13.6%
Rosenergoatom.....	29.0	11.7%
Eurosibenergo.....	19.5	7.9%
T Plus.....	15.7	6.4%
Other.....	57.8	23.6%
Total.....	**245**	**100%**

Source: Ministry of Energy of the Russian Federation

Transmission and Distribution

High voltage power lines in the Russian Federation are primarily operated by Federal Grid Company, which is owned by PJSC Rosseti, a company created as a result of the restructuring of RAO UES Russia and controlled by the Russian Federation.

The vast majority of medium- and low-voltage distribution networks are currently consolidated into 11 Inter-Regional Distribution Companies and 4 regional distribution companies under control of PJSC Rosseti.

Energy Retail Customers

Russian retail customers currently purchase electricity from guaranteeing suppliers, most of which have been spun off from the AO-Energos and sold by RAO UES Russia in public auctions, as well as from electricity retail companies, which sell electricity to large industrial consumers.

Structure of the Electricity Market in Russia

The Russian electricity market consists of wholesale and retail markets and capacity and electricity, while interrelated, are treated as separate economic products. The capacity market represents the obligation and ability to keep sufficient generation capability in reserve in order to satisfy a target level of potential demand, while the sale of electricity represents the actual delivery of electricity to the purchaser.

Wholesale Electricity and Capacity Markets

The wholesale electricity and capacity markets are divided into two pricing zones and non-pricing zones (tariff zones). The first pricing zone includes the territory of the European part of Russia and the Urals while the second pricing zone includes Siberia. The key driver behind the different pricing levels and pricing dynamics in each zone is the structure of installed capacity in each zone, the level of interconnectivity with another pricing zone and the mix of generation plants in each pricing zone. In particular, the first pricing zone has a high share of nuclear and gas-fired generation capacity and the second pricing zone has a high share of hydro generation capacity. In the areas not included in any of the pricing zones (the Arkhangelsk and Kaliningrad regions, the Komi Republic and various other northern regions of Russia and the Far East), where the electricity and capacity markets are not yet possible, the sale of electricity is carried out under special rules and tariffs as determined by the FAS.

The wholesale electricity and capacity are generally sold at unregulated prices in the Russian Federation. However, certain exceptions exist with respect to the Republic of Komi, Arkhangelsk and Kaliningrad Regions, regions of North Caucasus, the Republic of Tuva, the Far East and Buryatia which remain subject to tariffs. Also, the current process of liberalisation does not extend to household electricity prices, which remain subject to tariffs, nor does it currently contemplate the creation of a free market for transmission, distribution and dispatch services.

Wholesale market participants mainly include:

- sellers of electricity and capacity, including generation companies (OGKs, RusHydro, TGKs and others); and

- purchasers of electricity and capacity, including major power consumers, electricity retail companies (energy traders) and generation companies, which, at certain points in time, may purchase electricity in the market, rather than generate such electricity, to fulfil their supply obligations under existing contracts.

Electricity Market

The period from 1 September 2006 to 31 December 2010 was a transitional period until the liberalisation of the wholesale electricity and capacity markets was fully completed. At the beginning of the transitional period regulated contracts covered almost all volume of electricity and capacity

produced and sold. Thereafter, in accordance with the Resolution of the Russian Government "On Improvement of the Functioning of the Wholesale Electric Energy Market" No. 529 dated 31 August 2006, as amended (the "**Resolution No. 529**"), the share of sales under regulated contracts was constantly declining.

The Resolution No. 529 was amended by the Wholesale Market Rules (as defined below), which came into force on 1 January 2011.

According to the Wholesale Market Rules, electricity is traded based on the following trading mechanisms:

- Regulated Contracts. From 1 January 2011 the target model of a competitive wholesale electricity and capacity markets was completely formed: within pricing areas regulated contracts are traded only for volumes of electricity and capacity designated for delivery to the population, groups of customers equivalent to the population and participants of the wholesale market which purchase electricity (capacity) within certain territories where the Government of the Russian Federation established particular performance features for wholesale and retail markets. The parties to Regulated Contracts are determined by, and contracts are registered with, the operator of the wholesale market ("**Commercial Operator**").

  The sellers under the Regulated Contracts are required to cover the volumes prescribed in the Regulated Contracts either through their own generation or through their purchase of electricity on the "one-day- ahead" or balancing markets at prevailing market prices. If a buyer requires additional electricity, it can buy it on the "one-day-ahead" or balancing market at current market prices. The Regulated Contracts also incorporate the "take-or-pay" principle under which the buyer who cannot consume the full volume of electricity as stipulated by its Regulated Contract, must still pay in full and seek to recover its costs through the sale of its excess contracted volumes on the balancing market.

- One-day-ahead market (spot market). Electricity trades on spot market are conducted on an hourly basis on the spot market at unregulated prices. The participants may submit bids for buying or selling electricity for a certain volume and price for each hour of the next day. The Commercial Operator selects the winning bids on the basis of an equilibrium price (i.e., the price which balances supply and demand) for each hour of the following day.

  After the equilibrium prices and volumes are determined, the participants may submit price-confirmation bids, confirming their intention to sell or buy electricity at the determined volumes and equilibrium prices. Price-confirmation bids are rejected if it is not technically feasible to supply the volumes specified in the price-confirmation bids or where there is an imbalance between the total volumes specified by purchasers and the total volumes specified by suppliers.

- Balancing market. The balancing market is a real time market for electricity based on competitive bids submitted by suppliers and market participants, which is intended to cover any discrepancy between planned power volumes on the spot market and the actual volumes generated or consumed.

- Free bilateral contracts. Participants in the wholesale market may sell electricity under unregulated contracts at unregulated prices. Electricity prices and volumes sold under free bilateral contracts are negotiated between the supplier and the purchaser. Free bilateral contracts and any amendments thereto are required to be registered with the Commercial Operator.

- Non-pricing zones of the Far East. The Far East IES operates the model of wholesale market with a sole purchaser. Energy and capacity suppliers provide the electricity and capacity to the sole purchaser under the established tariffs in accordance with four-party sale and purchase agreements among the following parties: the relevant generating company, the sole purchaser, the ATS and JSC "CFR". The sole purchaser, in turn, provides electricity and capacity to the

wholesale market purchasers under the prices calculated by the ATS on the basis of indicative prices established by the FAS, in accordance with four-party sale and purchase among the following parties: the sole purchaser, the relevant electricity or capacity purchaser, the ATS and JSC "CFR".

In accordance with the Resolution of the Russian Government No. 1172 dated 27 December 2010, the functions of the sole purchaser are conducted by the energy supply company, established upon the reorganisation of the joint-stock companies which were operating within the relevant territory, provided that such energy supply company provides to the retail market more than 50% of electricity consumed within the Far East Region. Currently it is Far-Eastern Generating Company, guaranteeing supplier for Amur Region, Jewish Autonomous Region, Khabarovsk Region and Primorsk Region. The aggregate volume of Far-Eastern Generating Company supplies to the retail market comprises more than 90% of the electricity consumption of the Far East IES.

Capacity Market

The wholesale capacity market operates in parallel with the wholesale electricity market. The primary goal of the wholesale capacity market is to cover fixed costs and to ensure timely commissioning of new generation capacities. When selling capacity, generation companies are required to maintain their equipment in proper condition in order to be able to produce electricity in the required volumes and with the required specifications at any time.

The wholesale capacity is traded based on the following trading mechanisms:

- Competitive capacity auction (KOM). Capacity is sold upon the results of a competitive capacity auction ("**KOM**") for a six-year period. Under the KOM procedure, the price and volume of capacity is defined by the system operator after the selection of price bids which meet the criteria of the minimum electricity and capacity price.

- Free bilateral contracts. Capacity, which is not covered by Regulated Agreements, may be sold under unregulated free bilateral contracts provided that such capacity is selected under the KOM procedure.

- Regulated Contracts. Regulated Contracts for the purchase of capacity are concluded between the suppliers and purchasers on the basis of the prices established under the FAS tariffs (indicative prices). This mechanism applies only to the contracts relating to capacity designated for delivery to household and equivalent consumers.

- Capacity supply agreements (DPM). Capacity of generating companies which are subject to capacity supply agreements is sold on a long-term basis, provided that (i) such capacity meets certain requirements and (ii) the payment under such capacity supply agreements is guaranteed.

- Modernisation programme (DPM-2). The Government of Russian Federation launched modernisation programme according to which it is planning to modernize old thermal generating electric power equipment with aim to reduce operating expenses and to increase fuel efficiency.

- Forced generators capacity. Capacity of the generators which were not selected under the results of KOM is not paid for, but such forced generators must continue operating due to some technological and other reasons (e.g. threats of heat and electricity deficit).

- Non-pricing zones of the Far East. The Far East IES operate the model of wholesale market with a sole purchaser. Energy and capacity suppliers provide the electricity and capacity to the sole purchaser under the established tariffs in accordance with four-party sale and purchase agreements among the following parties: the relevant generating company, Far-Eastern Generating Company, the ATS and JSC "CFR". Far-Eastern Generating Company, in turn, provides electricity and capacity to the wholesale market purchasers under the prices calculated

by the ATS on the basis of indicative prices established by the FAS, in accordance with four-party sale and purchase among the following parties: Far-Eastern Generating Company, the relevant electricity or capacity purchaser, the ATS and JSC "CFR".

Retail Electricity Market in Russia

The retail electricity market includes the following participants: power generators and consumers, guaranteeing suppliers, independent power supply companies and grid operators. Consumers can purchase electricity either from guaranteeing suppliers and independent power supply companies or directly from the retail market participants (i.e., plants with capacity of up to 25 MW). Consumers have an obligation to pay for the relevant transmission services, which is done either directly or via guaranteeing suppliers and/or independent power supply companies.

The guaranteeing suppliers and/or independent power supply companies purchase the required volumes of electricity on the wholesale market. The sales premiums gained by the guaranteeing suppliers are regulated by the regional authorities, while the independent power supply companies are allowed to determine such sales premiums on a competitive basis.

Within the pricing zones of the retail electricity markets, the power generators may sale electricity to the consumers either directly (under the contracts) or through guaranteeing suppliers subject that the price of electricity provided through the guaranteeing suppliers shall not exceed the price applied by such guaranteeing suppliers in the wholesale market.

Grid distribution companies shall pay for energy losses arising in the retail electricity markets and, in turn, are paid for the electricity transmission services. Their activity is subject to tariffs.

Tariffs

Wholesale Electricity and Capacity Markets

The volumes of electricity and capacity to be provided under Regulated Contracts are established for each respective power generator in accordance with the consolidated forecast balance of electricity production and supply prepared by the FAS. Such volumes to be supplied under Regulated Contracts shall not exceed 35% of the total volume of electricity (capacity) which shall be supplied by such power generator in the wholesale market according to the balance resolution for such power generator.

The volumes of electricity which are not covered by Regulated Contracts are purchased under free bilateral contracts on the "one-day-ahead" or balancing market. Starting from 1 January 2023, prices (tariffs) for electrical energy are to be established on a long-term basis.

Tariffs for the electricity and capacity for 2021 have been calculated by the FAS by way of indexation of the base tariffs in accordance with the indexation formulae initially established by the Federal Tariff Service (the "**FTS**") (Order No. 210-e dated 28 August 2014). Base tariffs – tariffs for the electricity and capacity for 2021 – have been initially calculated by the FAS in accordance with the method of economically feasible expenses pursuant to methodological instructive regulations set out in the Order of FTS of Russia No. 199-e/6 dated 15 September 2006 "On approval of Methodological instructive regulations on calculation of tariffs for electricity and capacity under the sale and purchase agreements entered into under the regulated tariffs (prices) established on the wholesale market", which provided for calculation of expenses on "item-by-item" basis.

Under the Resolution of the Russian Government No. 837 dated 26 June 2019, amendments to the calculation of tariffs for the electricity and capacity were introduced. Effective from 1 July 2020, the new tariff calculation method additionally covers the factual fuel costs of the relevant generating companies.

Retail market rules establish a pricing system for the retail electricity market. Sales margins for guaranteeing suppliers and tariffs for consumers in isolated regions are established by the relevant regional tariff agencies based on the minimum and maximum levels determined by the

FAS. Guaranteeing suppliers and suppliers of electricity to residential consumers must supply a set portion of the electricity at regulated prices, while the remaining portion may be supplied at market prices. Retail electricity prices are calculated based on formulas provided in the Resolution of the Russian Government No. 1179 dated 29 December 2011 (as amended).

Overview of the Heat Market in Russia

General Overview of the Heat Market in Russia

The Russian heat energy market represents significant share of Russia's final energy consumption. For public safety, particularly during the winter season, it is critical to maintain the heat infrastructure in good operational condition.

Heat energy producers in Russia primarily include CHPPs and heat boilers; both fossil-fuel (gas, coal, fuel oil, and diesel) and electric. A substantial portion of heat energy produced in Russia is produced by CHPPs in a combined cycle mode.

Heat is transmitted and distributed through local heat grids that are mainly owned and operated by the heat producers, wholesale retailers or municipalities. Heat producers sell heat either: (i) directly to consumers that are connected to the heat grids owned by producers or leased from municipalities, or (ii) to wholesale resellers that own heat grids to which respective customers are connected.

In contrast to electricity, heat energy is characterised by exponentially increasing losses during transportation, particularly as distances increase. Consequently, heat energy supply is generally restricted to areas located in close proximity to heat production. Therefore, the heat energy market is a parochial retail market.

For the purposes of efficient and safe operation of heat supply systems, their development and increase of energy efficiency, the Federal Law of Russian Federation No. 190-FZ "On Heat Supply" dated 27 July 2010 (the "**Heat Supply Law**") envisages development and approval of heat supply schemes for each such system. Allocation of heat energy consumers among the sources of such energy within a particular heat supply system is administered by a competent authority by way of annual adjustments made to the heat supply scheme. Where it is possible to supply consumers with heat energy from various sources, while assuring reliable heat supply, the heat load shall be allocated among heat energy sources on a competitive basis with reference to minimum differential costs incurred by such sources for heat energy production.

In the structural mix of the heat energy consumption, the largest share of total consumption is represented by industry users and the residential population.

Heat energy demand is subject to considerable fluctuations and varies significantly across different seasons as well as during a single day. Peak consumption occurs during the winter months, with relatively low consumption during the summer months, which dictate the load of power generating capacity.

Heat is mainly distributed as steam or hot water that is transferred through the pipe distribution system. Heat produced by the Group's assets is supplied to consumers through a heat distribution network covering approximately 11 thousand km, of which approximately 3.8 thousand km is owned by the Group, with the remaining sections being leased from local municipalities and third parties. The terms of these lease agreements vary between one and three years. The Group conducts regular maintenance and repairs of its heat distribution network (both owned and leased) in order to ensure the effective utilisation of the network and a stable supply of heat to its customers. The repair and maintenance provisions under the lease agreements with municipalities and third parties vary, with the municipality or third party remaining responsible for capital repairs at its own expense under certain agreements and the Group assuming a duty to maintain the network and carry out capital repairs under certain others.

In order to establish a procedure for interaction to ensure the operation of the heat supply system, the Heat Supply Law entrusts power suppliers and heat network operators operating within the same heat supply system, with the obligation to enter into agreements for the management of such system annually prior to a heating season. Such agreements shall, inter alia, determine the hierarchy of dispatch services departments of the relevant entities and procedure for their interaction, the procedure for arranging heat networks maintenance, operational control of the heat supply system and procedures for access to heat networks for these purposes and for interaction between these entities in emergency situations.

The Heat Supply Law envisages that designated heat suppliers shall be determined within heat supply schemes by the federal executive authority responsible for implementing the state heat supply policy or by a municipal authority. For a designated heat supplier, the heat supply agreement constitutes a public agreement. It shall, therefore, enter into such agreements with any consumer willing to do so.

The Heat Supply Law envisages services on reserve heat capacity maintenance. A reserve heat capacity maintenance fee is charged if a consumer does not consume heat energy but has not disconnected its heat-consuming units from the heat network in order to retain the ability to resume consumption in the future. The imposition of the reserve capacity maintenance fee will result in a partial reallocation of heat energy production expenditure among "consuming" and "non-consuming" consumers; such reallocation is not expected to reduce tariff revenues from the sale of heat energy.

CHPPs are under an obligation to maintain fuel reserves throughout the year as prescribed by the statutory standards approved by the Government of Russian Federation or an authorised federal executive authority. Failure to maintain statutory fuel reserves or to follow the procedure for creating and using such reserves, may lead to administrative liability in the form of a fine imposed upon officers, or their disqualification, as well as a fine imposed on the heat supplier equalling the value of the lacking fuel reserve that is necessary to meet the statutory requirement.

Tariffs

Heat is sold by the Group under regulated tariffs, which are established by regional authorities. While the demand for heat that is to be used in production processes by industrial corporate customers is relatively stable throughout the year, the demand for heat that is used for heating purposes varies significantly, and is highly dependent on weather conditions.

Heat tariffs are regulated and set by regional authorities within the framework governed by the FAS. The FAS is responsible for setting the minimum and maximum tariff limits with respect to heat energy sold on the retail markets for each particular region, which are established for periods of at least one year. The heat tariffs are set for each heat generating unit by regional tariff authorities within the minimum and maximum limits approved by the FAS.

The state regulation of heat supply will be applied in respect of the following groups of services:

- heat energy (capacity) produced in the combined cycle by heat energy sources with installed electric power generating capacity of at least 25-MW, as well as heat energy (capacity) and heat transfer media supplied by heat suppliers to consumers or to other heat suppliers; and

- services involving connection to the heat supply system, maintenance of reserve heat capacity for certain categories of socially significant consumers and transmission of heat energy and heat transfer media.

Certain tariff ceilings for heat energy (capacity), other than the heat energy (capacity) supplied by heat suppliers to other heat suppliers, are set for the relevant region by a competent federal executive authority, while specific tariffs are set by regional authorities for each supplier individually. Tariffs for all other types of heating-related commodities and services are also set by competent regional authorities. In accordance with the laws of respective regions, certain tariff-setting powers of regional authorities may be delegated to municipal authorities.

In 2017, the Russian Parliament adopted the Federal Law "Amending the Federal Law on Heat Market and Other Legislative Acts of the Russian Federation on Development of the Heat Market" No. 279-FZ dated 29 July 2017. According to the new scheme introduced by the new law, the price cap for heat is based on the suppliers' costs and equal to the price of heat energy produced and supplied by an efficient energy source, a so-called "alternative boiler house". This methodology of heat energy price benchmarking has been developed by the Market Council and is based on the concept that the cost of heat energy produced by a centralised producer (a power plant) cannot exceed the cost of an alternative heat energy source available to the end consumer.

The calculation of the price cap is be based on the following compensation:

- Fuel costs associated to the production of the heat energy: gas, fuel oil, coal (calculated as a ratio of fuel consumption to the unit of heat energy production).
- Actual end cost of fuel, inclusive of its delivery and cost indexation.
- Return of capital expenditure related to the construction of new boiler houses and heat network.

The shift to the "alternative boiler house" methodology by 2023 will alter both the price setting and the relationship between the heat energy supply participants, and primarily the role of a single heat energy supply company. In addition to its functions as a single buyer and supplier of heat energy in its respective territory, a single heat energy supply company is to become a centre of quality control for heat energy supply, and therefore it would have the opportunity to make an impact on the optimisation and development of the heat energy supply scheme within its territory.

Prices for the produced heat energy (capacity) and the tariff for the transmission of heat energy will be set by the parties to the heat energy supply agreement, which should stimulate a single heat energy supply company and other participants to improve efficiency of heat energy supply.

The existing long-term tariffs will be in operation until the end of the transition period in 2020-2023.

Overview of the Transportation Market in Russia

In Russia, ports represent the major gateway for the export and import of cargo. Historically, Russian ports have been export-oriented and closely integrated with rail and pipeline systems to handle significant portions of bulk cargo.

The Russian bulk cargo transportation market includes the following segments: bulk cargo handling at ports, bulk cargo transportation by rail and truck deliveries of bulk cargo.

The Russian bulk cargo transportation market has been rapidly developing in recent years, supported by the growth in export of certain commodities and increase in rail and port transshipment capacity. The value of Russian exports has increased from U.S.$114.4 billion to U.S.$378.6 billion from 2000 to 2020, according to World Bank. Russian exports are dominated by bulk and liquid commodities (where containerisation is relatively low), while imports comprise mainly finished consumer goods, machinery and assembly parts for foreign manufacturers with production in Russia (most of which is delivered in containers).

There are four major gateways for bulk cargo in Russia: the Far East Basin, the Arctic Basin, the Baltic Sea Basin and the Black Sea Basin. According to Rosmorport, in the year ended 31 December 2020, transshipment of bulk cargo in the Far East Basin, in the Arctic Basin, in the Black Sea Basin and in the Baltic Sea Basin amounted to 146.8 million tonnes, 30.1 million tonnes, 114.9 million tonnes and 112.8 million tonnes, respectively.

REGULATION OF COAL, ELECTRICITY AND TRANSPORTATION INDUSTRIES

Regulation of Coal Industry

Applicable Laws, Rules and Regulations

Russia has not enacted any specific legislation governing the coal industry or the activities of coal producers. The production, sale and distribution of coal in the Russian Federation are regulated by general civil legislation and special legislation relating to quality standards, industrial safety rules, the environment and other issues.

The legislation regulating mining, processing and the use of minerals in Russia is based on the Russian Constitution and Law No. 2395-1 "On Subsoil" dated 21 February 1992, as amended (the "**Subsoil Law**"). The Subsoil Law allocates jurisdiction in the mining sector between federal, regional and local authorities, sets out the basic principles and features of the licence-based regulatory framework, and outlines the rules governing the issuance, transfer, suspension and termination of subsoil licences and subsoil use. There are also a number of regulations issued by the Russian federal government through its ministries and agencies that regulate certain aspects of mineral mining.

In 2018, the Government of Russian Federation enacted the "Mineral Resources Development Strategy". This document, among other things, determines the most important priorities of the mining industry. It also proposes measures aimed at provision of Russian Federation citizens and foreign countries with enough level of mineral resources, including coal.

On 13 June 2020, the Government of Russian Federation approved the "Coal Industry Development Programme". The programme envisages for the crucial aims and mechanisms for development of coal industry in Russian Federation for the period prior to 2035. The programme states as one of the crucial goal of Russian legislation in sphere of coal mining creating of favourable tax conditions for investment in coal mining. Together with legal developments, the programme envisages for gradual replacement of old equipment with new modern technologies. The programme provides for technical upgrade and modernisation both of already existing coal deposits and elaboration of new ones. The programme is also aimed at boosting the quality of provided coal together with decline in amount of flaws.

Federal Law No. 184-FZ "On Technical Regulation" dated 27 December 2002, as amended (the "**Technical Regulation Law**"), sets forth rules and requirements relating to the development, enactment, application and enforcement of mandatory technical requirements and the development of voluntary standards relating to manufacturing processes, operations, storage, transportation, selling and utilisation.

Federal, Regional and Local Regulatory Authorities

At the federal level, regulatory supervision over the Group's operations is divided primarily among the Russian Government, the Ministry of Economic Development, the Ministry of Natural Resources and Environment and the Ministry of Industry and Trade ("**Minpromtorg**"). The Russian Government ensures the implementation of a general state policy in the area of geological study, use and trade of coal; it also determines licensing procedures for the use of subsoil in connection with the exploration and extraction of natural resources. The Ministry of Economic Development is responsible for encouraging investment, foreign trade and support of scientific research. The Ministry of Natural Resources and Environment is responsible for the development of government policy and regulation in the sphere of exploration, use, restoration and protection of natural resources and environment. Minpromtorg is responsible for the development of government policy in the areas of industrial development, energy consumption effectiveness, standardisation and metrology.

The federal ministries in Russia are not, however, responsible for compliance control or management of state property and provision of state services, which is within the jurisdiction of federal services and federal agencies, respectively. The main Federal services and agencies that regulate the Group's operations in Russia include: the Federal Agency for Mineral Resources ("**Rosnedra**"),

Rosprirodnadzor, Rostekhnadzor, the Federal Service for the Oversight of Consumer Rights Protection and Welfare ("**Rospotrebnadzor**"), the Federal Service for Labour and Employment ("**Rostrud**"), and the Federal Agency for Technical Regulation and Metrology ("**Rosstandart**").

In particular, Rosnedra issues and oversees subsoil licences, approves project design documentation for geological exploration and controls protection of subsoil and implementation of geological exploration.

Rosprirodnadzor issues and oversees environmental permits and licences, establishes limits for waste disposal, monitors and enforces compliance with emission and waste management standards, and provides official ecological examination of relevant project design documentation.

Rostekhnadzor oversees and enforces compliance with certain mandatory industrial safety rules, which include safety procedures relating to the installation, deployment and operation of technical devices and machinery used in the Group's business, and the production and technological processes. It also (i) issues licences for certain industrial activities and activities relating to safety and environmental protection, such as licences for exploitation of coal and conduct of operations involving the use of explosives, surveyors' works and use of dangerous wastes and (ii) maintains a register of dangerous facilities.

Rospotrebnadzor oversees and enforces compliance with public health and safety standards as well as consumer rights protection.

Rostrud controls and enforces compliance with labour legislation and occupational health and safety standards.

Rosstandart determines and oversees compliance with mandatory general technical and industrial standards (where applicable) and implements technical regulations.

In 2020, competence of relevant supervisory authorities was spread by adding an opportunity of competent bodies to establish and issue procedures for drafting rules for development of geological exploration technologies and mining. Since that, deposits may be provided together for elaboration of such rules and mining.

The FAS implements the state policy relating to promoting the development of the commodity markets and competition, enforcing antimonopoly legislation, and preventing and curbing anticompetitive behaviour, unfair competition practices and other actions restricting competition. The FAS, among other things, oversees acquisitions of controlling stakes in companies meeting certain criteria and the achievement of dominant market position by business enterprises.

In addition to the above-listed federal executive bodies, which are directly involved in the supervision and regulation of the Group's business, there are a number of other governmental bodies and agencies with authority over general issues relating to the Group's business, including the Ministry of Justice of the Russian Federation, and transportation and tax collection agencies.

Under the Subsoil Law, the jurisdiction of the regional authorities in the exploration industry includes, among other things, establishment and execution of local programmes aimed at the development of subsoil plots in the region, maintenance a local database of geological information, the establishment of state funds of mineral resources for the Russian regions, and regulation, along with federal authorities, of the activities of organisations in the mining industry within the territory of the relevant constituencies of the Russian Federation.

In addition, regional and local authorities control land-use allocations and exercise certain taxation powers.

Licensing

The Group is required to obtain licences, permits and authorisations from Russian governmental authorities to conduct its operations. Federal Law No. 99-FZ "On Licensing of Certain Types of Activities" dated 4 May 2011, as amended (the "**Licensing Law**"), and other laws and regulations list activities which can only be performed under a licence and/or a permit issued by the relevant Russian authorities and establish the procedures for the issuance of such licences. In order to conduct its operations, the Group requires licences and permits for, among other things:

- exploration, evaluation and development of subsoil deposits;
- pollutant emissions into the environment;
- handling of waste (generation, collection, transportation, storage, processing, disposal and recycling);
- the storage and use of explosive materials;
- transportation of coal materials by railway or river and sea transport.

Under the licensing regulations and the terms of its licences and permits, the Group must comply with numerous industrial standards, employ qualified personnel, maintain certain equipment and a system of quality control, maintain insurance coverage, monitor operations, make appropriate filings and, upon request, submit information requested by the licensing authorities that oversee and inspect its activities. A licence may be suspended in case of (i) imposition of administrative sanctions on the licensee for a gross breach of licensing requirements; and (ii) administrative suspension of activities for gross breach of the licensing requirements. A licence may also be cancelled by the court in case of repeated breach of the licensing requirements after suspension of the licence.

According to the Town Planning Code of the Russian Federation No. 190-FZ dated 29 December 2004, as amended, design, construction and reconstruction of permanent structures and facilities, including those used in mining, are subject to permits for construction and review of the design documentation by the respective authorities and commissioning permits.

Subsoil Licensing

Overview

Each mining operation requires a subsoil licence issued by Rosnedra with respect to an identified mineral deposit, as well as the right (through ownership, lease or other right) to use the subsoil plot where such licensed mineral deposit is located. In addition, operating permits are required for specific mining activities.

Subsoil licences are issued in accordance with the Subsoil Law, the Civil Code of the Russian Federation, as amended (the "**Civil Code**") and the Procedure for the Licensing of Subsoil Use adopted by Resolution of the Supreme Soviet of the Russian Federation No. 3314-1 dated 15 July 1992, as amended. A licence granted under the Subsoil Law is accompanied by a licensing agreement, which sets out the terms and conditions for use of the subsoil.

There are two main types of licences related to the extraction of minerals: general geological exploration licence and mining licence. A general geological exploration licence allows its holder to conduct deposit exploration and evaluation. This licence only allows to conduct exploration of those mineral resources that are specified in the licence. It does not provide for any priority to the holder of an exploration licence in obtaining a mining licence. A mining licence allows its holder to conduct a detailed exploration and development of deposits. It also allows to conduct waste treatment (relating to waste generated by mining operations and related facilities) unless otherwise is stated in the licence. A licence for detailed exploration is not issued separately and the right to conduct detailed exploration is covered by the mining licence. In practice, combined licenses for general and detailed geological exploration and mining may be issued. The boundaries of a licensed area are set out in the licence (and expressed

in terms of latitude, longitude and depth). Currently, mining licences and combined exploration and mining licences are awarded by tender or auction conducted by special auction commissions of Rosnedra. While such auction or tender may involve a representative of the relevant region, a separate consent of regional authorities is generally not required in order to issue subsoil licences. The winning bidder in a tender is selected in particular on the basis of the submission of the most technically competent, financially attractive and environmentally sound proposal that meets the published tender terms and conditions. At an auction, the success of a bid is determined by the attractiveness of the financial proposal. A general geological exploration licence may be issued without holding an auction or tender, for example, pursuant to an application made by the interested party, if there are no discovered reserves or mineral resources in the targeted area, or in some other limited cases (wings of the deposit under development and layers beneath and above the deposit). Regional authorities may issue production licences for "common" mineral resources, such as clay, sand or limestone. The Russian Government may establish certain limits for companies with foreign ownership on participation in the auctions at which licences for exploration of subsoil plots of federal significance are awarded.

Pursuant to the Subsoil Law, a subsoil plot is provided to a subsoil user as a "mining allotment", i.e., a geometric block of subsoil. Preliminary mining allotment boundaries are determined at the time the licence is issued. Exact mining allotment boundaries are established upon the approval of a development plan by a special commission comprised of representatives from the Ministry of Natural Resources and Environment, Rosnedra, Rosprirodnadzor and Rostekhnadzor. These exact boundaries are certified in the mining allotment plan issued to the licensee thereafter. The exact mining allotment boundaries are incorporated into the licence as an integral part. Pursuant to Resolution No. 118 of the Russian Government dated 3 March 2010, the special commission, and, in certain cases, local authorities have the authority to approve development plans. In addition, a development plan provides for other material issues relating to the development of the deposits, including, inter alia, safety and environmental measures, sustainable utilisation of deposits, conservation and liquidation procedures and reclamation of land.

The term of each licence is set forth in the licence. Prior to January 2000, exploration licences had a maximum term of five years, mining licences a maximum term of 20 years, and combined exploration, evaluation and mining licences a maximum term of 25 years. Following the amendment of the Subsoil Law in January 2000, ordinary exploration licences now have a maximum term of five years; mining licences are generally granted for a term of the expected operational life of the field based on a feasibility study; and combined licences can be issued for the term of the expected operational life of the field based on a feasibility study. In addition, the licence for the extraction of the subsoil waters is granted for a 25-year period. These amendments do not affect the terms of licences issued prior to January 2000, but permit licensees to apply for extensions of such licences for the term of the expected operational life of the field, provided the licensee complies with the licence terms. The term of a subsoil licence runs from the date the licence is registered with Rosnedra.

A licensee has the right to develop and sell extracted mineral resources from the area indicated in the licence. The Russian Federation, however, retains ownership of all unextracted subsoil resources at all times, and the licensee only has rights to the minerals or other relevant types of mineral resources when extracted.

A subsoil exploration and production licence gives its holder exclusive subsoil use rights with respect to an identified licence area, including subsurface zones (however, land plots used for developing deposits are leased separately and in accordance with the Land Code of the Russian Federation No.136-FZ dated 25 October 2001, as amended (the "**Land Code**")) for the term of the licence.

Extension of Licenses

The Subsoil Law permits a subsoil licensee to request an extension of a mining licence in order to complete the exploration or evaluation of the minefield, extraction from the subsoil plot covered by the licence or the procedures necessary to vacate the land once the use of the subsoil is complete, provided

the licensee complies with the terms and conditions of the licence, the development plan and the relevant regulations.

To extend a subsoil licence the company must file an application with the local office of Rosnedra. In order for a licence extension application to be considered, the applicant must prepare technical documentation describing the exploration and extraction activities to be conducted at the underlying deposits. Such documentation must be prepared pursuant to the relevant regulations and approved by Rosnedra.

In practice, the factors that may affect a company's ability to obtain the approval of licence amendments include (i) its compliance with the licence terms and conditions, as well as with the development plan; and (ii) its management's experience and expertise relating to subsoil issues, including experience in amending licences. The Group is periodically checked for compliance by government authorities and has historically been in material compliance with its licences and development plans.

Transfer of Licenses

Licences may be transferred only under certain limited circumstances that are set forth in the Subsoil Law, including, among others, the reorganisation or merger of the licensee or in the event that the initial licensee transfers its licence to a subsidiary or a newly established legal entity in which it has at least a 50.0% ownership interest, provided that the transferee possesses the equipment and authorisations necessary to conduct the exploration or extraction activity covered by the transferred licence. Licences may not be transferred to a company or group of companies owned by foreign entities which (i) directly or indirectly control 10.0 % of voting shares comprising the share capital of such company; (ii) determine the decisions taken by such company including terms and conditions of its business; and (iii) appoint the chief executive officer and/or more than 10.0 % of members of the board of directors (supervisory board) or other collective management board of such company. However, the Russian Government in some exceptional cases may approve the transfer of the licences to such company.

Maintenance and Termination of Licenses

A licence sets out the terms and conditions for the use of the subsoil licence and certain environmental, safety and production commitments. Rosnedra and the licensee also enter into a licensing agreement where they may set out the expressly agreed additional terms, such as target extraction rates; conducting certain mining and other exploratory and development activities; protecting the environment in the licensed areas from damage; providing geological information and data to the local authorities and fulfilling specified commitments with respect to the social and economic development of the region. When the licence expires, the licensee must return the land to the condition required for its future use. Although most of the conditions set out in a licence are based on mandatory provisions contained in Russian law, certain provisions in a licensing agreement are left to the discretion of the licensing authorities and are often negotiated between the parties.

If the subsoil licensee fails to fulfil the licence requirements, upon notice the licence may be terminated by the licensing authorities.

The Subsoil Law and other Russian legislation contain extensive provisions with respect to the limitation, suspension or termination of the rights of a subsoil user. A licensee can be fined or its rights may be limited, suspended or terminated for repeated breaches of the law, as a consequence of a direct threat to the lives or health of people working or residing in the local area or in the event of certain emergency situations. The rights of a subsoil user may also be limited, suspended or terminated for violations of material licence terms. Although the Subsoil Law does not specify which terms are material, failure to pay subsoil taxes or failure to commence operations in a timely manner have been common grounds for limitation, suspension or termination of the rights of a subsoil user. Consistent overproduction, underproduction or failures to meet financial obligations in respect of a project (pursuant to the licensing agreement) are also likely to constitute violations of material licence terms.

In addition, certain licences provide that a licensee's failure to fulfil any of its obligations may constitute grounds for limitation, suspension or termination of the rights of a subsoil user.

The Group must comply with the Subsoil Law, including the provisions governing the use of subsoil, exploration and development of mineral resources.

Payments

Payments with respect to the exploration, evaluation and extraction of minerals include: (i) payments for the use of subsoil under the Subsoil Law (which may include regular payments for exploration of minerals and certain one-off payments); and (ii) the mineral extraction tax under the Russian Tax Code. Failure to make these payments could result in the suspension or termination of the subsoil licence.

Land Use Rights

Russian legislation prohibits any commercial activity, including mineral extraction activities, on a land plot without appropriate land use rights. Land use rights are generally obtained for only those parts of the licence area which are actually in use, including the plot being mined, access areas, and areas where other mining-related activity is being carried out.

Pursuant to the Land Code, companies generally have one of the following land rights in the Russian Federation: (i) ownership; (ii) lease; (iii) right of free use. The majority of land plots in the Russian Federation are owned by federal, regional or municipal authorities, which can sell, lease or grant other land use rights to third parties through public auctions or tenders or through private negotiations.

The Group generally has the right of ownership or has entered into long-term lease agreements in respect of its plots. A lessee generally has a priority right to enter into a new land lease agreement with a lessor upon the expiration of a land lease, however, it does not apply in relation to state or municipal land plots. Typically, in order to renew a land lease agreement in relation to state or municipal land plots, the lessee must apply to the lessor and participate in a tender to acquire lease rights but tender process is not required if the land plot is provided for exploration or development of a mineral deposit. Any lease agreement for a period of one year or more must be registered with the relevant state authorities.

Subsoil Plots of Federal Importance

In order for the Russian Federation to control subsoil resources necessary to safeguard national security, certain subsoil plots, including subsoil plots where the Group mines, have been classified as subsoil plots of federal importance and are subject to a special regulatory regime with regards to their exploration and development. Although the concept of a subsoil plot of federal importance is not new for the Russian subsoil legislation, the definition of a subsoil plot of federal importance was introduced only by amendments to the Subsoil Law which came into force in May 2008.

Subsoil plots of federal importance are plots containing deposits of (i) valuable minerals (e.g., uranium, diamonds, nickel and platinum group elements); (ii) more than 70 million metric tonnes of extractable oil; (iii) more than 50 billion cubic metres of gas; (iv) more than 50 tonnes of gold; or (v) more than 500,000 metric tonnes of copper. Subsoil plots under inland seas, territorial seas and the continental shelf of the Russian Federation, as well as under land related to national defence and security, also fall within this definition. The Subsoil Law and Resolution No. 823 dated 7 November 2008 of the Russian Government provide that a list of subsoil plots of federal importance will be officially published by Rosnedra. The current edition of the list of subsoil plots of federal importance is as at 6 November 2020.

The general rule set forth in the Subsoil Law is that subsoil plots of federal importance other than subsoil plots under inland seas, territorial seas and the continental shelf of the Russian Federation may be allocated for exploration and development only to Russian companies. However, the Russian Government may restrict participation of Russian companies with foreign investments in auctions for exploration or development of a particular subsoil plot of federal importance. In addition, allocation for

exploration and development of subsoil plots of federal importance which were discovered in the course of a geological survey by a foreign investor or a Russian company with foreign investments may be denied by the Russian government on a case-by-case basis.

Environmental Compliance

General

The Group is subject to laws, regulations and other legal requirements relating to the protection of the environment, including those governing the discharge of substances into the air and water, the management and disposal of hazardous substances and waste, the clean-up of contaminated sites, and protection of flora, fauna and other wildlife. Issues of environmental protection in Russia are regulated primarily by Federal Law No. 7-FZ "On Environmental Protection" dated 10 January 2002, as amended (the "**Environmental Protection Law**"), as well as by a number of other federal laws and regulations.

In the recent years, the Environmental Protection Law was slightly elaborated mostly by way of simplification of requirements to conducting inspections of implementation of unfavourable emission into atmosphere in course of unfavourable meteorological conditions.

Enforcement Authorities

Rosprirodnadzor (along with their regional branches) is the main regulatory service involved in environmental regulation, and implementation and enforcement of relevant laws and regulations. The Russian Government and the Ministry of Natural Resources and Environment are responsible for coordination of the activities of the regulatory authorities in this area. Such regulatory authorities, along with other state authorities, individuals and public and non-governmental organisations, also have the right to initiate lawsuits claiming compensation for damage caused to the environment. The statute of limitations for such lawsuits is 20 years.

Moreover, the following bodies are responsible for monitoring, implementing and enforcing relevant environmental laws and regulations in the Russian Federation:

- the Russian Government;
- the Ministry of Natural Resources and Environment of the Russian Federation;
- Rosprirodnadzor;
- Rostekhnadzor;
- the Federal Service for Hydrometeorology and Environmental Monitoring;
- Rosnedra;
- the Federal Agency for Forestry;
- the Federal Agency for Fishery; and
- the Federal Agency for Water Resources, together with its regional branches, as well as other state authorities and public and non-governmental organisations.

Environmental Permits

According to amendments to the Environmental Protection Law, since 1 January 2019, there are four categories of production sites depending on their impact on the environment. In relation to the Group's production sites that are included in the list of category I (designated as having significant impact on the environment), a complex environmental permit must be obtained from Rosprirodnadzor between 1 January 2019 and 31 December 2022. To obtain a complex environmental permit, a company must

develop technological standards of emission that comply with the technological standards of the best available technologies. If a company's technological standards are not sufficient, a temporary emission permit may be obtained from Rosprirodnadzor for a definite term to upgrade production sites to comply with such standards. The amendments also provide certain benefits for the companies that implement the best available technologies on their production sites. In particular, starting from 1 January 2020, companies that have implemented best available technologies pay no charges for a negative impact on the environment not exceeding emissions volumes as provided by technological standards of the best available technologies and may apply accelerated amortisation of the assets related to the best available technologies.

Pay-to-pollute

The Environmental Protection Law establishes a "pay-to-pollute" regime administered by federal and local authorities.

The Ministry of Natural Resources and Environment, Rosprirodnadzor, the Federal Agency for Water Resources and other government agencies have established standards relating to the permissible impact on the environment and, in particular, limits for emissions and disposal of substances, waste disposal and resource extraction. A company may obtain approval for exceeding these statutory limits from the federal or regional authorities, depending on the type and scale of environmental impact. As a condition to such approval, a plan for the reduction of the emissions or disposals must be developed by the company and cleared with the appropriate governmental authority.

The mechanism for calculating and collecting payments for activities which have a negative impact on the environment was established by the Resolution of the Russian Government "On Calculation and Collection of Payments for Negative Impact on the Environment" No. 255 dated 3 March 2017 ("**Resolution No. 255**"). Resolution No. 255 provides that the amount payable shall be estimated by the respective entity by multiplying (i) the size of payment base ("**payment base**") with respect to each pollutant included in the list of pollutants established by the Order of the Government of the Russian Federation "On Approval of the List of Pollutants to Which the Measures of State Regulation in the Field of Environmental Protection Apply" No. 1316-p dated 8 July 2015 by (ii) the corresponding rates of payment established by the Resolution of the Russian Government "On Payment Rates for Negative Impact On the Environment and Additional Coefficients" No. 913 dated 13 September 2016, with further application of coefficients established by the legislation on environmental protection and additional coefficients provided by the Resolution No. 913 and the Resolution of the Russian Government "On Payment for Negative Impact On the Environment for Disposal of 4th Hazard Class (Low-Hazard) Hard Domestic Waste and On Amendment of Certain Resolutions of Government of Russian Federation" No. 758 dated 29 June 2018. The payment base is equal either to the amount of pollutants emitted in the accounting period.

Companies must make advance payments on a quarterly basis, and any failure to make such payments when due may lead to an application of the overdue interest in amount of 1/300 of the key rate established by the Central Bank of the Russian Federation, but in any case no more than 0.2% for each day of delay. In 2020, the Resolution No. 255 was updated with clause providing payees with an opportunity to choose different formulas for calculation of payments.

The Group makes the relevant payments for the use of water objects in accordance with the Water Code of the Russian Federation No. 74-FZ dated 3 June 2006 (the "**Water Code**"). In addition, the Group pays for the negative impact on the environment, including payments for the discharge of waste and/or drain waters.

In addition, payments of such fees do not relieve a company from its responsibility to take environmental protection measures and undertake restoration and clean-up activities.

Ecological Approval

Certain activities that may affect the environment are subject to state ecological examination and approval by the Russian federal authorities or authorities of the constituent members of the Russian Federation in accordance with Federal Law No 174-FZ "On Ecological Expert Examination" dated 23 November 1995, as amended. Conducting operations that may cause damage to the environment without state ecological approval may result in the negative consequences described under "— *Environmental liability*".

Environmental Liability

If the operations of a company violate environmental requirements or cause harm to the environment or to any individual or legal entity, environmental authorities may suspend such operations or a lawsuit may be brought to limit or ban such operations and require the company to remedy the effects of the violation. Any company or employees that fail to comply with environmental regulations may be subject to administrative and/or civil liability, and individuals may be held criminally liable. In addition to fines, courts may also impose clean-up obligations on violators in lieu of compensation.

Subsoil licences generally require certain environmental commitments. Although these commitments can be substantial, the penalties for failing to comply are generally low and the clean-up requirements are not very onerous, but failure to comply may lead to a suspension of mining works.

Reclamation

The Group conducts its reclamation activities in accordance with the provisions of the Land Code and Resolution on Reclamation and Conservation of Land enacted by the Government of the Russian Federation No. 800 dated 10 July 2018. However, most of the Group's licences require the Group to conduct reclamation following exhaustion of the respective mines. The Group believes that it has complied in all material respects with the environmental standards of the appropriate regulatory authorities in Russia. The Group has not received any specific requests from such regulatory authorities to develop a closure plan or to establish a liquidation fund.

Technical Regulations

The Group is subject to various technical regulations and standards which apply to industrial manufacturing. The Technical Regulation Law introduced a new regime for the development, enactment, application and enforcement of mandatory rules applicable to production, manufacturing, storage, transportation, sales and certain other operations and processes, as well as new regulations relating to the quality of products and processes, including technical regulations, standards and certification. It was expected that these rules, or technical regulations, would replace the previously adopted state standards (the so-called "**GOSTs**"). However, most technical regulations have not yet been implemented, and, in the absence of such technical regulations, the existing federal laws and regulations, including GOSTs, that prescribe rules for different products and processes remain in force to the extent that they protect health, property, the environment and/or consumers. In addition, the federal standardisation authority has declared GOSTs and interstate standards adopted before 1 July 2003 to be the applicable national standards.

In certain circumstances, companies are required to obtain certification of compliance with applicable technical regulations, standards and terms of contracts or declaration of compliance with them. Currently, a number of the Group's products must be certified. Where certification is not mandatory, a company may elect voluntary certification by applying for a compliance certificate from the relevant authorities. Following the issuance of such certificate, the applicant has the right to use the relevant compliance mark on its products. In 2021, Russian legislation enacted for special registrar of voluntary certificates issued.

Industrial Safety

Due to the nature of the Group's business, a substantial portion of its activities is conducted at industrial sites by large numbers of workers, and labour protection is of significant importance to the operation of these sites.

The principal law regulating industrial safety is Federal Law No. 116-FZ "On Industrial Safety of Dangerous Industrial Facilities" dated 21 July 1997, as amended (the "**Safety Law**"). The Safety Law applies to industrial facilities and sites where certain activities are conducted, including sites where lifting machines are used, where toxic, flammable, oxidisable and other hazardous substances are produced, used, processed, stored or transported. There are also certain additional safety regulations applicable to the chemical industry.

As of August 2021, all regulated industrial sites are divided into four categories. Rostekhnadzor exercises the broadest control and supervision over sites pertaining to the first and second category, whereas sites included in the third and fourth categories enjoy a more liberal compliance regime.

Generally, any construction, reconstruction, liquidation or other activities in relation to regulated industrial sites is subject to an industrial safety review. Any deviation from project documentation in the process of construction, reconstruction or liquidation of industrial sites is prohibited unless reviewed by a licensed expert and approved by the Rostekhnadzor. On top of that, a company wishing to implement additional safety requirements or to substitute the requirements set forth in the legislation should file a safety case substantiating the proposed requirements. Such safety case is subject to mandatory industrial safety review.

Companies that operate such industrial facilities and sites have a wide range of obligations under the Safety Law and the Labour Code. In particular, they must limit access to such sites to specialists complying with the relevant qualifications and medical requirements, maintain industrial safety controls and carry insurance for third-party liability for injuries caused in the course of operating industrial sites. The Safety Law also requires these companies to enter into contracts with professional wrecking companies or create their own wrecking services in certain cases, conduct personnel training, create systems to cope with and inform Rostekhnadzor of accidents and maintain these systems in good working order.

Companies operating industrial facilities that fall within the highest two hazard categorisation levels must also prepare declarations of industrial safety which summarise the risks associated with operating a particular industrial site and measures the company has taken and will take to mitigate such risks, and use the site in accordance with the applicable industrial safety requirements. Such declaration must be adopted by the CEO of the company, who is personally responsible for the completeness and accuracy of the data contained therein. The industrial safety declaration, as well as an industrial safety review are required for the issuance of a licence permitting the operation of a dangerous industrial facility. Dangerous industrial facilities must be registered in the state register of dangerous industrial facilities maintained by Rostekhnadzor. The registration is permanent and must be renewed only in cases of changes in the regulated industrial site's composition and the liquidation or launch of a dangerous facility.

Any company or individual violating industrial safety rules may incur administrative and/or civil liability, and individuals may also incur criminal liability. A company that violates safety rules in a way that negatively impacts the health of an individual may also be required to compensate the individual for lost earnings, as well as health-related damages.

Licensing and Registration Requirements to Hazardous and Hydro-Technical Facilities

Rostekhnadzor issues licences for the operation of coal mining and coal beneficiation of I and II classed of danger, and also approves the declarations of safety of the hydro-technical facilities. Some hazardous facilities that fall within the technical requirements of the Safety Law, must be registered in the state register of hazardous industrial facilities. Hydro-technical facilities should be included into the State

Register of Hydro-Technical Facilities under the Federal Law "On Safety of Hydro-Technical Facilities " No. 117-FZ dated 21 July 2997, as amended (the "**Hydrotechnical Safety Law**").

Use of Surface Waters

The Water Code no longer requires any licensing of surface water use. However, licences that were issued under the previous regime remain in force until their expiration. Under the Water Code, surface water use may be effected either on the basis of (i) a water use agreement concluded with the state or local authorities, (ii) a decision of the state or local authorities to grant rights to the use of surface water or (iii) without any such agreements or decisions, depending on the purpose of surface water use.

Water use agreements relate to both the removal of water resources from water bodies and the use of water bodies for the purpose of electricity production without the removal of water resources. These agreements may be concluded for a period of up to 20 years. Decisions on granting rights to the use of surface water and water bodies relate, among other things, to the discharge of waste or drain water or the construction of hydro-technical facilities.

Use of Water Reservoirs

The Water Code requires that a water user must use water reservoirs in accordance with the Rules for the Use of Water Resources (the "**Rules**") approved by the Federal Agency for the Water Resources. In addition, a separate set of the Rules for each water reservoir with a volume in excess of 10 million cubic metres is determined individually, and a list of such reservoirs is approved by the Russian Government.

In addition to the Rules, the Federal Agency for Water Resources establishes an "operating regime" for a given period for each water reservoir (or its cascade). The Federal Agency for Water Resources usually sets the operating regimes of water reservoirs on a monthly basis, but in certain cases, including, for example, to allow the passage of river vessels or for the purposes of construction works, the operating regimes may be set on a weekly or even a daily basis.

Greenhouse Gas Emissions

The Group's approach to GHG emissions is tailored to satisfy both national and international standards. The Russian national GHG action was introduced by Decree No. 504-r of the Government of the Russian Federation dated 2 April 2014 and reflected the commitment of the Russian Government to reduce such emissions by no less than 25% by 2020 (with reference to the 1990 baseline). The Russian GHG legislation is evolving and the key laws and regulations are expected to be passed in 2017. Also, the Russian State Duma adopted the Federal Law "On Greenhouse Gas Emissions Reduction" No. 296-FZ dated 2 July 2021, which will come in force on 30 December 2021. This Federal law is aimed at reducing greenhouse emissions to comply with the Russian international obligations. Accordingly, the Group intends to ensure its compliance with these statutory requirements once they have been officially promulgated and in force.

Regulation of Electricity Industry

Overview

The legal and regulatory framework of the Russian electricity and capacity markets has been subject to constant renewal and amendment in recent years. Generally, the applicable laws and regulations focus on three main areas: (i) the establishment of a legal framework for the electricity industry and market; (iii) the regulation of the electricity and electricity capacity wholesale markets; and (iii) tariffs regulation.

As at the date of this Prospectus, the main laws and regulations relevant to the Group and its business are:

- the Resolution of the Russian Government "On Restructuring of the Electricity Industry of the Russian Federation" No. 526 dated 11 July 2001, as amended ("**Resolution No. 526**");

- the Federal Law "On Specific Features of Functioning of Electricity Industry, and on Introduction of Amendments into Certain Laws of the Russian Federation and on Abolishing Certain Laws of the Russian Federation in Connection with the Adoption of the Federal Law "On the Electricity Industry" No. 36-FZ dated 26 March 2003, as amended (the "**Transitional Period Law**");

- the Federal Law "On Electricity Industry" No. 35-FZ dated 26 March 2003, as amended (the "**Electricity Industry Law**");

- the Federal Law "On Energy Saving" and Improvement of Energy Efficiency and on the Amendments to Certain Legislative Acts of the Russian Federation No. 261-FZ dated 23 November 2009, as amended;

- the Hydrotechnical Safety Law;

- the Safety Law, as amended;

- the Federal Law "On Fire Safety" No. 69-FZ dated 21 December 1994, as amended;

- the Federal Law "Technical Regulations on Fire Safety Requirements" No. 123-FZ dated 22 July 2008, as amended;

- the Federal Law "On Heat Supply" No. 190-FZ dated 27 July 2010, as amended;

- the Federal Law "On Compulsory Liability Insurance of the Hazardous Facility Owner Against the Damage Resulting from and Accident at the Hazardous Facility" No. 225-FZ dated 27 July 2010, as amended;

- the Federal Law "On Protection of Legal Entities and Individual Entrepreneurs Rights during the State and Municipal Control" No. 294-FZ dated 26 December 2008, as amended;

- the Technical Regulation Law;

- the Licensing Law;

- the Federal Law "On Natural Monopolies" No. 147-FZ dated 17 August 1996, as amended (the "**Natural Monopolies Law**");

- the Resolution of the Russian Government "On the Operation of the Retail Electricity Markets, Full and (or) Partial Limitation of Electric Power Consumption Regime" No. 442 dated 4 May 2012, as amended;

- the Resolution of the Russian Government "On Approval of the Rules of the Electricity and Capacity Wholesale Market and on Amending Certain Acts of the Russian government Regarding Co-ordination of the Electricity and Capacity Wholesale Market Functioning" No. 1172 dated 27 December 2010, as amended (the "**Wholesale Market Rules**");

- the Resolution of the Russian Government "On Approval of the Rules of Non-Discriminatory Access to the Electricity Transmission Services and Provision of Such Services, on Approval of the Rules of Non- Discriminatory Access to the Operational Dispatch Management Services and Provision of Such Services, on Approval of Non-Discriminatory Access to the Services of the Wholesale Trade System Administrator and Provision of Such Services and on Approval of Rules of Technological Connection of the Consumers' Power Receivers, Electric Power Generation Facilities and Power Grid Facilities owned by Grid Operators and other Entities" No. 861 dated 27 December 2004;

- the Resolution of the Russian Government "On Approval of Rules of Operational Dispatch Management Services" No. 854 dated 27 December 2004;

- Resolution No. 529;

- the Russian Government Resolution "On Determination of Prices in Relation to Prices (Tariffs) on Electricity" No. 1178 dated 29 December 2011, as amended ("**Resolution No. 1178**");

- the Russian Government Resolution "On Determination of Prices in Relation to Prices (Tariffs) on Heat Supply" No. 1075 dated 22 October 2012;

- the Order of the FAS "On Maximum and Minimum Cap Limits of Tariffs for Electricity Power Supplied to Population and Equivalent Consumer Categories by the Regions of the Russian Federation for 2019" No. 1544/18 dated 12 November 2018;

- the Order of the FAS "On Maximum and Minimum Cap Limits of Tariffs for Electricity Power Supplied to Consumers in Retail Markets, Including to Population and Equivalent Consumer Categories, in the Territories not Included in the Price Zones of the Wholesale Market for 2019" No. 1546/18 dated 12 November 2018;

- the Resolution of the Russian Government "On Approval of Standards for Disclosure of Information by the Participants in the Electricity Wholesale and Retail Market" No. 24 dated 21 January 2004, as amended ("**Resolution No. 24**");

- the Resolution of the Russian Government "On Achievement of Basic Rates (Tariffs) for Electric Power (Capacity) in the Territories of the Far East Federal Region" No. 895 dated 28 July 2017;

- the Resolution of the Russian Government "On Base Level Prices for Electricity for 2018 for the subjects of the Russian Federation Composing Far Eastern Federal District" No. 2739-r dated 10 December 2018;

- the Resolution of the Russian Government "On Prices (Tariffs) on Electricity (Capacity) for the Subjects of the Russian Federation Composing Far Easters Federal District" No. 1615-r dated 28 July 2017;

- the Order of the FAS "On Approval of Guidelines for Calculation of Regulated Prices (Tariffs) for Electric Power (Capacity) Supplied to the Technologically Isolated Territorial Electric Power Systems and to the Territories Not Connected Technologically with the Unified Energy System of the Russian Federation and Technologically Isolated Territorial Electric Power Systems, With the Exception of Electric Power (Capacity) Produced at the Qualified Generating Facilities" No. 686/19 dated 29 May 2019;

- the Order of the FAS "On Approval of Intervals of Tariff Zones of Days for Consumers for 2019 (with the exception of population and (or) categories equated to it)" No. 1817/18 dated 19 December 2018;

- the Order of the FAS "On Approval of Maximum and Minimum Cap Limits of Tariffs for Electric Power Transmission Services Rendered to Consumers Not Included into Population and Equated to Consumer Categories by the Subjects of the Russian Federation for 2019" No. N 1819/18 dated 19 December 2018;

- the Resolution of the Government of the Russian Federation No. 2339 dated 29 December 2020 prescribing requirements for investors using governmental support programme in sphere of electricity industry;

- the Order of the FAS No. 918/20 dated 29 September 2020, No. 1163/20 dated 26 November 2020, No. 1219/20 dated 15 December 2020, etc. establishing limitations on prices both on retail and wholesale markets; and

- other laws and regulations that have been promulgated in accordance with the above.

The Resolution No. 526 established the principles and objectives of the restructuring of the Russian electricity industry. According to the Resolution No. 526, the restructuring should result in the liberalisation of the existing federal wholesale electricity and electricity capacity markets.

The Transitional Period Law provides further details of some of the matters addressed by the Resolution No. 526. The territory of the Russian Federation is currently divided into two major parts: (i) territories comprising pricing zones of the wholesale market; and (ii) territories that are not designated as pricing zones of the wholesale market, i.e., non-pricing zones (Republic of Komi, Arkhangelsk region, Kaliningrad region, South-Yakutia region of the Republic of Sakha (Yakutia), Primorsky Krai, Khabarovsky Krai, Amurskaya region, Jewish Autonomous Region). Pursuant to the Transitional Period Law, the completion date for the transitional period of the sector reform was set as 1 July 2008, the same date that the dissolution of RAO UES Russia occurred. However, the Transitional Period Law provides that wholesale and retail sales of electricity and capacity in the pricing zones of the wholesale market should have been liberalised effective as of 1 January 2011, subject to certain exceptions contained in the legislation, whilst retail sales to individuals and equivalent end-consumers will remain subject to the tariffs established by the Russian Government. It should be noted that, notwithstanding the above, in April 2011, the FTS issued Regulation No. 83-e/3 (further replaced by the Regulation N. 353-e/2 dated 15 December 2011) establishing indicative prices for certain kinds of electricity and capacity supplies in the wholesale market in the pricing zones, thus imposing restrictions on the liberalised market. Such restrictions are generally aimed at regulating prices for electricity supplied to individuals and equivalent end-consumers, as well as certain electricity (capacity) consumers in the wholesale market identified by the Russian Government. In addition, from 1 April 2006, the Transitional Period Law prohibits legal entities and individuals (and, from 1 July 2008, groups of persons and affiliates within one pricing zone of the wholesale market) from combining activities relating to the transmission and dispatching of electricity with activities relating to its generation and sale. As a result, from 1 April 2006 it has also been prohibited to own or otherwise legally possess simultaneously any property used for the transmission and dispatching of electricity and property used for its generation and sale, subject to a few exceptions. On 27 December 2010 the aforementioned legislation was supplemented by the Wholesale Market Rules, which came into force in April 2011 and replaced the previously effective Electricity and Capacity Wholesale Market Rules for the Transitional Period (approved by the Resolution of the Russian Government No. 643 dated 24 October 2003). This legislation regulates the fundamentals of the wholesale market and the specifics of trading of electricity and capacity thereon.

The Electricity Industry Law established the legal basis and the principles of economic relations within the electricity industry. In addition, the Electricity Industry Law provided specific details in relation to the trading of capacity as a separate product on the wholesale market, which was stated to be necessary for the efficient trading of electricity in both the short and long-term.

The Ministry of Energy of the Russian Federation is responsible for the development and implementation of public policy and legal regulation in the fuel and energy sector; including the electric power industry. Among other things, it exercises supervision over compliance by wholesale and retail markets participants with statutory requirements, as well as control over activities carried out by commercial infrastructure entities and over the dispatch control system.

The FAS monitors compliance with antimonopoly laws by wholesale and retail electricity market participants, and generally has broad authority to initiate, examine and settle cases regarding the violation of antimonopoly regulations, as well as impose certain sanctions. The Electricity Industry Law enables the FAS to apply a variety of specific measures in respect of companies that occupy a dominant position or an exclusive position or manipulate prices in the wholesale electricity (capacity) market. The FAS also exercises supervision over compliance by electricity market participants with restrictions

to combine electricity generation and electricity sale and purchase activities with electricity transmission and dispatch management activities, set forth by the Transitional Period Law.

The FAS is also the main tariff-setting authority. On the wholesale market, the FAS sets the regulated prices (tariffs) for electricity and capacity sold under regulated contracts. It has no control over the electricity and capacity price traded on the free (liberalised) market and/or sold under non-regulated contracts. On the retail market, the FAS establishes a range for regulated tariffs at which electricity and heat can be sold to retail consumers. The FAS also approves tariffs for the electricity transmission and dispatch management services.

The Electricity Industry Law establishes the competency of the relevant state authorities in the electricity industry and market. The Russian Government is the principal body charged with the regulation of the wholesale electricity market in the Russian Federation. Its authority includes, among other things, the following:

- the approval of the Wholesale Market Rules and the retail market framework rules;
- the approval of the material terms of the agreement relating to the access by a legal entity to the trade system of the electricity and capacity wholesale market;
- the approval of rules governing non-discriminatory access to the electricity transmission, system dispatching and commercial infrastructure services;
- the approval of rules for control and antimonopoly regulation;
- the approval of rules for concluding and fulfilling public agreements in the wholesale and retail markets;
- the determination of the order for submitting wholesale market pricing bids by wholesale market participants, the order for selection thereof and for determining the equilibrium prices of the wholesale market; and
- the determination and modification of pricing and non-pricing zone borders within the wholesale market.

The Russian Government or the federal governmental bodies authorised by the Russian Government may, among other things, make decisions regarding the following:

- the establishment and maintenance of a system of long-term supply and demand forecasting within the wholesale and retail markets;
- control over the dispatching services system, including control over compliance with the Wholesale Market Rules by the dispatching services market entities;
- the establishment of methods of determination (calculation) and application of the non-regulated prices for the electricity (capacity) charged by the suppliers of last resort;
- antimonopoly regulation;
- state ecological supervision in energy sphere;
- the approval of standards of information disclosure; and
- the exercise of control over the activities of commercial infrastructure entities.

The regional authorities of the Russian Federation are generally in charge of the regional control over the electricity prices regulated at the higher administrative levels, as well as supervision of the reliability of the electricity sale to the population by guaranteeing suppliers.

Legal Structure of the Electricity Market

Market participants can trade electricity on the following trading segments of the market:

Regulated Contracts

Regulated contracts are signed between power producers and energy supply companies (including guaranteeing suppliers), who buy on behalf of residential consumers or consumers in the territories subject to power price regulation (e.g. North Caucuses).

Key terms of the regulated contracts are described in the Wholesale Market Rules. The regulated contracts are based on take-or-pay principles. Tariffs are set by the FAS on an annual basis. The scheme and schedules for regulated contracts are set by the ATS.

The sellers of electricity are required to cover the volumes prescribed in the regulated contracts either through their own generation or through purchases of electricity on the wholesale market. Similarly, the buyers under regulated contracts receive planned electricity volumes and can freely trade the surplus balance, if any, between their demand for electricity and the supply as provided under their regulated contracts. If a buyer needs additional electricity, it can buy it either through unregulated contracts or in the day-ahead and balancing market. If the buyer cannot consume the full volume of electricity as stipulated by its regulated contract, it must still pay in full but may seek to recover its costs through the sale of its excess contracted volumes in the day-ahead and balancing market.

Unregulated Bilateral Contracts

Market participants are free to enter into unregulated bilateral contracts on either a short-term or long-term basis and at either fixed or floating prices. Market participants determine counterparties, price and volume of delivery at their sole discretion.

In addition to unregulated electricity contracts, market participants may enter into unregulated contracts for the supply of electricity and capacity. These contracts imply the sale of a certain amount of electricity and the simultaneous payment to the supplier for a certain amount of capacity.

Day-ahead Market

The day-ahead market is managed by the ATS which performs a competitive selection of bids of suppliers and buyers a day before the actual delivery of electricity, for every hour of the next day. Participants in the wholesale market may submit price bids for buying or selling electricity specifying volume and price for each hour of the next day. The ATS selects the winning bids using the minimum price criteria, and thus determines the electricity volume and the equilibrium price (i.e., the price which balances supply and demand), for each hour of the following day. The wholesale electricity market covers two pricing zones and each of them has a number of sub-regions and sale points where the equilibrium price differs from the average price for the respective pricing zone.

The ATS ranks all generators by "merit orders", which prescribe the priority in which these generators are loaded. The priority categories assigned to individual power plants' bids in the ATS' merit order may vary depending on various factors, including, without limitation, the mode of operation of such power plants, safety requirements and weather conditions. As a result, bids of individual power plants may at the same time fall into more than one priority category, and their priority categories may change over time. The general supply priority categories are as follows:

- The first priority is given to suppliers' price-taking bids, which are submitted with respect to power producers that ensure system reliability, nuclear power plants (to the extent necessary to meet the requirements of safe operation process regulations) as well as electricity volumes generated at the minimum safe output level. This priority applies to the necessary volume required to meet the aforementioned requirements;

- The second priority is given to suppliers' price-taking bids, which are submitted with respect to CHP power plants for the electricity generation volumes corresponding to the minimum safe output level of the relevant generating unit including bids involving operation in a combined cycle and bids by HPPs for electricity generation volume, which needs to be generated due to process reasons and/or in order to ensure environmental safety and which is scheduled for the respective hour in the forecast dispatch schedule;

- The third priority is given to suppliers' price-taking bids, which are submitted in respect to the minimum output levels, according to the requirements for the maintenance of optimal operational regimes of the dependent industrial equipment of the participants' regulated consumption controlling facilities, or for groups of supply points for generation of the participants purchasing and selling electricity on the wholesale market, both in respect of generating and power receiving equipment simultaneously; with respect to volumes in the suppliers' consumption groups of supply points as well as volumes, not exceeding the priority volumes under regulated contracts and as determined in accordance with the agreement on accession to the wholesale market system;

- The fourth priority is given to suppliers' price-taking bids which are submitted with respect to volumes not exceeding the priority volumes under unregulated bilateral contracts (including unregulated contracts for the sale and purchase of electricity and capacity), as determined in accordance with the agreement on accession to the wholesale market system and subject to certain conditions provided therein; and

- The fifth priority is given to other volumes specified in price-taking bids.

Price fluctuations on the wholesale electricity market are monitored by the state authorities. If the magnitude of a price increase exceeds a predetermined level within a specified period of time or if certain other extraordinary situations arise that result in significant increases in prices for electricity, price smoothing or state regulation of the electricity industry may be implemented as protective price limiting mechanisms.

Balancing Market

The balancing system is a real-time market for electricity based on competitive bids submitted by suppliers and market participants. The balancing system is intended to cover the deviations from planned power volumes on the day-ahead market from the actual generated or consumed volumes.

The prices on the balancing market are subject to considerable fluctuations both during the year and during the course of a day, due to fluctuations in demand and in supply (for example, for the period from August to September, when the majority of thermal generation facilities and nuclear power plants are undergoing regular annual maintenance). However, the seasonality effect is less notable in Siberia due to a higher portion of industrial demand, which is characterised by a more stable load.

Wholesale Capacity Market

The wholesale capacity market is operated separately from the wholesale electricity market. The main purpose of treating capacity separately is to improve the efficiency of operation and ensure the timely commissioning of generation facilities. One of the key instruments of the wholesale capacity market designed to encourage new investments is the competitive selection of the capacity: capacity not selected during the competitive selection of the capacity, as the general rule, is not entitled to capacity payments and can be decommissioned. Where decommissioning of the capacity is impossible for technical and/or social reasons a generation company operating such capacity receives the status of forced-to-run generator and is compensated by regulated forced-to-run generation tariff payable under regulated capacity contracts.

When selling capacity, generation companies are obliged to maintain their generation equipment in appropriate condition so that they are able to produce electricity in the required volumes and to the

required specifications at any time. If the obligation to maintain generation equipment in good working order is not fulfilled by a generation company, the price of its capacity will be reduced. Capacity may be traded in the following segments:

Regulated Contracts

Similar to the power regulated contracts, the terms of regulated capacity contracts are determined individually for each generator, and are based on "take-or-pay" principles. The terms are set by the FAS on the basis of the generator's fixed costs divided by planned and preliminarily dispatched electricity capacity as would allow the generator to operate even when it does not generate and sell any electricity. Remaining capacity, as well as capacity from all generation equipment commissioned in 2008 or later, is sold under unregulated contracts.

Unregulated Contracts

A competitive capacity market, allowing the sale of capacity on the wholesale capacity market at unregulated prices, was launched in July 2008 pursuant to the Resolution of the Russian Government: "On Amendments to Certain Provisions of the Acts of the Russian Government On the Organisation of Competitive Trade of Electricity Capacity on the Wholesale Market" No. 476 dated 28 June 2008.

Since 1 July 2008, the sale of capacity in the competitive sector has been undertaken through the "competitive selection of the capacity" (the "**KOM**"), conducted by the System Operator. In general, wholesale market players admitted to the KOM may apply to sell through the KOM an amount of capacity not exceeding their maximum available capacity (as registered in the forecast balance for the corresponding period, subject to the proportion of available capacity that must be sold on regulated markets). Under this procedure, the System Operator selects customer bids and determines the demand for capacity in a certain region and for a certain period. The System Operator selects those suppliers, which: (a) stated the lowest price in their bids; and (b) ensure the necessary available capacity with the required technical specifications.

The key objectives of having an efficient long-term capacity market according to the Market Council are the following:

- to prevent a deficit in the power system;
- to form the most effective generation structure with the lowest cost of electricity and capacity for consumers;
- to create opportunities for long-term bilateral relations between market participants; and
- to form regional price indicators to develop electricity consumption (industry and residential) and output.

Capacity is selected at the volume levels sufficient to meet projected consumption, inclusive of reserves, and taking into account technical characteristics and parameters of the power plants that are required to meet the anticipated demand. Out of the latter the System Operator identifies the plants whose pricing bids would ensure the least total cost of capacity for the consumers. The auction is held by pricing zone, and accounts for the capacity supply constraints between them. The System Operator holds a correction auction closer to the delivery date should the anticipated capacity demand exceed the volume of selected capacity.

All suppliers whose capacity is selected during the auction process have an obligation to ensure the readiness of their generation facilities and receive a guarantee of payment at the equilibrium auction price. The auction price is set per pricing zone, it is the same for all power plants selected during the auction, and equals the highest selected bid. The capacity price is subject to annual indexing (by applying a formula, CPI minus 1% (effective from 1 January 2018 prices are to be indexed CPI minus 0.1%)) with the exception of the year that follows. Those suppliers whose capacity has not been selected

during the competitive auction will not receive a guarantee of payment, but can receive payments in the electricity market. If such a supplier decides to close its capacity but does not receive permission for the closure, it will be paid for capacity at regulated tariffs under a forced-to-run generator status.

System Operator

The System Operator is a specialised company which provides management services to all market participants in relation to the production and dispatch of electricity and provides forecasts regarding the generation and consumption of electricity. The Russian Federation holds 100% of the shares in the System Operator.

In particular, the System Operator establishes a dispatch priority classification system to enable it to fulfil its responsibility for the maintenance of the sufficiency, stability and flexibility of the electricity supply and the minimisation of the cost of electricity supply. In formulating this classification system, the System Operator ranks all generators in a so-called merit order, which prescribes the order in which these stations receive load, assuming there is sufficient demand. The principal dispatch priority categories are as follows:

Base load generation. This category of generator encompasses facilities that are allocated the highest loads, either due to extraordinarily high efficiency, system safety standards (for example, technological minimum load requirements) or lack of flexibility (for example, if a particular generator cannot quickly change load on demand and is therefore incapable of adjusting effectively to cover peak loads). Base load generation facilities include nuclear capacity, hydro capacity in the post-winter thaw season, TGK stations only when they operate in "combined cycle" (joint generation of electricity and heat) and certain coal-fuelled stations. Base load generation traditionally enjoys high load factors throughout the year, but this category is generally insufficient to cover total electricity demand.

Mid-load generation. Mid-load generators are those generators that are typically dispatched if their variable costs lie below those of the least efficient generators needed to satisfy electricity demand (taking into account grid constraints). This category effectively encompasses all thermal generation facilities of the OGKs. The main competition in the wholesale electricity and capacity markets occurs in this dispatch priority category. Depending on their placing within the merit order and the prevailing price on the spot market, a mid-load generator could enjoy varying levels of load through the year, with the most efficient generators benefiting from a preferred position in the market.

Peak generation. Peak-load generators are those generators which are called upon only at times of peak electricity demand to cover whatever deficit still exists after base load generation and mid-load generators have already been dispatched. This category generally includes the most inefficient thermal electricity capacity, including TGK stations operating in electricity-only condensation mode, certain categories of hydroelectricity capacity (for example, hydro accumulating power plants) and those power plants which have the ability to vary their load significantly in order to sell at times of peak prices.

As a result, the electricity capacity utilisation rate and competitive position of a power plant in the wholesale market are significantly influenced by its ranking in the dispatch priority classification system.

Market Council

The Market Council is a non-profit partnership whose members are participants in the electricity and capacity wholesale markets and is a self-regulated organisation which maintains the Register of the Wholesale Market Participants, organises pre-trial dispute resolutions in the wholesale market, participates in the preparation of the rules of the wholesale market and monitors compliance with the rules. The Supervisory Board of the Market Council approves the standard form contract on adhesion to the trade system of wholesale market as well as regulations of the wholesale market, which are the base documents for the regulation of the wholesale electricity and capacity markets.

Commercial Operator

The Commercial Operator manages organisations of the trading system of the wholesale electricity and capacity markets. Currently, the functions of the Commercial Operator are performed by the Trade System Administrator, which is 100% owned by the Market Council.

Retail Electricity Market

The Retail Market Rules govern the interaction between retail market participants. It is envisaged that the deregulation of the retail electricity market will be carried out simultaneously with the deregulation of the wholesale market.

Under the Electricity Industry Law and the Retail Market Rules, the main participants to the retail market are consumers of electricity, guaranteeing suppliers and other retail suppliers, grid companies, entities organising dispatching operations at the retail level and those generating companies that are not entitled to participate in the wholesale electricity market.

The Retail Market Rules give consumers an opportunity to choose their energy supply company. However, not all energy supply companies are under an obligation to enter into contracts with requesting consumers, only guaranteeing suppliers have this obligation. Guaranteeing suppliers are obliged to enter into a contract at the request of any end-consumer within the guaranteeing suppliers' area. Guaranteeing suppliers enjoy certain privileges as compared to other energy supply companies. Guaranteeing suppliers are entitled to demand both the sale of excess power generated by other retail market participants and compensation for electricity losses that occurred in transit. Guaranteeing suppliers are selected through open tenders held every three years by the regional authorities or, in limited circumstances, by the federal authorities. The winner of a tender undertakes to fulfil certain obligations, including undertakings with respect to its financial condition and reduction of equity capital. Breach of such undertakings may lead to the status of a guaranteeing supplier being revoked.

In 2020, the Government of Russian Federation issued Resolution No. 2302 dated 28 December 2020 prolonging peculiarities of retail and wholesale market on certain territories of Russian Federation. The same was confirmed be relevant amendments to the Electricity Industry Law.

Pricing on Electricity and Capacity Markets

Wholesale Market

Tariffs for electricity and capacity supplied on the wholesale market under the regulated contracts are established by the FAS annually for each wholesale market participant. The tariffs for electricity sold on the wholesale market are calculated using various methods specified in Resolution No. 1178 which specifies that any of the following methods may be used to regulate electricity tariffs: cost-plus method, indexation method, regulated asset base ("**RAB**")-based method, comparative method and method of long-term indexation of gross proceeds.

The FAS chooses a method of regulation with respect to a particular entity taking into account a proposal made by such entity whose tariffs are subject to regulation.

Retail Market

Tariffs for each region are set by regional tariff authorities and are subject to the minimum and maximum levels established by the FAS. The retail pricing regime envisages that the electricity volumes supplied in the retail electricity market to residential consumers are supplied at regulated prices, while the remaining electricity volumes are supplied at prices which reflect the cost of electricity in the competitive wholesale electricity markets within the maximum unregulated prices, and calculated according to a specific formula which is based on the average weighted price of electricity in the wholesale market in the previous month, as published monthly by the Market Council. The retail power price also includes tariffs for transmission and distribution services, services provided by the Commercial Operator, and the retail sales mark-up.

The price of power supplied by the guaranteeing suppliers to the retail consumers also includes sales surcharges (set by the regional tariff authorities), which are intended to cover the expenses of the guaranteeing suppliers incurred in relation to their participation in the guarantee system in the wholesale electricity market.

Transmission and Distribution

Transmission and distribution tariffs and services on connecting to the transmission and distribution grids are regulated by the state, which sets the price cap and provides the guidance for the tariff growth, based on its forecasts for Russia's social and economic development.

Until recently, transmission and distribution tariffs were set on a "cost-plus" basis. However, this system provided few incentives for improving operational efficiency and developing asset bases. As a result, investment in distribution and transmission assets in the post-Soviet era has been limited. Accordingly, the electricity transmission and distribution segment as a whole requires a significant level of investment to preserve supply stability and to meet growing demand.

Driven by the fatigued state of the grid assets in Russia, the Government of the Russian Federation decided to introduce RAB-based regulation. In contrast to the "cost-plus" methodology, the RAB-based regulation allows electricity transmission and distribution companies to obtain a return on their investments in grids at the level determined by the state regulator, facilitated by the inclusion of an investment component in the tariffs. Under this methodology, tariffs are approved for three-to five-year periods to encourage improvements in operational efficiency and investments in the modernisation of the asset base.

Since 2010, transmission and distribution tariffs are set long-term for the five years ahead. The regulation provides relative freedom in terms of tariff methodology. Subject to the decision of a regional regulatory authority, tariffs could be calculated using the following methodologies: tariff indexation (based on "cost-plus" basis), tariff benchmarking, RAB, or long-term indexation of required revenues.

- The tariff indexation methodology was developed as an alternative to the original cost-plus methodology (the compensation of all actual incurred expenses and investment costs) and is based on an annual increase of distribution tariffs to inflation forecasts. However, unlike the original cost-plus methodology, (where the tariff is reset annually downward if a distribution company achieves costs savings) the annual indexation of operational expenses to the inflation allows distribution companies to retain any savings as a result of cost optimisation.

- The tariff benchmarking methodology is based on benchmarking distribution companies' operational expenditure against the best practice in the segment. Nevertheless, in practice it is challenging to apply owing to a range of structural differences and nuances between selected distribution companies.

- The long-term indexation of required gross revenues is among the most commonly used in Russia; the control period of tariffs under this methodology is five years with annual adjustments. The gross revenue (made of controllable and uncontrollable expenses) is adjusted subject to the reliability and quality criteria. Although the gross revenue indexation methodology is geared towards cost reduction, it does not provide enough incentives for aggressive cost optimisation and target achievement (e.g., transmission losses reduction). This methodology is not geared towards attracting additional investment, as the investment is limited to 12% of gross revenue.

- The RAB methodology is based on the principle of long-term control periods (from five to eight years) with incentive-regulation that would attract investment. Under RAB, investors receive a guaranteed return on investment and required fixed revenue. An investor is encouraged to beat the regulators estimation of required revenue in retaining any savings as a result of cost optimisation during the long-term control period. Currently the RAB methodology system provides generation companies and direct suppliers with an opportunity to directly sign long-

term heat supply contract. Unlike in a cost-plus methodology system, in course of which pricing mechanism is mostly concentrated on costs of producing heat, the RAB system entitles heat producers to keep saved resources and to get the agreed payment since those tariffs no longer depend on the costs of production in the tariff limits established by the Russian Government. Moreover, reducing the cost of generating heat energy is not a reason for revising tariffs. In most cases, if regulating authorities initiate revising of the RAB tariffs, they shall reimburse the generating company the difference it was entitled for.

Although the government has provided a relative freedom in choosing tariff methodology for the distribution companies, it recognises that, with the exception of RAB, they are not geared towards attracting additional investment into the segment. Therefore, to have better control over transmission and distribution tariff growth, while ensuring cost efficiency, and quality control and investment, the government plans to develop a new long-term incentive tariff methodology in 2017-2018. The government also continues to improve the regulation on new grid connections to reduce the length of procedures, reduce costs, and simplify the required procedures.

Disclosure of Information in the Wholesale Electricity Market

The Resolution No. 24 sets out special rules for the disclosure of information by wholesale and retail electricity market participants and supplements the disclosure rules of Russian securities laws. Pursuant to the Resolution No. 24, participants in the electricity markets must disclose the following information:

- annual financial (accounting) statements prepared in accordance with RAS with an auditor's report as prescribed by the relevant Russian legislation;
- the structure and volume of expenses for the production and disposal of goods (works, services); and
- when the method of "return on capital invested" is used for the calculation of tariffs: (i) their operating and non-controllable expenses included into the essential gross revenues, prescribed and actual levels of return on capital invested, as well as reasons for deviations from the established return levels; (ii) their asset flow reports, including the assets value as of the beginning and the end of the year, as well as information relating to the retirement of assets during the year; and (iii) reports on the commissioning of assets during the year (including as a result of revaluation, modernisation, (re)construction or purchase of new equipment).

In addition to the above information, generation companies must further disclose:

- information on electricity tariffs, the state authority's decisions adopting such tariffs and the official publication source of any such decisions;
- information on the discharge and emission of pollutants, and plans for the following year for reducing such discharges and emissions;
- information on the investment programmes of the electricity generation companies;
- information on the levels of the power consumption used by the generating equipment for auxiliary and service purposes in the course of electricity and heating energy generation (separately) specifying the station's name and type; and
- information on the fuel utilised at the power stations including details of suppliers and fuel characteristics.

The information listed in the items above must be disclosed by no later than 1 June of each year. The FAS and its regional divisions control compliance by retail electricity markets participants with the above listed disclosure rules.

Investment Projects in Electricity Market

DPM-1

In 2010, Russian Government adopted DPM-1 programme aimed at incentivising development of Russian energy infrastructure and launch of new generating assets. To incentivise the market participants KOM rules prescribe an individual procedure for pricing capacity constructed under mandatory capacity supply contracts depending on the type of construction, capacity, fuel inputs, pricing zone and other specific features of each project. Mandatory capacity supply contracts, signed by generating companies, establish specific capacity volume per each project constructed under these contracts.

Generation companies can rely on guaranteed payments for capacity for the entire contract term. The mechanism provides for a guaranteed return on investments in the construction of generating assets included into the list approved by the Russian Government.

DPM-2

In 2019, the Russian Government approved a new state support programme (DPM-2 or COMMod), which is planned to allow energy producers to upgrade 40 GW of capacity by 2031. According to the DPM-2, the Government of the Russian Federation is planning to modernize old thermal generating electric power equipment with aim to reduce operating expenses and to increase fuel efficiency. Unlike the DPM-1, the purpose of the DPM-2 is not to launch new facilities, but to repair and to modernize the old equipment serving for more than 45 years. The Russian Government is planning to extend service life of the old facilities for 15-20 years.

The COMMod prescribes for election of candidates by way of auction. The crucial criteria are the price of providing electricity and demand for a new generating facility, so that there shall be now downtime of capacity due to low demand. Candidates' offers may prescribe for (i) full replacement of a facility, (ii) partial amendment (*e.g.*, replacement of a drum, furnace walls or turbine) or (iii) establish a combined option.

Investment contracts signed for implementation of the DPM-2 are entered into for 16 years, 15 years of which companies receive increased payment for renewed capacity with a guaranteed rate of return.

The estimated volume of the DPM-2 shall cover approximately 17% of the whole Russian electricity facilities and shall attract up to RUB 1.9 trillion financing.

Regulation of Transportation Industry

Port Transportation Regulation

The activity of port operators in Russia that handle seaborne trade cargo flows is subject to a wide variety of federal and regional laws and acts of secondary legislation, including civil and commercial law, law regulating seaports, licensing, water and land use, anti-monopoly matters, environmental, health and safety concerns, employment and other issues, as well as the regulatory supervision of a number of federal, regional and local authorities.

Applicable Law

The regulation of seaport and stevedoring operations in Russia is primarily based on the following laws and regulations:

- The Civil Code. The Civil Code establishes the general legal framework for commercial relations between persons and entities. In particular, the Civil Code (i) regulates property relations between commercial parties, (ii) sets the rules for obtaining and transferring ownership of movable and immovable property and (iii) provides for the main rules for conclusion, amendment, performance and termination of contracts.

- The Merchant Shipping Code of the Russian Federation No. 81-FZ dated 30 April 1999, as amended (the "**Merchant Shipping Code**"). The Merchant Shipping Code establishes the legal basis for commercial shipping along sea routes and inland waterways and regulates stevedoring operations.

- The Water Code. The Water Code regulates the use and protection of bodies of water and establishes water use rights. In particular, the Water Code establishes the regime for use of the sea in connection with carrying out seaport operations (such as use of berths, fixed and floating sea platforms, as well as discharging waste and drainage waters into the sea) and specifies the procedure for provision of use rights to bodies of water.

- The Land Code. The Land Code regulates the use and protection of land and establishes the legal basis for creation, transfer and termination of title to land plots. In particular, the Land Code sets the rules for provision of land plots for various purposes, including allocation of seaports and facilities.

- Federal Law "On Seaports in the Russian Federation and Introduction of Amendments to Certain Acts of Legislation of the Russian Federation" No. 261-FZ dated 8 November 2007, as amended (the "**Seaports Law**"). The Seaports Law regulates commercial shipping in seaports. In particular, the Seaports Law establishes specific procedures for construction, opening and closing seaports, regulates operations performed in seaports and provides for governmental regulation of seaports and seaport activities.

- Federal Law "On Inland Sea Waters, Territorial Sea and Contiguous Zone of the Russian Federation" No. 155-FZ dated 31 July 1998, as amended (the "**Law on Waters**"). The Law on Waters establishes the legal status and regime of inland sea waters, territorial sea and contiguous zone of the Russian Federation. In particular, the Law on Waters regulates the call procedure for foreign vessels in ports.

- Federal Law "On Special Economic Zones of the Russian Federation" No. 116-FZ dated 22 July 2005, as amended (the "**Law on Special Economic Zones**"). The Law on Special Economic Zones sets out the regime of special economic zones in the Russian Federation (meaning the territory on which applies special business performance treatment, including but not limited to, the port special economic zones).

- Federal Law "On the Procedure for Implementing Foreign Investment in Commercial Enterprises Having Strategic Importance for Securing the National Defence and Security of the State" No. 57-FZ dated 29 April 2008, as amended (the "**Law on Strategic Enterprises**"). The Law on Strategic Enterprises sets out certain restrictions for foreign investors to acquire control over entities that have strategic importance for the national defence and security of Russia.

- The Natural Monopolies Law. The Natural Monopolies Law establishes the legal basis of state policy with respect to natural monopolies and sets out the natural monopoly spheres which include port services.

- The Licensing Law. The Licensing Law regulates licensing in Russia.

- The Environmental Protection Law. The Environmental Protection Law establishes the state policy on environmental protection.

- The Safety Law. The Safety Law provides for the measures for safety protection on industrial hazardous objects.

- Resolution of the Government of the Russian Federation "On the State Regulation and Supervision of Prices (Tariffs, Charges) for Services of Natural Monopoly Entities at Transport Terminals, Ports, Airports and the Exploitation of Domestic Waterways" No. 293 dated

23 April 2008, as amended. The resolution determines state regulation and supervision of the pricing for, amongst other things, seaport services and sets out the list of seaport services rendered by natural monopoly entities subject to state regulation.

- Order of the FTS "On the Procedure for Establishing (Change of) Port Prices (Tariffs, Charges) or their Maximum Level for Services of Natural Monopoly Entities in Transport Terminals, Ports, Airports and Services for the Use of Internal Water Infrastructure, as well as Lists of Documents Provided in Relation to their Establishment (Change)" No. 135-t/1 dated 24 June 2009. The Order regulates pricing for seaport services and sets the list of information and documents requisite for determination of port charges and tariffs or their maximum level.

Enforcement Authorities

Several governmental agencies participate in regulation of the Russian port industry and form a complex multi-tier system of regulation. Functions and authorities of these agencies are at times ambiguous and unclear. In addition, over the past years, the structure of the Russian government was extensively reorganised. At present, the principal regulatory authorities that provide overall oversight of the Group's business include the following:

- The Government of the Russian Federation decides on construction, expansion and closing of seaports, sets the borders of seaports, establishes the special economic port zone in accordance with the Law on Special Economic Zones and sets the regime for crossing of the borders of the Russian Federation in accordance with the law of the Russian Federation "On the State Border of the Russian Federation" No. 4730-1 dated 1 April 1993, as amended; and

- The Ministry of Economic Development approves: (i) strategic plans for social and economic development; (ii) the list and order of determination of the indexes of economic efficiency for federal state unitary enterprises and joint-stock companies whose shares are owned by the Russian Federation; and (iii) opinions on drafts of the legal acts which regulate the relationships of business entities or their relationships with the Russian Federation and which also affect macroeconomic indicators of the Russian Federation.

Ports transportation activity is regulated by the Ministry of Transport of the Russian Federation ("**Mintrans**"), the Federal Service for Supervision of Transport, the Federal Agency for Sea and Inland Water Transport (the "**FASIWT**") (reporting to the Mintrans), Seaports Authorities (reporting to the FASIWT) and Rosmorport:

- The Mintrans generally regulates and supervises the transport industry and infrastructure in Russia. The Mintrans has several agencies specialising in the regulation of specific types of transport;

- The Federal Service for Supervision of Transport, which is under the Mintrans, oversees compliance with the laws and regulations governing transport (including seaports), inland water transport, railway transport, motor and electric-powered city transport, civil aviation, industrial transport, and road transport, industrial transport and road facilities and issues licences for certain activities, including loading and unloading of hazardous cargo in seaports, and other authorisation documents, including quay operation permits;

- The FASIWT carries out state services and manages state-owned property in the field of seas and river transport, holds tenders and enters into government contracts for placement of orders to supply goods, performance of work and provision services for the agency's needs, and conduct of research for the state's needs;

- Seaport Authorities are state organisations that exercise supervising and controlling functions in relation to seaport activities. In particular, they supervise compliance by ports with applicable Russian and international law, maintain the register of vessels operated by ports, control

navigation within harbours, provide security and ecological safety control and exercise certain other functions; and

- Rosmorport is a federal state unitary enterprise that manages and controls the use of state-owned infrastructure operated by seaports and quays, including hydrotechnical constructions, on behalf of the Federal Agency for State Property Management, save for infrastructure facilities managed by Seaport Authorities. Rosmorport is responsible for collection of port duties and directing them towards construction and modernisation of port infrastructure. Rosmorport also oversees implementation of certain governmental port development programme and regulates tariffs for the lease of quays lines.

Border and customs activity are regulated by two authorities:

- State Border Control deals with international ships calling at Russian ports; and

- The Federal Customs Service defines the state customs policy, exercises legal regulation and supervisory powers in the customs sphere, provides customs clearance for all export and import goods, exercises the functions of a currency control agent and special functions to counter smuggling, other crimes, and administrative offences.

The financial activity of ports is regulated by the FAS:

- The FAS sets maximum tariff rates for the services rendered by natural monopoly entities, including seaport operators. The FAS also acts as a regulatory authority for natural monopoly entities in certain other aspects of their activities.

- The FAS supervises competition and pricing regulations and monitors compliance by the natural monopoly entities with anti-monopoly and natural monopoly law, particularly over the equal access of customers to the services provided by natural monopoly entities.

Other activities are regulated by the following authorities:

- Rosprirodnadzor monitors compliance with environmental law and supervises the use of water resources;

- Rostekhnadzor supervises pollutant discharge in the environment, monitors harmful impact on the atmosphere, maintains the register of hazardous industrial objects and controls compliance with environmental law and law on hazardous industrial objects;

- Rospotrebnadzor monitors compliance with sanitary and epidemiological regulations; and

- The Federal Service for Supervision in the Sphere of Mass Communication exercises supervisory powers in the radio broadcasting sphere, performs frequency assignment on the basis of the resolution of the Federal Radio Frequency Committee and registers the frequency assignment.

The federal services and agencies listed above are directly involved in regulating and supervising the Russian seaport industry. Moreover, there are certain other government bodies which, together with their subdivisions, have authority over various general issues relating to the Russian seaport industry or otherwise relating to the Group’s business, including emergency procedures, justice, tax and other matters.

Tariffs

As mentioned above, services rendered in transport terminals and ports are included in the list of activities of natural monopoly entities. For the purposes of tariff regulation, the Government of the Russian Federation adopted the list of services rendered by natural monopoly entities in seaports which are subject to tariff regulation.

The FAS sets maximum tariff rates for a range of stevedoring, including transshipment from vessel to the yard (first lift) and transpiration to the point of storage, transshipment from the yard/storage point to trucks and railway cars (last lift) and storage services, including storage within terminal area. These tariffs may be reviewed by the FAS in certain cases, in particular, at the request of the market participants or upon the initiative of the FAS.

Seaport Law Status

The Seaports Law regulates commercial shipping in seaports, determines the procedures of construction, opening and closing of seaports, sets out certain rules applicable to seaport operations, including provision of port services, and establishes the legal basis for state regulation of seaports and port activities in the Russian Federation.

The Seaports Law regulates seaport operations and determines the property which shall be owned by the state, including certain port infrastructure and land plots within the port's territory. The Seaports Law provides that leasehold or other use rights to such property may be provided to legal entities on the basis of lease or concession agreements, respectively.

The maximum term of such leasehold is 49 years. If a lessee under such a lease agreement undertakes to perform capital repair of the respective leased real estate, the lease term shall be at least 15 years. A seaport infrastructural facility may be sublet upon a lessor's consent. Also, the Seaports Law provides for certain exceptions where the ownership title to land plots within the port's territory can be transferred to private legal entities, for example, if buildings owned by such legal entities are located on the land plots within the port's territory.

Under a concession agreement, possession and use rights to buildings and constructions, including seaports, artificial land plots designed for construction and reconstruction of hydraulic seaport facilities and other seaport infrastructure, may be provided to legal entities. Transfer of the ownership title to real estate under a concession agreement is forbidden.

The Seaports Law determines the status and authority of seaport administration, sets requirements to, and obligations of, seaport operators, regulates seaport services, including transshipment. According to the law, transshipment services are rendered pursuant to a transshipment agreement and are subject to tariff regulation. The law also regulates the receipt and pickup of cargo, determines the port operator's obligations and sets the one year limitation period for claims under a transshipment agreement.

Lease of Quays

Russian law defines a quay as real estate. In accordance with the Civil Code, real estate is an object which is closely connected with land and cannot be moved without bringing damage to such object and to its further use. The quay is also a hydrotechnical object for the purposes of the Hydrotechnical Safety Law. Lease of quays is primarily regulated by:

- the Civil Code;
- the Seaports Law;
- the Hydrotechnical Safety Law; and
- the Federal Law "On State Registration of Rights to and Transactions with Immovable Property" No. 218-FZ dated 13 July 2015.

Under the Seaport Law quays, subject to limited exemptions, are owned by the Russian Federation itself. It is generally possible, for an individual or a legal entity, to obtain leasehold to a quay on terms and conditions set by the Civil Code, the Seaports Law and the Hydrotechnical Safety Law. The term of a quay lease cannot exceed 49 years. If under a quay lease agreement a lessee undertakes to perform

capital repair of the leased quay, the lease term shall be at least 15 years. The lessee has the right of first refusal to renew the leasehold, unless the lease agreement provides otherwise.

In accordance with the Seaports Law leasehold to state property in seaports may only be provided on the basis of a tender auction. However, the law contains an exemption from this rule whereby an owner or holder of real estate adjacent to the quay which is used for providing seaport services is by operation of law entitled to obtain leasehold to the respective quay without auction.

A quay lease agreement for a term of at least one year (a long-term lease) must be registered in the Unified Register of Rights to and Transactions with Immovable Property. Accordingly, the lease rights to a quay arise only at the time of registration of the relevant quay lease agreement in the register.

A real estate lease with a term less than one year (a short-term lease) does not require such registration.

Usually, rental rates for quay leases are not subject to state regulation. However, where the quays are owned by the Russian Federation, rental rates are required to be determined by an independent appraiser in accordance with Russian law.

Rail Transportation Regulation

Applicable Law

Russian Legislation

The regulation of railway transportation in Russia is primarily based on the following laws and regulations:

- Federal Law "On Railway Transport in the Russian Federation" No. 17-FZ dated 10 January 2003, as amended (the "**Railway Transport Law**"). The Railway Transport Law establishes the legal framework for the functioning of railway transport.

- Federal Law "Charter of Railway Transport of Russian Federation" No. 18-FZ dated 10 January 2003, as amended (the "**Railway Transport Charter**"). The Railway Transport Charter regulates all types of relations between shippers, passengers, consignors, consignees, owners of railway transport infrastructure and other users and providers of railway transport services, including the principal terms and conditions for transportation services, liability issues and procedures for dispute resolution.

- Natural Monopolies Law. In accordance with the Natural Monopolies Law, the prices charged by Russian Railways for certain core services are regulated as natural monopolies.

- Technical Regulation Law. The Technical Regulation Law determines the rules relating to the development, enactment, application and enforcement of obligatory technical requirements and the development of voluntary standards relating to manufacturing processes, operations, storage, transportation, selling and utilisation.

- Government Resolution "On Approval of the Rules for Rendering the Services on Common Railway Carrier Infrastructure" No. 703 dated 20 November 2003 (the "**Rules for Access to Infrastructure**"). The Rules for Access to Infrastructure provide legal grounds for the use of the railway infrastructure by railway operators.

- Government Resolution "On the Programme of Structural Reform of Railway Transport" No. 384 dated 18 May 2001, as amended. Government Decree "On the Development Strategy for Railway Transportation in the Russian Federation up to 2030" No. 877-R dated 17 June 2008 (the "**2030 Development Strategy**"). The 2030 Development Strategy provides a roadmap for implementing the remaining reforms of the Russian rail transportation market, lists priorities for modernisation, improvement and expansion of the rail transportation industry in Russia, and sets

goals for meeting public transportation needs and facilitating regional social and economic development.

- Government Resolution "On State Regulation and Control of Tariffs, Fees and Duties in Relation to Works (Services) Provided by Natural Monopolies Entities in the Area of Railway Transportation" No. 643 dated 5 August 2009 (the "**Regulation on Natural Monopolies in Rail Transportation**"), which sets out the methods for regulating the services provided by Russian Railways determined to be natural monopolies, including the setting of tariffs.

- Government Resolution "On Approval of the Rules on Forwarding Services" No. 554 dated 8 September 2006, as amended (the "**Forwarding Services Rules**"), which sets out procedures for rendering forwarding services.

- Federal Energy Commission Regulation "On Approval of the Price List No. 10-01 "Tariffs for Freight Transportation and Infrastructure Services Provided by Russian Railways" No. 47-t/5 dated 17 June 2003, as amended ("**Tariff 10-01**").

- Order of the Mintrans "On Approval of Rules for Freight Transportation in the Trains Composed of Locomotives and Railcars Owned or Otherwise Possessed by Consignors, Consignees or Other Legal Entities or Individuals Which are not Railway Carriers Themselves" No. 150 dated 22 October 2007 (the "**Rules for Freight Transportation**"). The Rules for Freight Transportation regulate the procedure and terms of cargo railway transportation by trains consisting of locomotives and railcars not owned by the railway carrier.

In addition, the railway transportation in Russia is also based on, among other laws and regulations, the Civil Code, the Russian Tax Code, Federal Law "On Forwarding Services" No. 87-FZ dated 30 June 2003 (the "**Forwarding Law**"), the Licensing Law and Federal Law "On Financial Leasing" No. 164-FZ dated 29 October 1998, as amended.

International Agreements

Russia is a party to certain international agreements governing railway transportation. In particular, Russia is a party to the Agreement on International Railway Cargo Transportation dated 1 November 1951, which establishes terms of transportation and a single set of transportation documents to be used in the transportation of cargo among the railways of 25 countries of Europe and Asia. In July 2009, Russia joined the Convention Concerning International Carriage by Rail dated 9 May 1980, as amended, which aims to establish a system of uniform law applicable to, inter alia, the carriage of freight in direct international traffic between member states.

Enforcement Authorities

At the federal level, regulatory powers over the Russian railway industry are primarily divided between the Government, the Ministry of Transport, the Ministry of Economic Development and the Ministry of Finance of the Russian Federation.

Regulation of the rail industry is also performed by a number of federal agencies and services, which are responsible for management of state property and provision of state services, oversight of compliance with regulations and various other regulatory functions. These federal services and agencies include the following:

- the Federal Agency for Railway Transport, which implements state policy, provides state services and manages state property in the Russian railway transportation sector, maintains the registers of rolling stock and makes decisions on suspension of freight transportation on certain routes;

- the Federal Service for Supervision of Transport, which carries out the licensing of certain activities in the railway sector and otherwise supervises railway transport; and

- the FAS, which monitors and supervises compliance with Russian competition legislation, determines and implements state regulation of tariffs and regulates the pricing of natural monopolies in the Russian Federation.

At the level of the CIS, the Commonwealth Railway Transportation Council coordinates railway transport activity and provides recommendations with respect to pricing rates and technical policy within the territory of CIS countries.

Russian Railways also performs certain regulatory functions in the Russian railway industry. Russian Railways issues approvals for the use of locomotives on particular routes, sets guidelines for the transportation of certain cargo in certain types of railcars and determines the procedure for submitting and agreeing freight carriage applications.

Structural Reform of Railway Transportation

The Russian railway system has been undergoing the massive reform of the whole railway sphere legal regulation (the "**Rail Reform Programme**").

There were three stages of implementation of the Rail Reform Programme.

First Stage: Preparation

In the first stage, the business and non-core facilities and regulatory functions of the Russian railway system were separated. The first stage was completed in 2003 when Russian Railways was created and the number of private companies participating in the freight rail market was increased.

Second Stage: Corporate Build-up and Encouragement of Competition

Between 2003 and 2005, the Russian railway industry continued to undergo liberalisation, which included the adoption of Tariff 10-01, resulting in a significant increase in the number of railcars owned by private operators. In the second stage, activities that could become competing businesses were separated into newly-established subsidiaries of Russian Railways. 27 subsidiaries were established to operate various businesses, including railway repair and maintenance, private railcar operations, industrial production, research and development, construction and other non-core activities.

The second stage of the Rail Reform Programme also was designed to encourage free market pricing in the competitive sectors of the railway industry, including the elimination of cross-subsidies of passenger transportation at the expense of freight traffic.

Third Stage: Formation and Development of a Competitive Market

Between 2006 and 2010, the Rail Reform Programme continued the process of creating a competitive environment in freight and passenger railway transportation and encouraging private investment into modernisation of railway-related assets. 58 additional subsidiaries of Russian Railways were created during the third stage, including, among others, two freight rail operators (Freight One and Freight Two), a container transportation subsidiary (TransContainer), a long-distance passenger operator (Federal Passenger Company), and other subsidiaries such as local suburban passenger operators, repair and maintenance companies, and companies offering certain non-core services.

Subsequent Reforms

In order to improve rail fleet management, the FTS passed several amendments to its regulations, effective 1 November 2012, with the aim of unifying empty-run tariffs into a single tariff applicable to gondola (open top) railcars and flat wagons (subject to certain exemptions), irrespective of the class and nature of cargo last transported.

In 2019, with aim to harmonize legislation in different types of shipping the Russian Parliament decreased amount of penalties paid by carries together with maximum amount of their responsibility.

Railway Operators

Under Russian law, railways may be owned by the state, municipal authorities, companies and individual entrepreneurs (whether Russian or foreign). However, in practice, virtually all Russian rail infrastructure is owned by Russian Railways. In addition, Federal Law No. 29-FZ dated 27 February 2003 "On Specifics of Management and Disposal of Rail Transport Property", as amended, provides that main railway lines and related infrastructure, as well as railways important for national defence, may only be owned by Russian Railways and the Russian Federation.

Rolling Stock Operators

Under the Railway Transport Law, a rolling stock operator is a legal entity or an individual entrepreneur that owns or otherwise possesses railcars, and which provides its rolling stock for use on the basis of an agreement with a carrier. Russian law does not provide any restrictions on ownership of railcars in Russia, internal or foreign. Rolling stock operators may also provide either their own or leased locomotives, or may rely on locomotives provided by Russian Railways. The number of private locomotive operators is currently limited because of a deficit of available locomotives on the market, a lack of a well-developed traffic controlling system and insufficient skill in transportation of the significant volume of cargo in traffic.

Current legislation makes a distinction between rolling stock operators, which own cars and carriers, and assume an obligation to move cargo from one point to another on the railway network, and owners of infrastructure such as railway tracks and railway stations. The Group is classified as a rolling stock operator.

In order to access public railway infrastructure, rolling stock operators must obtain Russian Railways' consent regarding the technological operating conditions of their private train formations. The locomotive owner must also obtain consent to use the relevant railway of Russian Railways for each trip, or series of trips, made by its private locomotive, as well as conclude agreements with Russian Railways on technical maintenance, on-going repairs and locomotive operation. Russian Railways provides crews for locomotives and locomotive repairs.

Licensing

The Law on Licensing sets forth the requirements for obtaining licences in respect of certain activities, including railway transportation of hazardous cargo. Railway transportation of non-hazardous cargo is no longer subject to licensing.

Certification of Rolling Stock and Equipment

The Railway Transport Law requires rolling stock, the components of rolling stock, rail equipment and elements of infrastructure to be certified for compliance with safety requirements, including fire safety, sanitary, epidemiological and environmental protection rules. The Railway Transport Certification Rules specify particular types of rolling stock and equipment which must be certified. Certified rolling stock must be inspected at least once a year to ensure continued compliance. Inspection control findings are documented in an official act of inspection. If a breach of certification rules or legal requirements is determined to have occurred, the certificate will be suspended until the certificate holder is able to cure the problem. If the problem is not cured in due course, the certificate may be revoked.

Freight Forwarding Services

Forwarding services are regulated by the Civil Code, the Forwarding Law, the Forwarding Services Rules and the state standards adopted by Russian governmental authorities. The Russian Forwarders Association, a nongovernmental organisation, has also adopted non-binding general terms of forwarding.

Forwarding services include organising cargo transportation, facilitating carriage agreements, supporting cargo shipments and receipts and certain other services ancillary to cargo transportation. The Forwarding Law imposes liability on a forwarder for failure to perform or improper performance of its obligations. This liability is limited in most cases to the actual damage resulting from such failure to perform or improper performance. The law also provides for a one-year limitation period on claims in relation to forwarding services. Forwarding services are not subject to tariff regulation, and no special permits, licences or authorisations are needed to carry out this type of activity.

Tariffs

In Russia, Russian Railways is the only company deemed to carry out "rail cargo shipments"; other transportation companies have the status of "operators of railcars" and, to access the railway infrastructure, they are required to conclude agreements with Russian Railways. Russian Railways is required to provide such access on a non-discriminatory basis.

Tariffs are designed to ensure a reasonable profit and to take into account projections for infrastructure renovation. Tariffs are set annually but may be reviewed at any time at the discretion of the FAS or the Mintrans (in case of international transit), or as a response to a request from Mintrans, a state authority or a company.

The freight tariff structure for the Russian railway sector is divided into two main parts: (a) a general infrastructure and locomotive charge and (b) a railcar charge. While the infrastructure and locomotive component of the tariff is set by the FAS for all market participants, including Russian Railways and private operators, the railcar component established by the FAS applies only to Russian Railways. Accordingly, private operators, including the Group, are free to set their own rates of railcar charges.

The infrastructure and locomotive tariff varies depending on whether the train formation has a private locomotive or a locomotive owned by Russian Railways. The tariff imposed on a private locomotive operator is generally lower than the tariff imposed for the use of a locomotive owned by Russian Railways.

The tariffs charged by Russian Railways primarily depend on the distance, cargo class and type of destination, such as whether the freight is being transported internationally or only within Russia, including transportation to and from the sea ports. There are three classes of cargo: From the least expensive Class 1 cargo to the most expensive Class 3 cargo. The Group's cargo generally falls within Class 2 (oil and oil products) and Class 3 (metals).

The formation of Freight One and Freight Two has increased competition in the railway transportation sector and has contributed to the liberalisation of prices in the railcar market. Because railcar charges of Freight One and Freight Two are not subject to FAS regulation, such charges are now more aligned to market rates and, on their own, do not serve as benchmarks for price competition.

Shipping

Applicable law

Under Russian law, shipping operations are regulated by international conventions, and the laws and regulations in force in the jurisdictions where the Group's ships operate and are registered.

Russian Legislation

The main Russian laws and regulations governing shipping include the following:

- The Merchant Shipping Code, which establishes the legal framework for regulating sea carriage contracts, including the issuance of bills of lading and the parties' rights and obligations.

- The Seaports Law, which regulates the acceptance of goods for shipping, delivery of goods from the carrier to the consignee and cargo transshipment.

- Order of the Mintrans of the Russian Federation "On Approval of Safety Rules for Carriage of Cargo by Sea" No. VR-1/p dated 21 April 2003, which regulates sea carriage of general and bulk goods, establishing certain packaging, storage and safety requirements with respect to the cargo being transported.

- Order of Rosmorflot "On Approval and Implementation of Safety Rules for Carriage of Particular Types of General Goods by Sea" No. 44 dated 29 November 1996, which enacts a number of safety rules for the sea carriage of certain types of cargo, including steel products, concrete products, heavy and oversized cargo, granite, marble and rubber.

- Order of Rosmorflot "On Approval and Implementation of Rules of Shipping of Cargo in Containers by Sea Transport" No. 39 dated 22 October 1996, which sets out rules for shipments of goods by container, including requirements for the proper stowage and securing of goods in containers.

- Order of the Ministry of Navy of the USSR "On Approval of Rules for Carriage of Hazardous Goods by Sea" No. 56 dated 3 May 1989, which enacts rules for the transport of certain types of hazardous goods in containers or other packages.

International Agreements

Shipping operations are also regulated under international law, including the following conventions:

- International Convention for the Unification of Certain Rules of Law relating to Bills of Lading dated 25 August 1924, as amended by the Protocol dated 23 February 1968 (the "**Hague-Visby Rules**") and SDR Protocol dated 21 December 1979. The Hague-Visby Rules represent customary international maritime shipping rules underlying national legislation, including the Merchant Shipping Code. They apply to any bill of lading related to a carriage of goods between the sea ports in two different states if such bill of lading is issued in a state-party thereto, the carriage is from a port of a state-party thereto, or the contract contained in or evidenced by a bill of lading expressly provides that the contract is governed by the Hague-Visby Rules or the legislation of any state-party thereto, irrespective of the nationality of the ship, the carrier, the shipper, the consignee or any other interested person.

- United Nations Convention on the Carriage of Goods by Sea dated 31 March 1978 (the "**Hamburg Rules**"). The Hamburg Rules regulate maritime shipping contracts. The Russian Federation is not a party to the Hamburg Rules, but the Hamburg Rules apply where the port of loading or the port of discharge is located in one of the 35 states-parties to the Hamburg Rules, or if the bill of lading is issued in one of such states or expressly provides that the contract is governed by the Hamburg Rules or the legislation of any state-party thereto, irrespective of the nationality of the ship, the carrier, the actual carrier, the shipper, the consignee or any other interested person.

- International Convention on Civil Liability for Oil Pollution Damage dated 29 November 1969, as amended by the Protocol dated 27 November 1992, which imposes strict liability on the owner of a vessel that discharges oil.

- International Convention for the Prevention of Pollution from Ships dated 2 November 1973 ("**MARPOL**"), as amended by two protocols adopted by the International Maritime Organisation in 1978 and 1997, respectively. MARPOL is aimed at preventing and minimising pollution by oil, noxious liquid substances, packaged hazardous substances, sewage and garbage from ships, as well as air pollution from ships.

- International Convention for the Safety of Life at Sea dated 1 November 1974, as amended ("**SOLAS**"). SOLAS is the main international treaty related to the safety of merchant vessels, setting out minimum standards for the proper construction and operation of ships.

Enforcement Authorities

The following governmental authorities, in addition to certain other government bodies, regulate shipping operations:

- The Mintrans issues regulations and safety rules, develops state policy in the sphere of shipping transportation and coordinates the work of the Federal Service for Supervision of Transport and the FASIWT;

- The Federal Service for Supervision of Transport oversees compliance with the laws, regulations and international treaties governing transport (including shipping transportation) and issues licences for certain activities, including loading and unloading of hazardous cargo in seaports, and other authorisation documents, and organises the registration of sea vessels;

- The FASIWT (formerly Rosmorflot) carries out state services and manages state-owned property in the field of sea and river transport, organises work to prevent oil pollution in the sea independent of the ship's nationality, carries out work to secure navigation on the Northern Sea Route, coordinates the work of rescue services, certifies shipping crew members and classifies and establishes requirements for navigation equipment;

- Federal Autonomous Institution "Russian Maritime Register of Shipping" (the "**Russian Maritime Register**") is a non-commercial organisation that classifies and surveys sea and mixed river-sea going vessels and their equipment. The Russian Maritime Register monitors the compliance of vessels with the requirements of international treaties and Russian law, maintains a register of certified vessels and maritime objects, conducts tonnage measurement and technological audits of vessels and acts as an expert advisor to the Mintrans for the drafting of legislation and regulations in the sphere of shipping transportation.

Licensing

According to the Merchant Shipping Code, a vessel must be registered in one of the state registers: the State Vessels Register, the Register of Small Vessels, the Bareboat-Charter Register, the Russian International Register of Vessels or the Register of Vessels Under Construction. The State Vessels Register covers all vessels, except for small vessels used for non-commercial activities, which are registered in the Register of Small Vessels. The Bareboat-Charter Register includes vessels already registered in foreign states and freighted to Russian consignors without crew. Such vessels also require a permit from the Federal Service for Transport Supervision for temporary carrying of the Russian flag. Their registration in the Russian Bareboat-Charter Register is valid only for the duration of the bareboat charter contract. The Russian International Register of Vessels includes vessels used for international cargo and passenger shipping. The vessel's registration in the Russian International Register of Vessels is subject to annual confirmation. Vessels under construction are subject to registration in the Register of Vessels Under Construction, which contains information on the ship-owner and the technical characteristics and encumbrances with respect to such vessel. A vessel can only be registered in one of the above mentioned registers. The registers are maintained by sea port captains.

Vessels owned by foreign companies are generally allowed to operate in Russian waters but are not allowed to operate under the Russian flag or engage in coastal shipping, i.e., cabotage, or icebreaking, salvaging, towing, hydraulic engineering works, underwater works or other similar activities carried out in the internal sea waters or territorial sea of Russia. A foreign vessel can temporarily carry the Russian flag if freighted under a bareboat-charter contract to a Russian consignor if such shift is approved by the ship-owner and mortgagor of the vessel (if applicable) and permitted under the law of the state where such vessel is registered and if the vessel's right to carry a foreign flag is suspended or

will be suspended by the time the vessel obtains the right to carry the Russian flag. A foreign vessel's right to carry the Russian flag is valid for the duration of the bareboat-charter contract. A vessel acquired outside Russia also has the right to carry the Russian flag under a temporary permit issued by a consular post of the Russian Federation, which is valid through the vessel's state registration.

Between 2005 and 2011, several amendments to Russian law were adopted to incentivise owners of vessels to register under the Russian flag instead of shifting to offshore jurisdictions. In particular, owners of vessels registered in the Russian International Register of Vessels have been exempt from profit tax on profits from operation and/or sale of such vessels, VAT on sale or import of such vessels, transport tax and property tax. Moreover, the amendments expanded the list of vessels qualifying for registration in the Russian International Register of Vessels. Thus, the Russian International Register of Vessels currently covers not only vessels used for international shipping, but also vessels used for transportation and towing between Russian sea ports and vessels used for exploration and exploitation of Russian sea bed resources, hydraulic engineering and underwater technical works, among other vessels.

Certification

After registration, a vessel must be classified and surveyed. The Russian Maritime Register is the only Russian institution authorised to carry out the classification and survey of vessels registered in any of Russian state registers. The Russian Maritime Register assigns a class to the vessel and monitors its compliance with the requirements of relevant Russian and international law. Furthermore, as a classification and survey institution, the Russian Maritime Register adopts rules governing vessel classification and construction. In cases of non-compliance with these rules, the Russian Maritime Register can suspend or revoke a previously issued certificate.

Each vessel must also obtain a number of documents, including a certificate confirming the right to operate under the Russian flag, a permit for a ship radio station (if any) and a certificate confirming compliance with sanitation requirements.

Completion and Pricing

Maritime cargo shipment is not per se considered to be a natural monopolistic activity. Accordingly, prices for such services are set on an unregulated, free-market basis. However, in case of unfair market practices or monopolistic prices, the entity abusing its dominant position in the market will be subject to limitations and liability established by competition legislation.

Starting from 27 January 2013, the provision of icebreaking services on the Northern sea route is considered to be a natural monopoly. The Russian Government adopted the Resolution "On Approval of the Regulation on State Regulation of Tariffs for Icebreaking Services, Icebreaking Pilot Services in waters of Northern Sea Route" No. 388 dated 24 April 2015 on state regulation of tariffs.

Antimonopoly and Related Regulation

Antimonopoly Approval of Certain Transactions

The antimonopoly regulation of the Russian Federation is based on the Competition Law and other federal laws and regulations governing antimonopoly issues.

Antimonopoly regulation of the Russian Federation is aimed at the prevention and termination of monopolistic activity and control over economic concentration and governs relations that involve, among others, Russian legal entities, foreign legal entities, state agencies of the Russian Federation and local government authorities. Antimonopoly restrictions include prohibitions on the conclusion of anti-competitive agreements, the exercise of anti-competitive coordinated actions, acts resulting in unfair competition and the abuse of a dominant position.

Compliance with antimonopoly legislation in Russia is monitored by the FAS. Russian legislation grants the FAS the powers necessary for the performance of its functions and for dealing with violations of antimonopoly legislation. The FAS is, among other things, authorised: (i) to initiate or examine cases regarding the violation of antimonopoly legislation; (ii) to issue binding orders to business entities in cases specified in the Competition Law; (iii) to hold commercial and non-commercial organisations and their officers to account for violating antimonopoly laws in the instances and by the procedure established by Russian legislation; and (iv) to file with a court or an arbitrazh court applications in respect of violations of antimonopoly laws, including, among other things, invalidating in full or in part any agreements that do not comply with antimonopoly legislation.

The Competition Law provides for antimonopoly control over economic concentration and requires prior approval by the FAS of the following transactions:

- acquisition by a person (or its group) of more than 25%, 50%, or 75% of the voting shares of a Russian joint stock company (or more than 1⁄3, 1⁄2 or 2⁄3 participation interest in a Russian limited liability company);

- acquisition by a person (or its group) of the core production assets (with certain exceptions) located in the territory of the Russian Federation and/or intangible assets of an entity if the balance sheet value of such assets exceeds 20% of the total balance sheet value of the core production and/or intangible assets of such entity, as applicable;

- obtaining rights to determine the business activity of a Russian entity or to exercise the powers of its executive body by a person (or its group); or

- acquisition by a person (or its group) of more than 50% of the voting shares (participation interest) of a foreign legal entity or obtaining other rights to determine its business activity or to exercise the powers of its executive body,

in each case, if any of the following thresholds are met:

- the aggregate asset value of the acquirer (and its group) together with the target (and its group) exceeds RUB 7 billion;

- the total annual revenue of the acquirer (and its group) and the target (and its group) for the preceding calendar year exceeds RUB 10 billion and the total asset value of the target (or its group) exceeds RUB 400 million.

Furthermore, the Competition Law provides for prior approval by the FAS of the following actions:

- mergers and consolidations of entities, if any of the following thresholds are met:

    - the aggregate asset value of such entities (or of the groups of persons to which they belong) exceeds RUB 7 billion;

    - the total annual revenue of such entities (or of the groups of persons to which they belong) for the preceding calendar year exceeds RUB 10 billion.

- formation of an entity, if any the following thresholds are met:

    - its charter capital is paid by the shares (or participation interest) and/or the assets of another entity (save for monetary funds) or the newly founded entity acquires the rights in respect of such shares (or participation interest) and/or assets as specified in the Competition Law, provided that the aggregate asset value of the founders (or group of persons to which they belong) and the newly founded entity (or groups of persons to which they belong) exceeds RUB 7 billion;

- the total annual revenue of the founders (or groups of persons to which they belong) and the newly founded entity (or groups of persons to which they belong) for the preceding calendar year exceeds RUB 10 billion.

The Competition Law expressly provides for extraterritorial application to transactions which are made outside of Russia but lead, or may lead, to the restriction of competition in Russia and which relate to assets located in Russia or to the shares (or participation interests) in Russian companies or rights in relation to such companies.

Under the Competition Law, if an acquirer has acted in violation of the merger control rules and acquired, for example, shares without obtaining the prior approval of the FAS, the transaction may be invalidated by a court order initiated by the FAS, provided that such transaction has led or may lead to the restriction of competition, for example, by means of strengthening of a dominant position in the relevant market.

More generally, Russian legislation provides for civil, administrative and criminal liability for the violation of antimonopoly legislation.

Regulation of a Dominant Position in a Particular Market

The antimonopoly regulation is aimed at the prevention of the abuse of a dominant position. According to the Competition Law, an entity or a group of entities is deemed to have a dominant position in a particular commodity market if: (a) the entity (or the group of entities) has a market share in a particular commodity market in excess of 50%, unless it is specifically established by the FAS that the entity (or the group of entities) does not have a dominant position; or (b) the entity has a market share in a particular commodity market which is less than 50%, but more than 35% and the dominant position of the entity (or the group of entities) is specifically established by the FAS based on (i) the stability or near stability of such entity's (or such group of entities') share in the particular commodity market, and (ii) certain characteristics of the relevant commodity market (such as the accessibility of the commodity market to new competitors); or (c) even if the entity has a market share of less than 35% in certain specific circumstances.

The Competition Law also provides the possibility of several unrelated entities being considered to collectively have a dominant position. In particular, each of three business entities collectively having a market share exceeding 50%, or each of five business entities collectively having a market share exceeding 70%, provided that the market share of each entity in any case is not less than 8%, may be considered as having a dominant position provided that: (i) market shares of relevant entities have been stable or nearly stable during a significant period of time; (ii) the access of new competitors into the particular commodity market is hindered; (iii) the relevant commodity cannot be easily substituted; and (iv) the increase of the price for the commodity does not lead to decrease of demand for it.

The Competition Law establishes a regulatory framework for companies having dominant positions in certain markets, aimed at protection of competition in the relevant markets. In particular, an entity having a dominant position is prohibited from abusing such a position through, among others, the following activities: (i) fixing and/or maintaining a monopolistic high or low price of goods; (ii) withdrawing goods from circulation, which results in price increases; (iii) dictating to a counterparty the terms of an agreement unfavourable to it or not relevant to the subject-matter of the agreement; (iv) economically or technologically unjustified reduction or termination of the production of certain goods; (v) economically or technologically unjustified refusal to enter into an agreement with certain buyers (customers) or avoiding such agreement; (vi) economically or technologically unjustified fixing of various prices (tariffs) for the same goods; fixing a monopolistic high or low price of finance service by a financial institution; (viii) creating discriminatory conditions; (ix) creating impediments for other entities to either access or exit a particular commodity market; (x) violation of established pricing rules; and (xi) price manipulation on wholesale and/or retail electricity market.

If a company having a dominant position systematically carries out any monopolistic activities a court, based on a claim brought by the FAS, may decide that such company is subject to forcible division or spin-off. In addition, the FAS is authorised to issue binding orders to stop abuse of a dominant market position and to transfer to the federal budget profits obtained as a result of abusing a dominant position.

Regulation of Natural Monopolies

The Natural Monopolies Law defines "natural monopoly" as a condition of the commodity market in which the demand for particular products or services is satisfied more effectively in the absence of competition and in which other goods cannot readily be substituted for the monopoly goods. To be considered a "natural monopoly", a company shall carry out activities mentioned in the list of naturally monopolistic activities set out in the Natural Monopolies Law. With respect to cargo transportation activities, this list includes providing services in terminals and commercial sea ports and carrying out rail cargo shipments. Starting from 27 January 2013, the list of naturally monopolistic activities has included providing services of an icebreaker ship to assist and pilot vessels in the Northern Sea Route. In addition to the list of naturally monopolistic activities set out in the Natural Monopolies Law, the Russian state authorities maintain registers of natural monopolies, which include identities of companies considered natural monopolies and thus subject to special regulation.

The Natural Monopolies Law regulates (i) the operations of the companies engaged in naturally monopolistic activities, (ii) major investments of such companies in assets that are not used for the naturally monopolistic activities and (iii) transactions involving fixed assets and shares of such companies. The FAS supervises the activities of natural monopolies and is responsible for regulation of the tariffs.

The Natural Monopolies Law enumerates the following key restrictions with respect to investment activities and other dealings in shares of the natural monopolies:

- a natural monopoly needs to receive prior written approval from the state authorities for any acquisition of fixed assets or rights to use such assets, if (a) such assets are not used for the naturally monopolistic activities and (b) the book value of such assets exceeds 10% of the natural monopoly entity's own capital (as calculated in accordance with its latest balance sheet);

- a party that intends to acquire, rent or obtain the right to own or use in another way the fixed assets of a natural monopoly must obtain prior written approval of the regulators, if such assets (a) are used for the naturally monopolistic activity and (b) the book value of such assets exceeds 10% of the natural monopoly entity's own capital (as calculated in accordance with its latest balance sheet); and

- a natural monopoly requires prior regulatory approval for any investments in production or distribution of goods, not related to the industry of the natural monopoly entity, whose value exceeds 10% of the natural monopoly entity's own capital (as calculated in accordance with its latest balance sheet).

The relevant authority can adopt binding decisions in the case of a breach of the law and issue binding instructions to a natural monopoly to prevent a breach of the law, including instructions on eliminating the consequences of a breach. The principal methods of regulating the activities of natural monopolies by relevant supervising authorities are:

- price regulation by setting prices (tariffs) or price limits; and

- identifying consumers entitled to obligatory services and/or setting natural monopoly minimum supply levels for such consumers (with a view to protecting the rights and legal interests of citizens, state security, the environment and cultural values).

In order to promote transparency in activity and regulation, the changes require natural monopolies to grant free access to the information on their activity in accordance with the standards of disclosure

approved by the Russian Government. The information on the regulated activity of the natural monopolies include the following: (i) information on prices (tariffs) for regulated goods and services; (ii) information on principal operational and financial activity that is the subject of regulation; (iii) information on basic consumer characteristics of the regulated goods and services; (iv) information on technical access to the regulated goods and services, or the lack thereof; and (v) information on the terms and conditions for supplying regulated goods and services. The supervisory authority has the right: (i) to regulate natural monopoly entities and to use methods of regulation contemplated by the Natural Monopolies Law including price regulation; (ii) to instruct natural monopoly entities to stop violations and mitigate its consequences, including entering into contracts with those consumers entitled to obligatory service, to instruct natural monopoly entities to make amendments to existing contracts, to instruct natural monopoly entities to transfer revenue from activities which contravene the existing federal laws; and (iii) to perform other acts contemplated by federal laws.

Foreign Investment in Strategic Enterprise

The Strategic Investment Law sets forth certain limitations on the acquisition by a foreign investor of shares in strategic companies and sets out a list of activities considered to be of strategic importance to the national defence and security of Russia. The list includes, among other things, services rendered by companies classified as "natural monopoly entity" under Russian law, including the services rendered in transport terminals and ports.

The Strategic Investment Law sets forth a general prohibition on transactions resulting in the acquisition of control over strategic companies by foreign states and international organisations or an organisation controlled by any foreign state or international organisation and requires other foreign investors to obtain prior approval of a state committee (the "**State Committee**") for the acquisition of control over a strategic company.

A person is deemed to control a strategic company if such person: (i) controls (directly or indirectly) more than 50% (25% or more for the companies using the subsoil of the strategic importance (the "**Strategic Subsoil User**")) of the total number of votes attributable to the voting shares or stakes making up the share capital of a strategic company; (ii) has the right (on the basis of an agreement or otherwise) to direct decisions of a strategic company, including the terms of its business operations; (iii) has the right to appoint the sole executive body of a strategic company and/or for more than 50% (25% or more for the Strategic Subsoil User) of the members of its collective executive body; (iv) has an unconditional ability to procure the election of more than 50% (25% or more for the Strategic Subsoil User) of the members of a strategic company's board of directors or other management body; or (v) acts as a management company for a strategic company. Also, a strategic company is deemed to be under control if a controlling foreign entity controls (directly or indirectly) less than 50% of the total number of votes attributable to the voting shares or stakes making up the share capital of a strategic company provided the proportion between the amount of votes available to the controlling foreign entity and the amount of votes available to other shareholders provides the controlling foreign entity with an opportunity to determine the decisions of the strategic company.

If the proportion of votes available to the foreign entity changed due to (i) the buyback or transfer of shares in a strategic company to it and, consequently, formation of a block of treasury shares, (ii) distribution of treasury shares in a strategic company between its shareholders, (iii) conversion of preferred stock into ordinary stock or (iv) any other reason, and the foreign entity subsequently obtained control over the respective strategic company, such foreign entity is obliged under the Strategic Investment Law to file an application to the State Committee within three months upon obtaining control.

Prior approval of the State Committee is also required in the event a foreign state, international organisation or an organisation controlled by any of them acquires direct or indirect control over more than 25% (more than 5% for the Strategic Subsoil User) of the votes represented by shares in a strategic company or other ability to block decisions of the management bodies of such entity.

In addition, foreign investors are required to notify the State Committee about any transactions undertaken by them resulting in the acquisition of 5% or more of the charter capital of a strategic company.

The Strategic Investment Law provides for certain exceptions to the general rules described above. No prior approval or post-closing notification is required for obtaining control over a Strategic Subsoil User if the Russian government owns or has the right to vote (directly or indirectly) more than 50% of the voting shares of such strategic company, or for making foreign investments in Russia if such investment activity is governed by other federal laws or international treaties of the Russian Federation, including treaties on military and technical cooperation.

The Strategic Investment Law governs the procedure for review by the State Committee of an application of foreign investors seeking to obtain control over a strategic company. A foreign investor initiates this process by filing an application with the FAS. The term for review of such an application is three months and may be extended for another three months. The FAS will issue its approval upon confirmation from the Federal Security Service of Russia and the State Committee that the acquisition of control does not threaten the national defence and security of Russia.

Transactions which are subject to review under the Strategic Investment Law and are not subsequently approved by the State Committee are void, and the foreign investor, by order of the courts, may be denied its right to vote at shareholder meetings of such strategic company.

Employment and Labour

Labour matters in Russia are primarily governed by the Labour Code and certain other federal laws.

Employment Contracts

As a general rule, an employment contract may not provide for its termination upon the expiration of a set term, except in certain circumstances, for example, where the nature of the employee's duties is time-limited. Employment contracts with the chief executive officer, deputy chief executive officer and the chief accountant may provide for termination upon the expiration of a set term.

All permitted causes for termination of employment by an employer are listed in the Labour Code and other federal laws and may not be changed in the employment contract, subject to certain narrow exceptions. The instances when an employer may terminate an employment contract include, among others:

- liquidation of the enterprise or downsizing of its staff;
- employee's failure to comply with his duties due to incompetence;
- systematic failure of employee to perform his duties without reasonable justification;
- the commitment by an employee of any single gross violation as enumerated in the Labour Code; and
- delivery of false documents by the employee in connection with the execution of the employment contract.

An employee dismissed from an enterprise due to downsizing or liquidation is entitled to receive compensation, including a severance payment and, depending on the circumstances, salary payments for a certain period of time.

The Labour Code also provides protections for specified categories of employees. For example, except for certain cases established by the Labour Code, an employer cannot dismiss minors, expectant mothers, mothers with a child under the age of three, single mothers with a child under the age of 14 or

disabled child under the age of 18 or other persons caring for a child under the age of 14 or disabled child under the age of 18 without a mother.

Work Time

The Labour Code generally sets a working week of 40 hours. Any time worked beyond 40 hours per week, as well as work on public holidays and weekends, must be compensated at a higher rate. Annual paid vacation leave under the Labour Code is generally 28 calendar days. Certain categories of employees whose labour conditions, based on a special assessment, are classified as harmful conditions of the second, third or fourth degree or hazardous conditions may be entitled to an additional paid vacation ranging from seven to 36 working days. Other categories of employees having the same right to an additional paid vacation are set forth in the Labour Code and other federal laws.

The retirement age in the Russian Federation is generally 65 years for men and 60 years for women.

Salary

The minimum monthly salary in Russia is established by federal law from time to time. Starting from 1 January 2021, the minimum monthly salary is set at an amount of RUB 12,792 (approximately U.S.$175). Salaries of the Group's employees are generally higher than the statutory minimum.

Strikes

The Labour Code defines a strike as the temporary and voluntary refusal of workers to perform their work duties with the intention of settling a collective labour dispute. Russian legislation contains several requirements for lawful strikes. Participation in a lawful strike may not be considered by an employer as employee's failure to perform his duties and may not be serve as grounds for termination of such employee. However, employers are generally not required to pay wages to striking employees for the duration of the strike. Participation in an unlawful strike may serve as adequate grounds for termination.

Trade Unions

Although recent Russian labour regulations have curtailed the authority of trade unions, they still retain significant influence over employees and, as such, may affect the operations of large industrial companies in Russia.

The activities of trade unions are generally governed by Federal Law No. 10-FZ "On Trade Unions, Their Rights and Guaranties of Their Activity" of 12 January 1996 as amended (the "**Trade Union Law**") and the Labour Code.

The Trade Union Law defines a trade union as a voluntary public association of individuals with common professional and other interests established for the purposes of representing and protecting the rights and interests of its members. National trade union associations, which coordinate activities of trade unions throughout Russia, are also permitted.

As part of their activities, trade unions may:

- negotiate collective bargaining agreements between and among trade unions and employers, federal, regional or local governmental authorities or other entities;
- monitor compliance with labour laws and collective bargaining and other agreements;
- access work sites and offices and request information relating to labour issues from the management of companies, federal, regional and local authorities;
- represent their members and other employees in individual and collective labour disputes with management;

- organise strikes for the purposes of collective dispute resolution; and
- put forth proposals for the temporary suspension of mass layoffs, which must be considered by local authorities.

Russian laws require that companies cooperate with trade unions and not interfere with their activities. Trade unions and their officers enjoy certain guarantees.

If a trade union discovers any violation of work condition requirements, notification is sent to the employer with a request to cure the violation and to suspend work if there is an immediate threat to the lives or health of employees. A trade union may apply to state authorities and labour inspectors and prosecutors to ensure that an employer does not violate Russian labour laws.

Although the Trade Union Law provides that those who violate the rights and guarantees provided to trade unions and their officers may be subject to disciplinary, administrative and criminal liability, no specific sanctions for these violations are set forth in Russian legislation. However, a violation of the Labour Code, including the sections wherein the rights of trade unions are established rights, is an administrative violation and may subject an offender company and its officers to administrative liability, including the temporary suspension of operations.

Requirements to Employees of Shipping Companies

In 2020, the Mintrans issued two regulations envisaging procedure for employees of companies either conducting shipping activities as their main professional activity or performing shipping for achieving their main commercial goals, including necessity to evidence qualification and mandatory probation period.

Other Labour Regulation

On 1 January 2016, a new Federal Law No. 116-FZ came into force which provided for amendments into Russian legislation, including Russian Labour Code ("**Law No. 116**"). The changes introduced by Law No. 116 established prohibition on the use of labour of outside employees (i.e., the seconded labour). The seconded labour is defined as a work fulfilled by an employee pursuant to his or her employer's order in favour, and under direction and control, of an individual of legal entity, other than his or her employer. Exceptions apply to the temporary provision of employees by one employer to another under a labour (personnel) provision agreement from an accredited private employment agency, between affiliated parties or where there is a shareholder agreement. Private employment agencies may second employees to legal entities for the purposes of performing work related to a temporary (up to nine months) increase in production or operations.

Due to changes in legislation on seconded labour, most companies which provide temporary personnel have replaced secondment agreements with agreements for the provision of services to formally comply with the law. However, there remains a risk that a services agreement will be considered invalid because its form does not correspond to its substance. Moreover, relations with temporary staff may be requalified as employment relations, and as a result the employer and its officials may incur administrative penalties under Article 5.27 of the Administrative Code for evading legal requirements for the signing of employment contracts with employees. The employer, agencies and their officials may incur penalties for breaches of labour legislation where they provide staff not on the basis of a personnel outsourcing agreement, but rather on the basis of a services agreement.

Taking into account changes in labour legislation, the tax authorities may challenge existing service agreements of taxpayers (as being personnel provision agreements by nature) because their form does not correspond to their substance or challenge the existing personnel outsourcing agreements as incompliant with the law. As a result, the tax authorities may disallow deduction for profit tax purposes of the expenses related to personnel outsourcing agreements and may disallow offset of the respective input VAT.

Currency Restrictions

The Group's operations are subject to certain currency control restrictions, which are set forth in the Federal Law "On Currency Regulation and Currency Control" No. 173-FZ dated 10 December 2003, as amended, (the "**Currency Law**") and respective regulations of the CBR. Pursuant to the Currency Law, residents and non-residents may settle transactions either in roubles or in foreign currency. Under the Currency Law, residents conducting foreign trade must, subject to certain exemptions stipulated by the Currency Law, repatriate all roubles and foreign currency payable to them under foreign trade contracts to accounts in authorised Russian banks. In addition, such residents must procure the repatriation of funds paid to non-residents for goods, works, services, intellectual property and information that were not supplied into, or performed in, the Russian Federation.

Amendments to the Civil Code

On 30 December 2012, Russian President Vladimir Putin signed the first set of amendments to the Civil Code, which form part of a major reform to Russian civil legislation. The majority of these amendments, which became effective on 1 March 2013, relate primarily to certain basic principles of civil law, limits on the exercise of civil rights, changes to rules on state registration of rights to certain types of property, as well as recognising the principle of compensation for losses incurred as a result of unlawful acts of the state authorities. Since 2012 there have been approximately eight sets of further material amendments to the Civil Code.

The second set of amendments to the Civil Code was signed on 7 May 2013. These amendments affect, inter alia, the general rules on transactions, the grounds on which a transaction may be challenged and the rules governing representation and powers of attorney. The amendments became effective on 1 September 2013. The most significant ones provide for the following:

- a general presumption that a transaction violating applicable law is voidable (rather than void ab initio);

- a requirement that a person challenging a transaction be either a party to the transaction or another person specified by law. Furthermore, in order to prevent counterparties from challenging transactions in bad faith on formal or technical grounds, the amendments provide that a claim to have a transaction declared invalid will not be upheld if the party making the claim acted in a way that allowed other parties to treat the transaction as valid;

- general rules for adopting and challenging decisions taken at meetings (such as creditors' meetings and other meetings which have legal consequences) were introduced. Such general rules should not apply to shareholders' meetings in a joint stock company or participants' meetings in a limited liability company or any other meetings to the extent they are otherwise regulated by separate laws;

- a number of requirements regulating the matters of representation and powers of attorney were amended and updated. Among other things, the amendments provide that the authority may be delegated not only under a power of attorney as a separate document. The amendments also lift the restriction on the maximum term of powers of attorney (previously, three years) thus allowing a power of attorney to be issued for a longer term and introduced a new type of a power of attorney (an irrevocable power of attorney), which requires notarisation. Additional measures protecting the counterparty's rights under transactions entered into with unauthorised person were introduced. The amendments also provide for a new procedure of notification of third parties of revocation of a power of attorney by means of publication of the relevant termination notice;

- general rules for legal notices and notifications were introduced; and

- and a final ten-year term for enforcing one's rights through the court was introduced in addition to the existing general three-year limitation period. In addition, pursuant to the amendments, the limitation period starts running from the day the respective person learned or should have learned (i) about the violation of his right and (ii) who is the competent defendant in respect of the claim for protection of the relevant right.

The third set of amendments was signed on 2 July 2013, which primarily affects provisions of the Civil Code dealing with securities. These amendments took effect on 1 October 2013. The most significant of these amendments provide for the following:

- differentiation of the regimes applicable to certificated and uncertificated securities: under the new classification certificated securities are treated as tangible property, while uncertificated securities are treated as "other property". Under the general rule, provisions governing registered certificated securities, records of which are maintained by a registrar or custodian, also apply to uncertificated securities. At the same time, a new section dedicated exclusively to uncertificated securities and dealing with specific aspects of their regulation was added to the Civil Code. In particular, rules were introduced protecting holders of uncertificated securities in cases where the securities have been unlawfully debited from their accounts;

- a new concept of an "integrated immovable property complex", defined as a set of physically or technologically interconnected immovable property objects having the same designated use and treated as a single item of real property, was added to the Civil Code; and

- a general rule that any benefit, output or proceeds resulting from the use of an asset belongs to the owner rather than its user.

The fourth set of amendments to the Civil Code was signed on 30 September 2013. These amendments became effective on 1 November 2013. The most significant of which provide for the following:

- a court may impose the duty of providing information on the content of foreign law rules only on the parties to the proceedings (before the introduction of the relevant amendment a court could vest the burden of proof of the content of foreign law rules in the parties);

- an exception from the general rule on personal law of legal entities was introduced providing that at the choice of the creditors either the Russian law or the personal law may apply to liability claims to a foreign legal entity's founders (participants) and other persons entitled to give instructions to be followed by a foreign legal entity predominantly carrying out its business activities within the territory of the Russian Federation; and

- parties to foundation agreements and participants agreements of a legal entity are now free to choose the governing law applicable to such agreements, as long as that choice does not affect the operation of the imperative requirements of the personal law of the respective legal entity.

The fifth set of amendments to the Civil Code, which was signed into law on 21 December 2013, primarily deals with rules related to pledges and mortgages. These amendments took effect on 1 July 2014. The most significant of these amendments provide for the following:

- a special regulation of pledges of liability rights, rights under bank account agreement and pledge of rights of the legal entity's shareholders and participants;

- rules on pledge management were introduced;

- beginning 1 July 2014, state registration of mortgage agreements is no longer required;

- beginning 1 January 2015, permitting the definition of the pledged assets in a pledge agreement to refer to the actual pledged property as at the date of its foreclosure including, inter alia, by

means of referring to a pledge of all of the pledgor's property or any part thereof, as well as a pledge of the pledgor's property of any type or kind;

- the cancellation of a pledge with respect to a property acquired in good faith;
- regulations on subsequent pledges were specified; and
- special regulations on assignments of future rights of demand.

The sixth set of amendments to the Civil Code was also signed on 21 December 2013 and introduced "nominee account agreements" and "escrow agreements" as contracts. These amendments became effective on 1 July 2014.

The seventh set of amendments to the Civil Code was signed on 12 March 2014, primarily deals with rules related to legal protection of intellectual activity and means of individualisation. The majority of these amendments took effect on 1 October 2014. The most significant of these amendments provide for the following:

- rules regulating pledge of exclusive rights were introduced;
- the prohibition for a right holder to use a result of intellectual activity for which it granted an exclusive licence;
- decrease up to five years of the effective term of an exclusive right to utility models; and
- the imperative rule under which proceeds from joint disposal of an exclusive right should be distributed equally among the right holders.

The eighth set of amendments was signed on 5 May 2014 and covers a wide range of corporate issues. These amendments took effect on 1 September 2014 and the most significant of them provide for the following:

- a new division of legal entities into corporations and unitary legal entities;
- replacement of open and closed joint stock companies by public and non-public entities;
- new opportunities for corporate structures;
- general principles of "corporate contracts" (shareholders agreements and participants agreements);
- the scope of liability of the management bodies and persons who may determine a business entity's conduct;
- new types of reorganisation;
- grounds for invalidating reorganisation coupled with the relevant aftermath; and
- the priority of creditors in terms of liquidation.

The ninth set of amendments was signed into law on 8 March 2015 and covers primarily the law of obligations and contracts. These amendments took effect on 1 June 2015 and the most significant of them provide for the following:

- the concepts of representations and indemnities;
- conditional obligations;

- waivers;
- options to enter into agreement, optional agreements and framework agreement;
- intercreditor agreements;
- pre-contractual negotiations; and
- independent guarantees and security payments.

The next set of amendments to the Civil Code was signed into law on 26 July 2017 and came into effect on 1 June 2018. These amendments introduced new regulation of financial transactions in Russia, including, *inter alia*:

- loan agreements now may be deemed concluded at the time of the agreement's execution (the so-called consensual agreement) or, at the moment when the actual transfer of money or objects under the loan agreement takes place (depending on how the parties drafted the agreement). Previously only the latter option was available for loans;
- the concept of so-called "usurious interest rate", which will indicate an interest rate exceeding the usually applicable rates twice or more (this applies only to loans and credits provided to individuals either by entities not engaged in consumer lending or by other individuals). Courts will be able to lower "usurious interest rates" in line with the rates ordinarily applicable in similar circumstances if such interest rate is considered exceedingly onerous for the borrower;
- various ways of determining the applicable interest rate in a loan or credit agreement, including fixed rate, floating rate (LIBOR, EURIBOR or else) and any other means of determination;
- new types of bank deposits and bank accounts;
- use of electronic means of payment, which will become expressly allowed by the legislation;
- the right of individuals to carry out payments intended for a recipient having an account in the bank of payment or another bank without opening a bank account in the payer's name; and
- revocation of a payment order by the payer until such order becomes irrevocable under the law.

During the last years, the following amendments were implemented into the Civil Code:

- written form of a transaction shall be viewed as satisfied if a contract was signed by way of using electronic devices allowing to establish will of the parties;
- hereditary fund became a new tool allowing testators to establish fund controlling their hereditary assets;
- new rules on regulation of pledge account; and
- updated regulation of contractual restrictions on assignment of rights from contracts.

As of the date of this Prospectus, the potential interpretation by state authorities (including the courts), along with the impact of the above amendments on the Group's activities and corporate governance, are unknown.

DESCRIPTION OF THE ISSUER AND GUARANTORS

The Group is a leading vertically integrated energy and coal producer with diversified businesses spanning the energy value chain that are supported by complimentary logistics operations and infrastructure. The diversification of operations and the development of synergies between business lines that was undertaken by the Group in the last several years, as well as the Group's investments in research and development and product innovation, has strengthened its resilience to market downturns and positioned it to capture domestic economic growth and global economic recovery opportunities as they arise. The Group's mission is to provide affordable and reliable energy to customers across the world whilst adhering to the best in class principles of corporate governance, sustainability, health and environmental safety.

The principal activity of the Issuer is the issuance of debt securities (including bonds, notes and debentures), the proceeds of which are lent to other members of the Group. The relationship between the Company and the Issuer is carried out in accordance with the applicable statutes and regulations of Ireland and the Issuer's Constitution.

The business address of each director of the Issuer and each Guarantor in such capacity is the registered office of the relevant entity as set out below. As at the date of this Prospectus, neither the Issuer nor any of the Guarantors is aware of any potential conflict of interests between the duties their directors owe, on the one hand, and their private interests or the duties owed by any of them to any other person, on the other.

Guarantors' Financial Contribution

The table below sets out Adjusted EBITDA and assets of the Guarantors as a group and the non-guarantor subsidiaries of the Company as a group as at and for the year ended 31 December 2020.

	As of and for the year ended 31 December 2020			
	Adjusted EBITDA	**% of Group**	**Assets**	**% of Group**
	(*U.S.$ millions, except for percentage data*)			
Guarantors	1,973	100%	16,034	100%
Non-guarantors.....	0	0%	0	0%
Total Group.....	**1,973**	**100%**	**16,034**	**100%**

As at and for the year ended 31 December 2020, the consolidated Company's assets represented 100% of the Group's total assets and 100% Adjusted EBITDA of the Group. In the Company's consolidated financial statements for the year ended 31 December 2020, Adjusted EBITDA accounted for U.S.$1,973 million, or 100%, of the Group's Adjusted EBITDA, and as at 31 December 2020 its assets accounted for U.S.$16,034 million, or 100%, of the Group's assets.

Issuer

The Issuer was incorporated in Ireland as a designated activity company on 29 June 2021, registered number 699061, under the Companies Act 2014. The registered office of the Issuer is 2nd Floor, Palmerston House, Denzille Lane, Dublin 2, Ireland and phone number +353 1 905 8020.

The authorised share capital of the Issuer is EUR 100 divided into 100 ordinary shares of par value EUR 1 each (the "**Shares**"). The Issuer has issued one hundred Shares, which are fully paid and are held by the Company.

The Issuer is a wholly owned subsidiary of the Company.

Cafico Corporate Services Limited (the "**Corporate Services Provider**"), an Irish company, acts as the corporate services provider for the Issuer. The office of the Corporate Services Provider serves as the general business office of the Issuer. Through the office and pursuant to the terms of the corporate

services agreement entered into on 10 September 2021 between the Issuer and the Corporate Services Provider (the "**Corporate Services Agreement**"), the Corporate Services Provider performs various management functions on behalf of the Issuer, including the provision of certain clerical, reporting, accounting, administrative and other services until termination of the Corporate Services Agreement. In consideration of the foregoing, the Corporate Services Provider receives various fees and other charges payable by the Issuer at rates agreed upon from time to time plus expenses. The terms of the Corporate Services Agreement provide that either party may terminate the Corporate Services Agreement upon the occurrence of certain stated events, including any material breach by the other party of its obligations under the Corporate Services Agreement which is either incapable of remedy or which is not cured within 30 days from the date on which it was notified of such breach. In addition, either party may terminate the Corporate Services Agreement at any time by giving at least 90 days written notice to the other party.

The Corporate Services Provider's principal office is Palmerston House, Denzille Lane, Dublin, D02 WD37, Ireland.

Business

The principal objects of the Issuer are set forth in clause 3 of its Constitution (as currently in effect) and permit the Issuer, inter alia, to lend money and give credit, secured or unsecured, to issue debentures, loan participation notes, enter into derivatives and otherwise to borrow or raise money and to grant security over its property for the performance of its obligations or the payment of money. The Issuer is organised as a special purpose company. The Issuer was established to raise capital by the issue of debt securities and to use an amount equal to the proceeds of each such issuance to advance loans to other members of the Group.

Since its incorporation the Issuer has not engaged in material activities other than those incidental to its registration as a designated activity company under the Companies Act 2014 and the issue of the Notes. The Issuer has no employees.

Directors and Company Secretary

The Issuer's Constitution provide that the Board of Directors of the Issuer will consist of at least two and maximum twelve Directors.

The Directors of the Issuer and their business addresses are as follows:

Kar Chun Man	Palmerston House, Denzille Lane, Dublin, D02 WD37, Ireland
Lester Almojuela	Palmerston House, Denzille Lane, Dublin, D02 WD37, Ireland

The Company Secretary is Cafico Secretaries Limited of Palmerston House, Denzille Lane, Dublin, D02 WD37, Ireland.

Financial Statements

Since its date of incorporation, save as disclosed in the section entitled "*Business*" above, the Issuer has not commenced operations and no financial statements of the Issuer have been prepared as at the date of this Offering Circular. The Issuer intends to publish its first financial statements in respect of the period ending on 31 December 2021. The Issuer will not prepare interim financial statements. The financial year of the Issuer ends on 31 December each year.

Each year, a copy of the audited profit and loss account and balance sheet of the Issuer together with a report of the directors and the auditors thereon is required to be filed in the Irish Companies Registration Office within 28 days of the annual return date of the Issuer and is available for inspection. The profit and loss account and balance sheet can be obtained free of charge from the registered office of the Issuer.

The auditors of the Issuer are Deloitte Ireland LLP, who are chartered accountants and are members of the Institute of Chartered Accountants of Ireland and registered auditors qualified in practice in Ireland, with their registered office at Earlsfort Terrace, Dublin 2, Ireland D02 AY28.

Guarantors

The Company

Legal and commercial name	Siberian Coal Energy Company (SUEK), Joint Stock Company
Registration Number	1027700151380
Date and place of incorporation	14 March 2000, Russian Federation
Duration of existence	Indefinite
Place of domicile	Moscow, Russian Federation
Legal form	Joint stock company under the laws of Russian Federation
Registered office	53 Dubininskaya str., building 7, Moscow, 115054, Russian Federation
Telephone number	+7 (495) 795-25-38
Principal place of business	53 Dubininskaya str., building 7, Moscow, 115054, Russian Federation
General Director	Stepan Solzhenitsyn
Board of Directors	Samir Brikho, Seiler Juerg, Mikhail Kuznetsov, Andrey Melnichenko, Vladimir Rashevsky, Michael Hogan
Principal activities	Holding company

SUEK-Kuzbass

Legal and commercial name	SUEK-Kuzbass, Joint Stock Company
Registration Number	1074212001368
Date and place of incorporation	7 May 2007, Russian Federation
Duration of existence	Indefinite
Place of domicile	Leninsk-Kuznetskiy, Russian Federation
Legal form	Joint stock company under the laws of Russian Federation
Registered office	1 Vasilyeva str., Leninsk-Kuznetskiy, Kuzbass, Kemerovskaya obl., 652507, Russian Federation
Telephone number	+7 (38456) 7-02-18
Principal place of business	1 Vasilyeva str., Leninsk-Kuznetskiy, Kuzbass, Kemerovskaya obl., 652507, Russian Federation

General Director	Anatoly Meshkov
Board of Directors	Sergey Petrov, Andrei Vanyushin, Andrei Kostylev, Anatoly Meshkov, Irina Savelyeva, Vladimir Shmat, Evgeny Yutyaev
Principal activities	Coal mining

SUEK-Khakasia

Legal and commercial name	SUEK-Khakasia, Limited Liability Company
Registration Number	1071903000773
Date and place of incorporation	1 June 2007, Russian Federation
Duration of existence	Indefinite
Place of domicile	Chernogorsk, Russian Federation
Legal form	Limited liability company under the laws of Russian Federation
Registered office	40 Sovetskaya str., Chernogorsk, Khakasia, 655162, Russian Federation
Telephone number	+7 (39031) 5-58-67
Principal place of business	40 Sovetskaya str., Chernogorsk, Khakasia, 655162, Russian Federation
General Director	Aleksey Kilin
Board of Directors	Tatiana Stepanenko, Andrei Kostarev, Aleksei Kilin, Sergey Petrov, Andrei Vanyushin
Principal activities	Coal mining

Tugnuisky Opencast Mine

Legal and commercial name	Tugnuisky Opencast Mine, Joint Stock Company
Registration Number	1020300752350
Date and place of incorporation	15 September 1998, Russian Federation
Duration of existence	Indefinite
Place of domicile	Sagan-Nur, Russian Federation
Legal form	Joint stock company under the laws of Russian Federation
Registered office	70 Let Oktyabrya 49, Sagan-Nur, Muhorshibirskiy, Buryatia, 671353, Russian Federation
Telephone number	+7 (3012) 480-700

Principal place of business	70 Let Oktyabrya bld., Sagan-Nur, Muhorshibirskiy, Buryatia, 671353, Russian Federation
General Director	Valery Kuletsky
Board of Directors	Angelika Panina, Sergey Petrov, Andrei Vanyushin, Valery Kuletsky, Tatiana Fedorkevich
Principal activities	Coal mining

TERMS AND CONDITIONS OF THE NOTES

The U.S.$500,000,000 3.375 per cent. guaranteed notes due 2026 of SUEK Securities Designated Activity Company (the "**Issuer**", which expression shall include (unless the context requires otherwise) any entity substituted for the Issuer pursuant to Condition 12.3 (*Substitution*)) (the "**Notes**", which expression includes any further Notes issued pursuant to Condition 15 and forming a single series therewith) are unconditionally and irrevocably guaranteed by Joint Stock Company "Siberian Coal Energy Company" (SUEK) (the "**Parent**"), Joint Stock Company "SUEK-Kuzbass", Limited Liability Company "SUEK-Khakasia" and Joint Stock Company "Tugnuisky Opencast Mine" (together with the Parent, the "**Guarantors**" and each a "**Guarantor**"). The board of directors of the Issuer authorised the issue of the Notes on 10 September 2021. Each Guarantor authorised the relevant Guarantee (as defined below) given by it by the following respective corporate actions: (i) the resolution of the board of directors of the Parent on 30 August 2021, (ii) the resolution of the board of directors of Joint Stock Company "SUEK-Kuzbass" dated 27 August 2021, (iii) the resolution of the sole participant of Limited Liability Company "SUEK-Khakasia" dated 30 August 2021 and (iv) the resolution of the sole participant of Joint Stock Company "Tugnuisky Opencast Mine" dated 30 August 2021.

The Notes are constituted by a trust deed dated 15 September 2021 (the "**Trust Deed**") between the Issuer, the Guarantors and Citibank, N.A., London Branch as trustee (the "**Trustee**", which expression shall include all persons for the time being who are the trustee or trustees under the Trust Deed) as trustee for the Noteholders (as defined below).

These terms and conditions (the "**Conditions**") include summaries of, and are subject to, the detailed provisions of the Trust Deed. The Issuer and the Guarantors have entered into a paying agency agreement dated 15 September 2021 (the "**Paying Agency Agreement**") with the Trustee, Citibank, N.A., London Branch as principal paying agent and transfer agent (the "**Principal Paying Agent**" and the "**Transfer Agent**" and, together with any other paying agents appointed under the Paying Agency Agreement, the "**Paying Agents**") and Citibank Europe plc as registrar (the "**Registrar**"). The Registrar, Paying Agents and Transfer Agent are together referred to herein as the "**Agents**".

Copies of the Trust Deed and the Paying Agency Agreement are available for inspection during normal business hours on any weekday (i) at the specified office of the Principal Paying Agent in London (being at the date hereof Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, United Kingdom) or (ii) electronically from the Issuer or the Principal Paying Agent. The Noteholders (as defined below) are entitled to the benefit of, are bound by, and are deemed to have notice of, all the provisions of the Trust Deed and are deemed to have notice of those provisions of the Paying Agency Agreement applicable to them. Capitalised terms used but not defined in these Conditions shall have the respective meanings given to them in the Trust Deed.

1 Form and Denomination

The Notes are issued in fully registered form in denominations of U.S.$200,000 and integral multiples of U.S.$1,000 in excess thereof (each an "**Authorised Denomination**") without coupons attached. Title to the Notes shall pass by registration in the register (the "**Register**") which the Issuer shall procure to be kept by the Registrar. The Notes are represented by registered definitive Notes ("**Definitive Notes**") and, save as provided in Condition 3.3, each Definitive Note shall represent the entire holding of Notes by the same holder.

2 Guarantee and Status

2.1 Guarantee

Each Guarantor has in the Trust Deed unconditionally and irrevocably, jointly and severally, guaranteed the payment when due of all sums expressed to be payable by the Issuer under the Trust Deed and the Notes (each a "**Guarantee**" and together the "**Guarantees**").

2.2 Status

The Notes constitute direct, unsubordinated and (subject to Condition 4.1) unsecured obligations of the Issuer and shall at all times rank *pari passu* and rateably without any preference among themselves. The Guarantees constitute direct, unsubordinated and (subject to Condition 4.1) unsecured obligations of each Guarantor. The Issuer and each Guarantor shall ensure that at all times the claims of the Noteholders against them under the Notes and the Guarantees, respectively, rank in right of payment at least *pari passu* with the claims of all their other present and future unsecured creditors, save those whose claims are preferred by any bankruptcy, insolvency, liquidation or similar laws of general application or any other mandatory provisions of applicable law.

3 Register, Title and Transfers

3.1 Register

The Registrar shall maintain the Register in respect of the Notes in accordance with the provisions of the Agency Agreement. The Register shall be kept at the specified office for the time being of the Registrar and shall record the names and addresses of the holders of the Notes, particulars of the Notes and all transfers and redemptions thereof. In these Conditions, the "**Holder**" of a Note means the person in whose name such Note is for the time being registered in the Register (or, in the case of a joint holding, the first named thereof) and "**Noteholder**" shall be construed accordingly.

3.2 Title

Title to the Notes will pass by and upon registration in the Register. The Holder of each Note shall (except as otherwise required by law) be treated as the absolute owner of such Note for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any other interest therein, any writing on the Definitive Note relating thereto (other than the endorsed form of transfer) or any notice of any previous loss or theft of such Definitive Note) and no person shall be liable for so treating such Holder.

3.3 Transfers

Subject to Conditions 3.6 and 3.7 below, a holding of Notes may be transferred in whole or in part in an Authorised Denomination upon surrender (at the specified office of the Registrar or the Transfer Agent) of the relevant Definitive Note representing that Note, together with the form of transfer (including any certification as to compliance with restrictions on transfer included in such form of transfer endorsed thereon) (the "**Transfer Form**"), duly completed and executed, at the specified office of the Transfer Agent or of the Registrar, together with such evidence as the Transfer Agent or the Registrar may reasonably require to prove the title of the transferor and the authority of the persons who have executed the Transfer Form. In the case of a transfer of part only of a holding of Notes represented by one Definitive Note, a new Definitive Note shall be issued to the transferee in respect of the part transferred and a further new Definitive Note in respect of the balance of the holding not transferred shall be issued to the transferor. Neither the part transferred nor the balance not transferred may be less than the Authorised Denomination. In the case of a transfer of Notes to a person who is already a Holder of Notes, a new Definitive Note representing the enlarged holding shall only be issued against surrender of the Definitive Note representing the existing holding. No transfer of a Note will be valid unless and until entered on the Register.

3.4 Registration and delivery of Definitive Notes

Each new Definitive Note to be issued pursuant to Condition 3.3 shall be available for delivery within three business days of receipt of a duly completed Form of Transfer and surrender of the existing Definitive Note(s). Delivery of the new Definitive Note(s) shall be made at the specified office of the Transfer Agent or of the Registrar (as the case may be) to whom delivery or surrender of such Form of Transfer or Definitive Note shall have been made or, at the option of the Holder

making such delivery or surrender as aforesaid and as specified in the relevant Form of Transfer or otherwise in writing, be mailed by uninsured post at the risk of the Holder entitled to the new Definitive Note to such address as may be so specified, unless such Holder requests otherwise and pays in advance to the Transfer Agent or the Registrar (as the case may be) the costs of such other method of delivery and/ or such insurance as it may specify. In this Condition 3.4, "**business day**" means a day, other than a Saturday or Sunday, on which banks are open for business in the place of the specified office of the Transfer Agent or the Registrar (as the case may be).

3.5 No Charge

Definitive Notes, on transfer or exercise of an option and partial redemption, shall be issued and registered without charge by or on behalf of the Issuer, the Registrar or the Transfer Agent, but upon payment by the person making such application for transfer or exercise of an option of any tax or other governmental charges that may be imposed in relation to it (or the giving of such indemnity as the Registrar or the Transfer Agent may require).

3.6 Closed periods

No Noteholder may require the transfer of a Note to be registered (i) during the period of 15 days ending on (and including) the due date for redemption of that Note, (ii) during the period of 15 days prior to (and including) any date on which Notes may be called for redemption by the Issuer at its option pursuant to Condition 6.2, Condition 6.4 or Condition 6.5 (iii) after any such Note has been called for redemption, or (iv) during the period of seven days ending on (and including) any Record Date (as defined in Condition 7).

3.7 Regulations concerning Transfer and Registration

All transfers of Notes and entries on the Register are subject to the detailed regulations concerning the transfer and registration of Notes set out in Schedule 2 to the Paying Agency Agreement. The regulations may be changed by the Issuer with the prior written approval of the Trustee and the Registrar. A copy of the current regulations will be sent by the Registrar free of charge to any person who so requests and will be available at the specified offices of the Registrar and at the specified office of the Transfer Agent.

4 Covenants

4.1 Negative Pledge

None of the Issuer or any Guarantor shall, and the Issuer and the Guarantors shall not permit any of their respective Subsidiaries to, directly or indirectly, create, incur, assume or suffer to exist any Liens, other than Permitted Liens, on any of its or their assets, now owned or hereafter acquired, or any income or profits therefrom, securing any Indebtedness, without, at the same time or prior thereto, according to the Notes the same security as is created, assumed or subsisting to secure such other Indebtedness or such other security as either (i) the Trustee shall in its absolute discretion deem not materially less beneficial to the interest of the Noteholders or (ii) shall be approved by an Extraordinary Resolution (as defined in the Trust Deed) of the Noteholders.

4.2 Limitation on Indebtedness

4.2.1 The Issuer and the Guarantors shall not, and the Issuer and the Guarantors shall not permit any of their respective Subsidiaries to, Incur any Indebtedness, except that if on the date of such Incurrence and after giving effect thereto on a *pro forma basis* (a) no Potential Event of Default nor Event of Default shall have occurred and be continuing at the time, or would occur as a consequence, of the Incurrence of such Indebtedness and (b) the Consolidated Net Leverage Ratio would have been no more than 3.5 to 1.

4.2.2 Notwithstanding the foregoing Condition 4.2.1, the following shall be permitted:

(i) The Incurrence by the Parent or any of its Subsidiaries of Indebtedness outstanding on the Issue Date (other than Indebtedness described in paragraphs (ii), (iv), (v), (vi), (x) and (xi) of this Condition 4.2.2);

(ii) the Incurrence by the Issuer and the Guarantors of Indebtedness represented by the Notes and the related Guarantees (for the avoidance of doubt, no Additional Notes may be issued in reliance on this paragraph (ii));

(iii) the Incurrence by the Parent or any of its Subsidiaries of Refinancing Indebtedness in exchange, replacement or renewal for, or the net proceeds of which are used to refund, refinance, replace, defease or discharge Indebtedness (other than intercompany Indebtedness) that was permitted to be Incurred under Condition 4.2.1 or under paragraphs (i), (ii), (iii), (vii), (viii) and (ix) and of this Condition 4.2.2;

(iv) the Incurrence by the Parent or any of its Subsidiaries of Indebtedness between or among the Parent and any of its Subsidiaries; *provided, however*, that: (i) any subsequent issuance or transfer of Capital Stock that results in any such Indebtedness being held by a Person other than the Parent or a Subsidiary of the Parent and (ii) any sale or other transfer of any such Indebtedness to a Person that is neither the Parent nor a Subsidiary of the Parent will be deemed, in each case, to constitute an Incurrence of such Indebtedness by the Parent or such Subsidiary, as the case may be, that was not permitted by this paragraph (iv);

(v) the guarantee by the Parent or any of its Subsidiaries of Indebtedness of the Parent or a Subsidiary of the Parent that was permitted to be Incurred by another provision of this Condition 4.2; provided that if the Indebtedness being guaranteed is subordinated in right of payment to the Notes or the Guarantees thereof (if any), then such guarantee shall be subordinated to the same extent as the Indebtedness guaranteed;

(vi) the Incurrence by the Parent or any of its Subsidiaries of Indebtedness in respect of workers' compensation claims, self-insurance obligations, bankers' acceptances, bank guarantees, performance, bid, appeal, surety and similar bonds or letters of credit, completion guarantees, judgment, advance payment, customs, VAT, or other similar instruments issued for the for the account of the Parent or any of its Subsidiaries or other similar obligations incurred in the ordinary course of business or for governmental, tax or regulatory requirements and not in connection with borrowing of money (including guarantees or indemnities related thereto);

(vii) the Incurrence by the Parent or any of its Subsidiaries of Indebtedness under any revolving credit facility or overdraft facility entered into (A) in connection with the cash pooling arrangements of the Parent and its Subsidiaries or (B) to finance the posting of collateral by the Parent and its Subsidiaries under Hedging Obligations entered into in the ordinary course of business and not for speculative purposes, provided that the aggregate outstanding principal amount of Indebtedness permitted to be Incurred under this paragraph (vii) shall not exceed U.S.$200,000,000 at any one time and provided further that the maturity of any advance under any credit facility referred to in sub-paragraph (B) above is equal to or less than 365 days;

(viii) the Incurrence by the Parent or any of its Subsidiaries of Indebtedness under any revolving credit facility (including any warehouse finance or any other inventory finance facility) solely for working capital purposes in the ordinary course of business of the Group provided that the maturity of any advance thereunder is equal to or less than 365 days and the principal amount outstanding thereunder does not exceed U.S.$300,000,000 at any one time;

(ix) the Incurrence by the Parent or any of its Subsidiaries of Purchase Money Indebtedness in an aggregate principal amount not to exceed U.S.$150,000,000 at any one time outstanding;

(x) the Incurrence by the Parent or any of its Subsidiaries of Indebtedness arising from the honouring by a bank or other financial institution of a check, draft or similar instrument inadvertently drawn against insufficient funds, so long as such Indebtedness is extinguished within five Business Days of Incurrence;

(xi) the Incurrence by the Parent or any of its Subsidiaries of Indebtedness arising from agreements of the Parent or a Subsidiary of the Parent providing for guarantees, indemnification, adjustment of purchase price, earn outs or similar obligations, in each case, Incurred or assumed in connection with the disposition of any business, assets or Capital Stock of a Subsidiary of the Parent, other than guarantees of Indebtedness of the Subsidiary of the Parent disposed of, or Incurred or assumed by any Person acquiring all or any portion of such business, assets or Capital Stock for the purpose of financing such acquisition; provided that the maximum liability of the Parent and its Subsidiaries in respect of all such Indebtedness shall at no time exceed the gross proceeds, including the Fair Market Value of non-cash proceeds (measured at the time received and without giving effect to any subsequent changes in value) actually received by the Parent and its Subsidiaries in connection with such disposition;

(xii) the Incurrence by the Parent or any of its Subsidiaries of Indebtedness, in addition to the Indebtedness permitted to be Incurred under paragraphs (i) to (xi) above, in an aggregate principal amount (or accreted value, as applicable) at any time outstanding, including all Refinancing Indebtedness Incurred to refund, refinance, replace, defease or discharge any Indebtedness Incurred pursuant to this paragraph (xii), not to exceed U.S.$300,000,000 at any time outstanding.

4.2.3 For the purposes of determining compliance with any U.S. dollar denominated restriction on the Incurrence of Indebtedness where the Indebtedness Incurred is denominated in a different currency, the amount of such Indebtedness will be the U.S. Dollar Equivalent determined on the date of the Incurrence of such Indebtedness. The principal amount of any Refinancing Indebtedness Incurred in the same currency as the Indebtedness being Refinanced will be the U.S. Dollar Equivalent, as appropriate, of the Indebtedness Refinanced, except to the extent that if the principal amount of the Refinancing Indebtedness exceeds the principal amount of the Indebtedness being Refinanced, then the U.S. Dollar Equivalent of such excess, as appropriate, will be determined on the date such Refinancing Indebtedness is Incurred. Notwithstanding any other provision of this Condition 4.2, the maximum amount that the Parent or its Subsidiaries may Incur pursuant to this Condition 4.2 shall not be deemed to be exceeded, with respect to outstanding Indebtedness, due solely as a result of fluctuations in the exchange rates of currencies. The amount of any Indebtedness outstanding as of any date will be (without double counting) calculated in accordance with IFRS.

4.2.4 Notwithstanding the foregoing, neither the Issuer nor any Guarantor will Incur any Indebtedness pursuant to Condition 4.2.2 if the proceeds thereof are used, directly or indirectly, to Refinance any Subordinated Obligations of the Parent or any Subsidiary of the Parent unless such Indebtedness shall be subordinated to the Notes or the applicable Guarantee to at least the same extent as such Subordinated Obligations.

4.2.5 The Issuer and the Guarantor will not Incur any Indebtedness (including permitted Indebtedness in accordance with Conditions 4.2.1 and 4.2.2 above) that is contractually subordinated in right of payment to any other Indebtedness of the Issuer or such Guarantor unless such Indebtedness is also contractually subordinated in right of payment to the Notes

or the applicable Guarantee on substantially identical terms; *provided, however*, that no Indebtedness will be deemed to be contractually subordinated in right of payment to any other Indebtedness of the Issuer or such Guarantor solely by virtue of being unsecured or by virtue of being secured on a junior Lien basis or by virtue of not being guaranteed.

4.2.6 For the purposes of determining compliance with this Condition 4.2, if an item of Indebtedness (or any portion thereof) meets the criteria of more than one of the types of Indebtedness described in Condition 4.2.2, or is entitled to be Incurred pursuant to Condition 4.2.1, the Parent, in its sole discretion, will be permitted to classify and from time to time, to reclassify such item of Indebtedness (or any portion thereof) in any manner that complies with this Condition 4.2.

4.3 Maintenance of Authorisations

4.3.1 Each of the Issuer and the Guarantors shall, and shall procure that each Material Subsidiary shall, take all necessary action to obtain and do or cause to be done all things necessary, in the opinion of the Issuer the relevant Guarantor or the relevant Material Subsidiary, to ensure the continuance of its corporate existence, its business and intellectual property relating to its business except where a failure to do so would not have a Material Adverse Effect; and

4.3.2 the Issuer and the Guarantors shall each take all necessary action to obtain, and do or cause to be done all things necessary to ensure the continuance of, all consents, licences, approvals and authorisations, and make or cause to be made all registrations, recordings and filings, which may at any time be required to be obtained or made in the Russian Federation, Ireland or, as the case may be, the applicable jurisdiction for any of the Issuer or the Guarantors if different from the aforementioned for the execution, delivery or performance of the Trust Deed, the Guarantees and the Notes or for the validity or enforceability thereof (as applicable),

provided that, in any case, if the Issuer, a Guarantor or the relevant Subsidiary remedies any failure to comply with paragraphs 4.3.1 and 4.3.2 above within 90 days of such failure, then this covenant shall be deemed not to have been breached.

4.4 Mergers

4.4.1 The Issuer shall not (x) enter into any reorganisation (whether by way of a merger, accession, division, separation, spin-off or transformation, or other bases or procedures for reorganisation contemplated or as may be contemplated from time to time by applicable Irish legislation), or (y) in a single transaction or a series of related transactions, directly or indirectly, merge, consolidate, amalgamate or otherwise combine with or into another Person or sell, assign, lease, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Issuer, to another Person, unless:

(i) (A) the surviving or resulting entity or the transferee (the "**Issuer Successor Company**") is the Issuer or, (B) if not the Issuer, the Issuer Successor Company assumes all the obligations of the Issuer under the Notes and the Trust Deed; and

(ii) such transaction(s) would not have a Material Adverse Effect.

4.4.2 A Guarantor shall not (x) enter into any reorganisation (whether by way of a merger, accession, division, separation, spin-off or transformation, or other bases or procedures for reorganisation contemplated or as may be contemplated from time to time by applicable Russian legislation) or undergo any other type of corporate reconstruction, or (y) in a single transaction or a series of related transactions, directly or indirectly, merge, consolidate, amalgamate or otherwise combine with or into another Person or sell, assign, lease, transfer,

convey or otherwise dispose of all or substantially all of its properties or assets, to another Person, unless:

(i) (A) the surviving or resulting entity or the transferee (the "**Successor Guarantor**") is the Guarantor or (B) if not the Guarantor, the Successor Guarantor assumes all the obligations of the Guarantor under the Guarantees and the Trust Deed; and

(ii) such transaction(s) would not have a Material Adverse Effect.

4.4.3 The Issuer and each Guarantor shall ensure that no Material Subsidiary shall (A) (x) enter into any reorganisation (whether by way of a merger, accession, division, separation, spin-off or transformation, or other bases or procedures for reorganisation contemplated or as may be contemplated from time to time by applicable Russian legislation), or (y) in the case of a Material Subsidiary incorporated in a jurisdiction other than the Russian Federation, participate in any type of corporate reconstruction or other analogous event (as determined under the legislation of the relevant jurisdiction); or (B) in a single transaction or a series of related transactions, directly or indirectly, merge, consolidate, amalgamate or otherwise combine with or into another Person or sell, assign, lease, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of such Subsidiary, to another Person, unless such transaction(s) would not have a Material Adverse Effect.

4.4.4 This Condition 4.4 shall not apply to (i) any transactions between any of the Subsidiaries of the Parent (other than the Guarantors) that do not involve any Person that is not a Subsidiary of the Parent; or (ii) any transaction in which a Subsidiary of the Parent consolidates with, merges into or transfers all or part of its assets to a Guarantor.

4.5 Disposals

4.5.1 The Issuer and the Guarantors shall not, and shall ensure that none of their respective Subsidiaries shall, directly or indirectly, consummate an Asset Sale, unless:

(i) the Issuer or a Guarantor (or any of its Subsidiaries, as the case may be) receives consideration at least equal to the Fair Market Value of the assets or Capital Stock issued or sold or otherwise disposed of;

(ii) at least 75 per cent. of the consideration received in the Asset Sale by the Issuer, such Guarantor or such Subsidiary is in the form of cash, Cash Equivalents or Additional Assets. For purposes of this provision, each of the following will be deemed to be cash: (A) any liabilities, as shown on the most recent balance sheet, of the Issuer, such Guarantor or such Subsidiary (other than contingent liabilities and liabilities that are by their terms subordinated to the Notes or any Guarantee) that are (1) assumed or released and discharged by the transferee of any such assets pursuant to a customary novation or other agreement that releases the Issuer, such Guarantor or such Subsidiary from liability in respect of those liabilities; (2) assumed or transferred in connection with a reorganisation (whether by way of a merger, accession, division, separation, spin-off or transformation, or other bases or procedures for reorganisation or corporate reconstruction contemplated or as may be contemplated from time to time by applicable Russian legislation or, in the case of a Subsidiary incorporated in a jurisdiction other than the Russian Federation, by the legislation of the relevant jurisdiction) as a result of which the Issuer, such Guarantor or such Subsidiary shall no longer liable in respect of those liabilities; and (B) any securities, notes or other obligations received by the Issuer, such Guarantor or such Subsidiary from such transferee that are converted by the Issuer, such Guarantor or such Subsidiary into cash or Cash Equivalents within 60 days, to the extent of the cash or Cash Equivalents received in that conversion; and

(iii) the Net Proceeds from such Asset Sale are:

A. applied to repay permanently any Consolidated Indebtedness (other than Subordinated Obligations);

B. invested in Additional Assets;

C. retained as cash deposited with a bank or invested in Cash Equivalents; and/or

D. applied to acquire or invest in other assets that are not classified as current assets under IFRS and that are used or useful in a Permitted Business or applied to acquire or invest in the Capital Stock of any Person holding such property or assets, which is primarily engaged in a Permitted Business and will upon the acquisition by the Parent or any of its Subsidiaries of such Capital Stock become a Subsidiary of the Parent or any of its Subsidiaries,

in each case, within 360 days of the date when such proceeds are received; provided that, if the Net Proceeds are applied pursuant to Condition 4.5.1(iii)(C), the Issuer, such Guarantor or such Subsidiary, as the case may be, shall apply or invest the Net Proceeds on or prior to the date falling 540 days after the date when such proceeds are received either to (i) repay permanently any Consolidated Indebtedness (other than Indebtedness subordinated to the Notes and/or the Guarantees), (ii) invest in Additional Assets, or (iii) acquire or invest in other assets that are not classified as current assets under IFRS and that are used or useful in a Permitted Business.

4.6 Transactions with Affiliates

4.6.1 None of the Issuer and the Guarantors shall, and the Issuer and each Guarantor shall ensure that each of their respective Subsidiaries do not, directly or indirectly, conduct any business, enter into or permit to exist any transaction or series of related transactions (including, without limitation, the purchase, sale, transfer, assignment, lease, conveyance or exchange of any property or the rendering of any service) with, or for the benefit of, any Affiliate (an "**Affiliate Transaction**") including, without limitation, intercompany loans, unless the terms of such Affiliate Transaction are no less favourable to the Issuer, such Guarantor or such Subsidiary, as the case may be, than those that could be obtained (at the time of such transaction or, if such transaction is pursuant to a written agreement, at the time of the execution of the agreement providing therefore) in a comparable arm's-length transaction with a Person that is not an Affiliate of the Issuer, such Guarantor or such Subsidiary.

4.6.2 This Condition 4.6 shall not apply to:

(i) any employment agreement, employee compensation arrangements, consulting agreement, employee benefit plan, officer and director indemnification agreement, including any stock option, stock appreciation rights, stock incentive or similar plans or any similar arrangement entered into by the Parent or any of its Subsidiaries in the ordinary course of business and compensation (including bonuses and equity compensation) paid to and other benefits (including retirement, health and other benefit plans) and indemnification arrangements provided on behalf of directors, officers, consultants and employees of the Parent or any of its Subsidiaries;

(ii) transactions (including a merger) between or among the Parent and/or its Subsidiaries;

(iii) payment of reasonable fees to, reimbursements of expenses and indemnity provided on behalf of, officers, directors, members of the Board of Directors, employees or consultants of the Parent or any of its Subsidiaries;

(iv) any issuance of Capital Stock (other than Disqualified Stock) of the Parent or its Subsidiaries to Affiliates of the Parent;

(v) transactions with customers, clients, suppliers, joint venture partners or purchasers or sellers or other providers of goods or services, or lessors or lessees of property, in each case in the ordinary course of business and otherwise in compliance with these Conditions which are fair to the Parent or its Subsidiaries or on terms at least as favourable to the Parent or its Subsidiaries as might reasonably have been obtained at such time from an unaffiliated party;

(vi) transactions effected pursuant to or contemplated by agreements or arrangements between any Person and an Affiliate of such Person existing at the time such Person is acquired by, merged into or amalgamated, arranged or consolidated with the Parent or any of its Subsidiaries; provided that such agreements or arrangements were not entered into in contemplation of such acquisition, merger, amalgamation, arrangement or consolidation, and any amendments, modifications or replacements of such agreements or arrangements (so long as such amendments, modifications or replacements are not materially more disadvantageous to the Noteholders, taken as a whole, than the original agreements or arrangements as in effect on the date of such acquisition, merger, amalgamation, arrangement or consolidation);

(vii) any Affiliate Transaction undertaken by the Parent or any of its Subsidiaries not involving, individually or in aggregate, payments or value in excess of U.S.$50,000,000 (or its U.S. Dollar Equivalent);

(viii) the payment of a dividend by the Parent or its Subsidiaries;

(ix) to the extent otherwise permitted under these Conditions, the repurchase by the Parent or a Subsidiary of the Parent of its Capital Stock pursuant to an offer that is made to all holders of such Capital Stock;

(x) transactions effected pursuant to the Logistics Segment Disposal;

(xi) any Product Delivery Contracts;

(xii) agreements and arrangements, and transactions pursuant thereto, existing on the Issue Date and disclosed in the Prospectus and any amendment, extension, renewal, refinancing, modification or supplement thereof; provided that following such amendment, extension, renewal, refinancing, modification or supplement, the terms of any such agreement or arrangement so amended, modified or supplemented are, on the whole, no less favourable to the Parent and its Subsidiaries, as applicable, than the original agreement or arrangement as in effect on the Issue Date.

4.7 Maintenance of Property

The Issuer and each Guarantor shall, and shall ensure that their respective Subsidiaries will, cause all property that is used in the conduct of its or their business to be maintained and kept in good condition, repair and working order and supplied with all necessary equipment and shall cause to be made all necessary repairs, renewals, replacements, betterments and improvements thereof, all as, in the judgment of the Issuer, such Guarantor or such Subsidiary, may be reasonably necessary so that the business carried on in connection therewith may be properly conducted at all times; provided that if the Issuer, such Guarantor or such Subsidiary can remedy any failure to comply with the above within 90 days or any failure relates to property with a value not exceeding U.S.$250,000,000 (or its U.S. Dollar Equivalent), this covenant shall be deemed to not have been breached.

4.8 Payment of Taxes and Other Claims

The Issuer and each Guarantor shall, and shall ensure that their respective Subsidiaries will, pay or discharge or cause to be paid or discharged, before the same shall become overdue:

4.8.1 all taxes, assessments and governmental charges levied or imposed upon, or upon the income, profits or property of the Issuer, the Guarantors and their respective Subsidiaries; and

4.8.2 all lawful claims for labour, materials and supplies which, if unpaid, might by law become a Lien (other than a Permitted Lien) upon the property of the Issuer, the Guarantors and their respective Subsidiaries;

provided that none of the Issuer, the Guarantors nor any of their respective Subsidiaries shall be in breach of this Condition 4.8 if the Issuer, any Guarantor or any their respective Subsidiaries has failed to pay or discharge or cause to be paid or discharged any tax, assessment, charge or claim (i) if such amount, applicability or validity is being contested in good faith by appropriate proceedings and for which adequate reserves in accordance with IFRS or other appropriate provision has been made; or (ii) if a failure to pay, or discharge or cause to be paid or discharged such amount, together with all such other unpaid or undischarged taxes, assessments, charges and claims, would not have a Material Adverse Effect.

4.9 Environmental compliance

The Issuer and each Guarantor shall, and shall ensure that their respective Subsidiaries will, obtain all Environmental Approvals required by all applicable laws and that it will comply with all Environmental Laws and Environmental Approvals applicable to it and will take all reasonable steps in anticipation of known or expected future changes to or obligations under the same, except where a failure to do so would not have a Material Adverse Effect.

4.10 Financial Information

4.10.1 The Parent shall as soon as the same become available, but in any event within 180 days after the end of each of its financial years, deliver to the Trustee copies of the Group's consolidated financial statements in English for such financial year, prepared in accordance with IFRS consistently applied with the Group's consolidated financial statements for the preceding period, and all such financial statements of the Group shall be accompanied by the audit report (in English) of the Auditors thereon.

4.10.2 The Parent shall as soon as the same become available, but in any event within 120 days after the end of the first six months of each of the Group's financial years, deliver to the Trustee copies of the Group's unaudited condensed consolidated financial statements in English for such six-month period, prepared in accordance with IFRS consistently applied with the Group's consolidated financial statements for the preceding period, and all such financial statements of the Group shall be accompanied by the review report (in English) of the Auditors thereon.

4.10.3 The Parent hereby undertakes that it will deliver to the Trustee, as soon as reasonably practicable, such additional information regarding the financial position or the business of the Group as the Trustee may reasonably request including providing certification to the Trustee in accordance with the Trust Deed.

4.10.4 The Parent shall also post each set of consolidated financial statements delivered by it pursuant to this Condition 4.10 (*Financial Information*) on Parent's website within the periods referred to in Conditions 4.10.1 and 4.10.2 above.

4.10.5 The Issuer undertakes to furnish to the Stock Exchange (or any other or further stock exchange or stock exchanges or any relevant authority or authorities on which the Notes

may, from time to time, be listed or admitted to trading) such information as it may require as necessary in connection with the listing or admission to trading on such stock exchange or relevant authority of such instruments.

4.11 Limitation on Restrictions on Distributions from Subsidiaries

The Issuer and each Guarantor shall not, and shall not permit any of their respective Subsidiaries to, create or otherwise cause or permit to exist or become effective any consensual encumbrance or consensual restriction on the ability of any Subsidiary to:

4.11.1 pay dividends or make any other distributions on its share capital;

4.11.2 make any loans or advances or pay any Indebtedness owed to the Issuer or any Guarantor; or

4.11.3 transfer any of its property or assets to the Issuer or any Guarantor,

However, the preceding restrictions shall not apply to encumbrances or restrictions existing under or by reason of:

(i) any encumbrance or restriction originally entered into by the Issuer or a Subsidiary of the Issuer prior to (and as in effect on) the Issue Date, including imposed by the Notes, these Conditions and the Guarantees;

(ii) encumbrances and restrictions pursuant to an agreement or instrument relating to any Indebtedness ranking equally with the Notes and the Guarantees and permitted to be Incurred pursuant to Condition 4.2, provided that the encumbrances or restrictions contained in any such agreement or instrument taken as a whole are not materially less favourable to the Noteholders than (x) the encumbrances and restrictions contained in these Conditions, as in effect on the Issue Date or (y) is customary in comparable financings where such encumbrances or restrictions will not adversely affect the Issuer's or any Guarantor's ability to make interest and principal payments on the Notes and the Guarantees;

(iii) encumbrances and restrictions contained in any agreement or other instrument of any Person acquired by the Parent or any Subsidiary of the Parent in effect at the time of such acquisition (but not created in contemplation thereof) which encumbrance or restriction is not applicable to any Person, or the properties or assets of any Person, other than the Person, or the property or assets of the Person, so acquired;

(iv) customary non-assignment provisions in leases and other contracts for goods and services entered into in the ordinary course of business;

(v) any agreement for the sale or other disposition of a Subsidiary or any assets of the Issuer, the Guarantor or a Subsidiary that restricts distributions of that Subsidiary or such assets pending such sale or other disposition;

(vi) customary limitations on the distribution of assets or property in joint venture agreements entered into in the ordinary course of business and in good faith, provided that such encumbrance or restriction is applicable only to the relevant Subsidiary, and provided further that such encumbrance or restriction (x) is not materially more disadvantageous to the holders of the Notes than is customary in comparable agreements and (y) such encumbrance or restriction will not affect the Issuer's or any Guarantor's ability to make any anticipated principal or interest payments on the Notes and the Guarantees, as applicable;

(vii) Permitted Liens securing Indebtedness that limit the right of a debtor to dispose of the assets subject to such Liens;

(viii) restrictions on cash or other deposits or net worth imposed by customers under contracts entered into in the ordinary course of business;

(ix) any encumbrances or restrictions of the type referred to in paragraphs (i), (ii) and (iii) above or this paragraph (ix) that are imposed by any amendments, modifications, restatements, renewals, increases, supplements, refundings, replacements or refinancings of contracts, instruments or obligations; provided that such amendments, modifications, restatements, renewals, increases, supplements, refundings, replacements or refinancings taken as a whole are, in the good faith judgment of the Board of Directors of the Parent, no more restrictive with respect to such encumbrances and restrictions than those contained in the encumbrances and restrictions prior to such amendment, modification, restatement, renewal, increase, supplement, refunding, replacement or refinancing;

(x) any restrictions provided for by the applicable laws of the Russian Federation, Ireland or, as the case may be, the applicable jurisdiction for any of the Issuer or the Guarantors if different from the aforementioned; and

(xi) any encumbrances or restrictions created pursuant to, or in the context of, any Non-recourse Project Financing or borrowing under subsidised lending programmes or state lending programmes, provided that such encumbrances or restrictions taken as a whole are not materially less favourable to the Noteholders than (x) the encumbrances and restrictions contained in these Conditions, as in effect on the Issue Date or (y) is customary in comparable financings where such encumbrances or restrictions will not adversely affect the Issuer's or any Guarantor's ability to make interest and principal payments on the Notes and the Guarantees.

4.12 Officer's Certificates

4.12.1 On each Interest Payment Date and within 14 days of a request from the Trustee, the Parent on behalf of the Issuer and the Guarantors shall deliver to the Trustee written notice in the form of an Officer's Certificate stating whether any Potential Event of Default or Event of Default has occurred and, if it has occurred and shall be continuing, detailing such Potential Event of Default or Event of Default and what action the Issuer or the relevant Guarantor, as the case may be, is taking or proposes to take with respect thereto.

4.12.2 The Parent on behalf of the Issuer and the Guarantors will, at the same time as delivering the Group's audited annual financial statements pursuant to Condition 4.11.1 and within 30 days of a request from the Trustee, deliver to the Trustee an Officer's Certificate specifying those Subsidiaries which were, at a date no more than 20 days before the date of such Officer's Certificate, Material Subsidiaries.

4.12.3 Following the occurrence of any matter or event specified in these Conditions where these Conditions provide for a determination of whether such matter or event has or will have a Material Adverse Effect, the Parent on behalf of the Issuer and the Guarantors shall provide the Trustee with an Officer's Certificate certifying whether such matter or event has or will have a Material Adverse Effect and setting out such additional information as may be required to support such determination. The Trustee shall be entitled to rely solely on an Officer's Certificate from the Parent certifying whether or not such matter has or will have a Material Adverse Effect.

4.13 Verification

The Trustee shall not be under any obligation to verify the authenticity of any Officer's Certificate or any other certificate received by it or to approve the selection of any Auditors or Rating Agency or be responsible for determining the existence of any Potential Event of Default or any Event of Default. The Trustee shall be at liberty to accept any aforementioned Officer's Certificate as sufficient evidence of any fact or matter stated in any such Officer's Certificate and the Trustee shall not be bound to call for further evidence or be responsible for any loss or liability that may be occasioned by acting on or refraining to act on such Officer's Certificate or any determination or failure to determine the existence of any Event of Default or Potential Event of Default or to determine whether any matter shall or shall not have a Material Adverse Effect.

4.14 Covenant Fall Away

To the extent that the Notes have satisfied all conditions of Investment Grade Status and at all times thereafter, the Issuer and each Guarantor will be released from their respective obligations to comply with Condition 4.2, Condition 4.3, Condition 4.5 to Condition 4.8 inclusive and, in each case, any related Events of Default under Condition 9.

5 Interest

The Notes bear interest on their outstanding principal amount from and including the Issue Date at the rate of 3.375 per cent. per annum, payable semi-annually in arrear on 15 March and 15 September in each year (each an "**Interest Payment Date**"), commencing on 15 March 2022 and will amount to U.S.$16.875 per Calculation Amount (as defined below). Each Note will cease to bear interest from the due date for redemption unless, upon surrender of the Definitive Note representing such Note, payment of principal is improperly withheld or refused. In such event it shall continue to bear interest at such rate (both before and after judgment) until whichever is the earlier of (a) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant holder, and (b) the day seven days after the Trustee or the Principal Paying Agent has notified Noteholders of receipt of all sums due in respect of all the Notes up to that seventh day (except to the extent that there is failure in the subsequent payment to the relevant holders under these Conditions).

If interest is required to be calculated for a period of less than a complete Interest Period (as defined below), the relevant day-count fraction will be determined on the basis of a 360-day year consisting of 12 months of 30 days each and, in the case of an incomplete month, the number of days elapsed.

In these Conditions, the period beginning on and including the Issue Date and ending on but excluding the first Interest Payment Date and each successive period beginning on and including an Interest Payment Date and ending on but excluding the next succeeding Interest Payment Date is called an "**Interest Period**".

Interest in respect of any Note shall be calculated per U.S.$1,000 in principal amount of the Notes (the "**Calculation Amount**"). The amount of interest payable per Calculation Amount for any period shall be equal to the product of the rate of interest specified above, the Calculation Amount and the day-count fraction for the relevant period, rounding the resulting figure to the nearest cent (half a cent being rounded upwards).

6 Redemption and Purchase

6.1 Final redemption

Unless previously redeemed, or purchased and cancelled, the Notes will be redeemed at their principal amount together with accrued but unpaid interest on 15 September 2026 (the "**Maturity Date**"). The Notes may not be redeemed at the option of the Issuer other than in accordance with this Condition 6.

6.2 Redemption for tax reasons

The Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time, on giving not less than 25 nor more than 60 days' notice to the Noteholders in accordance with Condition 16 and to the Trustee and Agents (which notice shall be irrevocable) at the principal amount thereof, together with interest accrued to (but excluding) the date fixed for redemption, if (i) immediately prior to the giving of such notice it (or if the Guarantees were called, a Guarantor) has or will become obliged to pay additional amounts as provided or referred to in Condition 8.1 as a result of any change in, or amendment to, the laws treaties or regulations of the Russian Federation (in the case of a payment by a Guarantor) or Ireland (in the case of a payment by the Issuer) or, as the case may be, the applicable jurisdiction for any of the Issuer or the Guarantors if different from the aforementioned, or of any constituent part or political sub-division thereof or any authority having power to tax therein or a change in the application or official interpretation of such laws or regulations (including as a result of a judgment of a court of competent jurisdiction), which change or amendment has become or becomes effective on or after the Issue Date and (ii) such obligation cannot be avoided by the Issuer (or the relevant Guarantor, as the case may be) taking reasonable measures available to it; provided that no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which the Issuer (or the relevant Guarantor, as the case may be) would be obliged to pay such additional amounts as provided or referred to in Condition 8.1. Prior to the publication of any notice of redemption pursuant to this Condition, the Issuer shall deliver to the Trustee (x) an Officer's Certificate of the Issuer stating that the Issuer is entitled to effect such redemption and that the conditions precedent to the right of the Issuer to so redeem set out in (i) and (ii) above have occurred and (y) an opinion of independent legal advisers of recognised standing to the effect that the Issuer (or the relevant Guarantor, as the case may be) has or will become obliged to pay such additional amounts as a result of such change or amendment. The Trustee shall be entitled to accept and rely absolutely, without further enquiry and without liability to any person, upon such opinion and certificate as sufficient evidence of the satisfaction of the conditions precedent set out in (i) and (ii) above, in which event it shall be conclusive and binding on the Noteholders. All Notes in respect of which any such notice of redemption is given under this Condition shall be redeemed on the date specified in such notice in accordance with this Condition.

6.3 Purchase

The Issuer, any Guarantor or any member of the Group may at any time, to the extent permitted by applicable law, purchase Notes in the open market or by tender or otherwise at any price. Notes so purchased may be (a) held and/or resold or (b) delivered to the Principal Paying Agent for cancellation or delivered to the Issuer together with a request for the Issuer to deliver such Notes to the Principal Paying Agent for cancellation. The Notes so purchased, while held on or behalf of the Issuer, any Guarantor or any of their respective Subsidiaries, shall not entitle the Holder to vote at any meetings of the Noteholders and shall not be deemed to be outstanding for the purposes of calculating quorums at meetings of the Noteholders or for the purposes of Conditions 9 or 12.

6.4 Make-Whole

At any time prior to the date falling three months prior to the Maturity Date, but on one occasion only, the Issuer may, at its option, on giving not less than 25 nor more than 60 days' irrevocable notice to the Noteholders in accordance with Condition 16 (the "**Call Option Notice**") redeem the Notes in whole but not in part, at the price which shall be the following:

(i) the aggregate principal amount of the outstanding Notes; plus

(ii) interest and any additional amounts or other amounts that may be due thereon (if any) accrued but unpaid to but excluding the date on which the call option is to be settled (the "**Call Settlement Date**"); plus

(iii) the Make Whole Premium.

The Call Option Notice shall specify the Call Settlement Date.

For the purposes of this Condition:

"**Make Whole Premium**" means, with respect to a Note at any time, the excess of (a) the present value of the Notes at the Call Settlement Date, plus any required interest payments that would otherwise be due to be paid on such Notes from the Call Settlement Date through to the Maturity Date calculated using a discount rate equal to the Treasury Rate at the Call Settlement Date plus 50 basis points, over (b) the outstanding aggregate principal amount of the Notes at the Call Settlement Date, provided that if the value of the Make Whole Premium at any time would otherwise be less than zero, then in such circumstances, the value of the Make Premium will be equal to zero.

"**Treasury Rate**" means the yield to maturity at the time of computation of United States Treasury securities with a constant maturity most nearly equal to the period from the Call Settlement Date to the Maturity Date. The Parent (on behalf of the Issuer) will obtain such yield to maturity from information compiled and published in the most recent Federal Reserve Statistical Release H.15 (519) which has become publicly available at least two Business Days (but not more than five Business Days) prior to the Call Settlement Date (or, if such Statistical Release is not so published or available, any publicly available source of similar market data selected by the Issuer in good faith)); *provided, however,* that if the period from the Call Settlement Date to the Maturity Date is not equal to the constant maturity of a United States Treasury security for which a weekly average yield is given, the Treasury Rate shall be obtained by linear interpolation (calculated to the nearest one-twelfth of a year) from the weekly average yields of United States Treasury securities for which such yields are given, except that if the period from the Call Settlement Date to the Maturity Date is less than one year, the weekly average yield on actually traded United States Treasury securities adjusted to a constant maturity of one year shall be used.

6.5 Optional Redemption at Par

The Issuer may, at any time on or after the date three months prior to the Maturity Date, on giving not less than 30 nor more than 60 days' irrevocable notice to the Noteholders (which notice shall specify the date fixed for redemption (the "**Par Optional Redemption Date**")) in accordance with Condition 16, redeem the Notes in whole or in part, at the principal amount thereof, together with interest accrued and unpaid and additional amounts (if any) to but excluding the Par Optional Redemption Date.

In the case of a partial redemption the notice to Noteholders shall also specify the nominal amount of Definitive Notes drawn and the serial numbers of the Definitive Notes to be redeemed, which shall have been drawn in such place as the Trustee may approve and in such manner as it deems appropriate, subject to compliance with any applicable laws and stock exchange or other relevant authority requirements.

6.6 Cancellation

All Notes redeemed or purchased pursuant to this Condition 6 shall be either cancelled forthwith, held or, to the extent permitted by law, resold. Any Notes so cancelled may not be reissued.

7 Payments

7.1 Method of Payment

7.1.1 Payments of principal shall be made (subject to surrender of the relevant Definitive Notes at the specified office of any Transfer Agent or of the Registrar if no further payment falls to be made in respect of the Notes represented by such Definitive Notes) in the manner provided in Condition 7.1.2 below.

7.1.2 Interest on each Note shall be paid to the person shown on the Register at the close of business on the business day before the due date for payment thereof (the "**Record Date**"). Payments of interest on each Note shall be made by transfer to an account in U.S. Dollars maintained by the payee with a bank.

7.1.3 If the amount of principal being paid upon surrender of the relevant Definitive Note is less than the outstanding principal amount of such Definitive Note, the Registrar will annotate the Register with the amount of principal so paid and will (if so requested by the Issuer or a Noteholder) issue a new Definitive Note with a principal amount equal to the remaining unpaid outstanding principal amount. If the amount of interest being paid is less than the amount then due, the Registrar will annotate the Register with the amount of interest so paid.

7.2 **Payments subject to fiscal laws:** All payments in respect of the Notes are subject in all cases to (i) any applicable fiscal or other laws and regulations, but without prejudice to the provisions of Condition 8 and (ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the Code, or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or (without prejudice to the provisions of Condition 8) any law implementing an intergovernmental approach thereto. No commissions or expenses shall be charged to the Noteholders in respect of such payments.

7.3 **Agents:** The initial Agents and their initial specified offices are listed below. The Issuer reserves the right (subject to prior written approval of the Trustee (such approval not to be unreasonably withheld or delayed)) to vary or terminate the appointment of all or any of the Agents at any time (provided that no Agent shall be responsible for any costs or liabilities occasioned by any such termination) and appoint additional or other payment or transfer agents, provided that they will maintain (i) a Principal Paying Agent, (ii) a Registrar, (iii) a Transfer Agent, and (iv) such other agents as may be required by any other stock exchange on which the Notes may be listed, in each case, as approved by the Trustee (such approval not to be unreasonably withheld or delayed). Notice of any such change will be provided as described in Condition 16 below.

7.4 **Delay in Payment:** Noteholders will not be entitled to any interest or other payment for any delay after the due date in receiving the amount due on a Note if the due date is not a business day, or if the Noteholder is late in surrendering or cannot surrender its Definitive Note (if required to do so).

7.5 **Non-Business Days:** If any date for payment in respect of any Note is not a business day, the holder shall not be entitled to payment until the next following business day nor to any interest or other sum in respect of such postponed payment. In this Condition 7, "**business day**" means a day (other than a Saturday or a Sunday) on which banks and foreign exchange markets are open for business in the place in which the specified office of the Principal Paying Agent is located and on which foreign exchange transactions may be carried on in U.S. Dollars in New York City.

8 Taxation

8.1 All payments of principal and interest in respect of the Notes by or on behalf of the Issuer or by the Guarantors under the Guarantees shall be made free and clear of, and without deduction or withholding for or on account of, any Taxes, unless such withholding or deduction is required by law. In the event such withholding or deduction is required by law, the Issuer or (as the case may be) the relevant Guarantor or Guarantors shall pay such additional amounts so as to result in the receipt by the Noteholders of such amounts as would have been received by them if no such withholding or deduction had been required, except that no such additional amounts shall be payable in respect of any Note:

8.1.1 held by or on behalf of a Holder that is liable to such taxes, duties, assessments or governmental charges in respect of such Note or the Guarantee by reason of his having

some connection (whether present of former) with Ireland or the Russian Federation other than the mere holding of such Note or the benefit of a Guarantee;

8.1.2 where (in the case of a payment of principal or interest on redemption or at maturity) the relevant Definitive Note is surrendered for payment more than 30 calendar days after the Relevant Date except to the extent that the relevant Holder would have been entitled to such additional amounts if it had surrendered the relevant Definitive Note on the last day of such period of 30 calendar days; or

8.1.3 any combination of Conditions 8.1.1 and 8.1.2 above.

8.2 Notwithstanding any other provision of the Conditions, any amounts to be paid on the Notes by or on behalf of the Issuer will be paid net of any deduction or withholding imposed or required pursuant to an agreement described in Section 1471(b) of the Code, or otherwise imposed pursuant to Sections 1471 through 1474 of the Code (or any regulations thereunder or official interpretations thereof) or an intergovernmental agreement between the United States and another jurisdiction facilitating the implementation thereof (or any fiscal or regulatory legislation, rules or practices implementing such an intergovernmental agreement) (any such withholding or deduction, a "**FATCA Withholding**"). Neither the Issuer nor any other person will be required to pay any additional amounts in respect of FATCA Withholding.

8.3 In these Conditions, "**Relevant Date**" means whichever is the later of (a) the date on which the payment in question first becomes due and (b) if the full amount payable has not been received for the account of the Principal Paying Agent or the Trustee on or prior to such due date, the date on which (the full amount having been so received) notice to that effect has been given to the Noteholders by the Issuer in accordance with Condition 16.

8.4 Any reference in these Conditions to principal or interest shall be deemed to include any additional amounts in respect of principal or interest (as the case may be) that may be payable under Condition 8 or any similar undertaking given in addition to or in substitution for it under the Trust Deed.

9 Events of Default

9.1 If any of the following events occurs (each an "**Event of Default**") then the Trustee at its discretion may and, if so requested in writing by Holders of at least one quarter of the aggregate principal amount of the outstanding Notes or if so directed by an Extraordinary Resolution, shall (subject to the Trustee having been indemnified and/or secured and/or prefunded to its satisfaction) give written notice to the Issuer declaring the Notes to be immediately due and payable, whereupon they shall become immediately due and payable at their principal amount together with accrued interest without further action or formality:

9.1.1 *Non-payment*: the Issuer fails to pay any amount of principal in respect of any of the Notes by no later than the seventh Business Day after the due date for payment thereof or fails to pay any amount of interest by no later than the tenth Business Day after the due date for payment thereof; or

9.1.2 *Obligations:* the Issuer or any Guarantor, as the case may be, fails duly to perform or comply with, or is otherwise in breach of, any other obligation expressed to be assumed by it under or in respect of the Notes, the Guarantees or the Trust Deed, as the case may be, and such failure or breach, provided it is in the opinion of the Trustee capable of remedy, is not remedied within 30 days after the Trustee has given written notice of it to the Issuer or the Guarantors.

9.1.3 *Cross Acceleration:* any of the following occurs in respect of any member of the Group:

(i) any of its Indebtedness is not paid when due (after the expiry of any originally applicable grace period); or

(ii) any of its Indebtedness:

A. becomes prematurely due and payable; or

B. is placed on demand,

in each case, by reason of any actual or potential default or event of default, howsoever described,

provided that the amount of Indebtedness referred to in sub-paragraphs (i) or (ii) individually or in the aggregate exceeds U.S.$75,000,000 (or its U.S. Dollar Equivalent).

9.1.4 *Validity and Illegality:* the validity of the Notes, the Guarantees or the Trust Deed, as the case may be, is contested by the Issuer or any Guarantor, or the Issuer or any Guarantor shall deny any of their respective obligations thereunder or it is, or will become, unlawful for the Issuer or the Guarantors to perform or comply with any of their respective obligations under or in respect of the Notes, the Trust Deed and the Guarantees or any of such obligations shall become unenforceable or cease to be legal, valid and binding.

9.1.5 *Bankruptcy and Insolvency:* the occurrence of any of the following events:

(i) the Issuer, any Guarantor or any of their respective Material Subsidiaries is unable, or admits inability to, pay its debts as they fall due, generally suspends making payments on its debts or, by reason of actual or anticipated financial difficulties (in the reasonable view of the management of the Issuer, such Guarantor or such Material Subsidiary, as the case may be), commences negotiations with its creditors generally with a view to rescheduling any of its Indebtedness; and/or a moratorium is declared in respect of any Indebtedness of the Issuer, the Guarantors or any of their respective Material Subsidiaries;

(ii) any of the Issuer, the Guarantors or any of their respective Material Subsidiaries seeking or consenting to the introduction of proceedings for its liquidation or bankruptcy or the appointment of a liquidation commission (*likvidatsionnaya komissiya*) or a similar officer of any of the Issuer, the Guarantors or any of their respective Material Subsidiaries, as the case may be;

(iii) the presentation or filing of a petition in respect of any of the Issuer, the Guarantors or any of their respective Material Subsidiaries in any court, arbitration court or before any Agency alleging, or for, the bankruptcy, insolvency, dissolution, liquidation (or any analogous proceedings) including in the case of any entity in the Russian Federation the institution of supervision (*nablyudeniye*), financial rehabilitation on (*finansovoye ozdorovlenie*), external management (*vneshneye upravleniye*), bankruptcy management (*konkursnoye proizvodstvo*), as such terms with Russian transliteration are defined in the Federal Law of the Russian Federation No. 127-FZ "On Insolvency (Bankruptcy)" of 26 October 2002 (as amended or replaced from time to time), of any of the Issuer, the Guarantors or their respective Material Subsidiaries, unless such petition is demonstrated to the satisfaction of the Trustee to be vexatious or frivolous (and ignoring any petition that is not accepted by such court or competent agency for review on its merits);

(iv) the entry by the Issuer, the Guarantors or their respective Material Subsidiaries into, or the agreeing by the Issuer, the Guarantors or their respective Material Subsidiaries to enter into, amicable settlement (*mirovoe soglashenie*) with its creditors as such terms with Russian transliteration are defined in the Federal Law of the Russian Federation No. 127-FZ "On Insolvency (Bankruptcy)" of

26 October 2002 (as amended or replaced from time to time), or any analogous procedure or event in any other relevant jurisdiction; or

(v) any judicial liquidation, dissolution, administration or winding-up of the Issuer, any Guarantor or any of their respective Material Subsidiaries.

This Condition 9.1.6 shall not apply to the solvent liquidation of any member of the Group pursuant to a transaction(s) permitted by Condition 4.4 so long as any payments or assets distributed as a result of such liquidation are distributed to other members of the Group.

9.1.6 *Governmental or Court Action:* any government, Agency or court takes any action that would result in a Material Adverse Effect, including, without prejudice to the foregoing: (i) all or a majority of the issued shares of the Issuer, any Guarantor or any of their respective Material Subsidiaries are seized, nationalised, expropriated or compulsorily acquired; or (ii) the whole or any part of the assets of the Issuer, any Guarantor or any of their respective Material Subsidiaries (the book value of which is more than 5 per cent. of the Consolidated Total Assets (excluding any assets of a Project Company) is seized, nationalised, expropriated or compulsorily acquired.

9.1.7 *Appropriation:* unless contested in good faith by the Issuer, any Guarantor or any of their respective Material Subsidiaries and not dismissed, disapplied or overturned within 30 Business Days by the Issuer, any Guarantor or such Material Subsidiary, a secured party takes possession (in the case of non-possessory security) or otherwise takes possession under enforcement of its security, or a receiver, manager or other similar officer is appointed, of the whole or any part of the undertaking, assets and revenues of the Issuer, any Guarantor or any of their Material Subsidiaries having a Fair Market Value in excess of 5 per cent. of the book value of the Consolidated Total Assets (excluding any assets of a Project Company).

9.1.8 *Judgments:* the aggregate amount of unsatisfied judgments, decrees or orders of courts or other appropriate law-enforcement bodies that are not subject to further appeal for the payment of money against the Issuer, any Guarantor and/or any of their respective Subsidiaries exceeds 5 per cent. of the book value of the Consolidated Total Assets (excluding any assets of a Project Company) or 5 per cent. of the gross revenues of the Group.

9.1.9 *Analogous Events:* any event occurs which under the laws of any relevant jurisdiction has an analogous effect to any of the events referred to in Condition 9.1.5 to Condition 9.1.8.

9.2 The Issuer or the Guarantors shall deliver to the Trustee, forthwith upon becoming aware thereof, written notice in the form of an Officer's Certificate of any event which is a Potential Event of Default or an Event of Default, its status and what action the Issuer, the relevant Guarantor or the relevant Material Subsidiary, as the case may be, is taking or proposes to take with respect thereto and, if applicable, whether such event will have a Material Adverse Effect.

10 Prescription

Claims for the payment of principal and interest in respect of any Note shall be prescribed and become void unless made within 10 years (for claims for the payment of principal) or five years (for claims for the payment of interest) of the appropriate Relevant Date.

11 Replacement of Definitive Notes

If a Note shall become mutilated, defaced, lost, stolen or destroyed it may, subject to all applicable laws and regulations and requirements of the Stock Exchange, be replaced at the specified offices of the Registrar or the Transfer Agents on payment of such costs, expenses, taxes and duties as may be incurred in connection therewith and on such terms as to evidence, security and indemnity and

otherwise as may reasonably be required by or on behalf of the Registrar or the Transfer Agents. Mutilated or defaced Notes must be surrendered before replacements will be issued.

12 Meetings of Noteholders, Modification and Waiver

12.1 Meetings of Noteholders

The Trust Deed contains provisions for convening meetings of Noteholders to consider any matter affecting their interests, including any modification of, or any arrangement in respect of, the Notes or the Trust Deed. Noteholders will be entitled to one vote per U.S.$1,000 in principal amount of Notes held by them. Such a meeting may be convened by the Issuer or the Trustee and shall be convened by the Trustee, subject to its being indemnified and/or secured and/or prefunded to its satisfaction, upon the request in writing of holders of the Notes holding not less than one tenth of the aggregate principal amount of the outstanding Notes. The Trust Deed provides that special quorum provisions apply for meetings of Noteholders convened for the purpose of, inter alia (i) altering the terms and conditions relating to the maturity, redemption, prepayment and repayment (including, without prejudice to the generality of the foregoing, Condition 6) or postponing any date for payment of interest, (ii) reducing the principal amount of the Notes, (iii) varying the amounts corresponding to interest or principal payable in respect of the Notes or the method of determining such payments in respect of the Notes, (iv) varying the currency in which payments under the Notes are to be made, (v) modifying or cancelling any Guarantee, (vi) amending the provisions of Schedule 3 of the Trust Deed concerning the quorum required at any meeting of the Noteholders or any adjourned such meeting thereof or concerning the majority required to pass an Extraordinary Resolution or (vii) amending the proviso to paragraph 2 of Schedule 3 of the Trust Deed, in which case the necessary quorum will be two or more persons holding or representing not less than two-thirds, or at any adjourned meeting not less than one-quarter, in principal amount of the Notes for the time being outstanding. Any resolution duly passed at a meeting of Noteholders will be binding on all the Noteholders, whether present or not.

In addition, a resolution in writing signed by or on behalf of Noteholders holding in aggregate at least 75 per cent. in principal amount of the Notes outstanding (a "**Written Resolution**") will take effect as if it were an Extraordinary Resolution. Such a resolution in writing may be contained in one document or several documents in the same form, each signed by or on behalf of one or more Noteholders.

12.2 Modification and Waiver

The Trustee may from time to time and at any time without any consent or sanction of the Noteholders concur with the Issuer or the Guarantors (as the case may be) in making, or consent to the Issuer or the Guarantors (as the case may be) making, (a) any modification to the Trust Deed (other than the proviso to paragraph 2 of Schedule 3 or any modification referred to in that proviso), the Notes or the Paying Agency Agreement provided, however, that the Trustee is of the opinion that such modification will not be materially prejudicial to the interests of the Noteholders; or (b) any modification to the Trust Deed, the Notes or the Paying Agency Agreement, if in the opinion of the Trustee such modification is of a formal, minor or technical nature or made to correct any manifest error. Any such modification shall be binding on the Noteholders and, unless the Trustee otherwise determines, such modification shall be notified to the Noteholders by the Issuer (subject to the approval of the Trustee and upon receipt of the requisite information from the Registrar) as soon as practicable thereafter in accordance with Condition 16.

12.3 Substitution

The Trust Deed contains provisions permitting the Trustee to agree with the Issuer and the Guarantors, subject to such amendment of the Trust Deed and such other conditions as the Trustee may reasonably require, but without the consent of the Noteholders, to the substitution of certain other entities in place of the Issuer, or of any previous substituted company, as principal debtor

under the Trust Deed and the Notes. In the case of such substitution, the Trustee may agree with the Issuer and the Guarantors, without the consent of the Noteholders, to a change of law governing the Notes and/or the Trust Deed, provided that such change would not in the opinion of the Trustee be materially prejudicial to the interests of Noteholders. Notice of any such substitution will be provided to the Noteholders as described in Condition 16 below.

12.4 Entitlement of the Trustee

In connection with the exercise of any of its powers, trusts, authorities or discretions, the Trustee shall have regard to the interests of the Noteholders as a class and, in particular, shall not have regard to the consequences of such exercise for individual Noteholders resulting from their being for any purpose domiciled or resident in, or otherwise connected with, or subject to the jurisdiction of, any particular territory. No Noteholder is entitled to claim from the Issuer, any Guarantor or the Trustee any indemnification or payment in respect of any tax consequence of any such exercise upon individual Noteholders.

13 Enforcement

At any time after an Event of Default has occurred and for as long as it is continuing, the Trustee may, at its discretion and without further notice, institute such proceedings and/or take such steps or actions against the Issuer and/or any Guarantor as it may think fit to enforce the terms of the Trust Deed, the Guarantees and/or the Notes, but the Trustee shall not be bound to institute such proceedings and/or take or omit to take any step or action unless (a) it shall have been so directed by an Extraordinary Resolution or so requested in writing by Noteholders holding at least 25 per cent. in principal amount of the Notes outstanding and (b) it shall have been indemnified and/or secured and/or prefunded to its satisfaction. No Noteholder may proceed directly against the Issuer or any Guarantor unless the Trustee, having become bound so to proceed, fails to do so within a reasonable time and such failure is continuing.

14 Indemnification and Removal of the Trustee

The Trust Deed contains provisions for the indemnification of the Trustee and for its relief from responsibility including provisions relieving it from taking proceedings or steps or actions to enforce payment unless indemnified and/or secured and/or prefunded to its satisfaction, and to be paid its costs and expenses in priority to any claims of Noteholders. In addition, the Trustee is entitled to enter into business transactions with the Issuer, each Guarantor and any entity related to the Issuer or each Guarantor without accounting for any profit.

The Trustee's responsibilities are solely those of trustee for the Noteholders on the terms of the Trust Deed. Accordingly, the Trustee makes no representations and assumes no responsibility for the validity or enforceability of the Notes or for the performance by the Issuer or any Guarantor of its obligations under or in respect of the Notes and the Trust Deed. The Trustee is entitled to assume that the Issuer and each Guarantor is performing all of its obligations pursuant to the Notes and the Trust Deed (and shall have no liability for doing so) until it has express written notice to the contrary.

The Trustee may rely without liability to Noteholders on any certificate or report prepared by auditors, accountants or any other expert pursuant to the Trust Deed, whether or not addressed to the Trustee and whether or not the auditors', accountants' or experts' liability in respect thereof is limited by a monetary cap or otherwise. The Trust Deed provides that the Noteholders shall together have the power, exercisable by Extraordinary Resolution, to remove the Trustee (or any successor trustee or additional trustees) provided that the removal of the Trustee or any other trustee shall not become effective unless there remains a Trustee in office after such removal.

15 Further Issues

The Issuer may from time to time, without the consent of the Noteholders, create and issue further notes (the "**Additional Notes**") having the same terms and conditions as the Notes in all respects (or in all respects except for the first payment of interest, the date of issue and the amount of principal) and so that such further issue shall be consolidated and form a single series with the outstanding Notes; *provided, however,* that any Additional Notes that have the same identifying number as the outstanding Notes shall be issued either in a "qualified reopening" for U.S. federal income tax purposes or otherwise as part of the same "issue" for U.S. federal income tax purposes. References in these Conditions to the Notes include (unless the context requires otherwise) any Additional Notes issued pursuant to this Condition and forming a single series with the Notes. Any such Additional Notes shall be constituted by a deed supplemental to the Trust Deed and will benefit from the guarantees substantially in the form of the Guarantees given in respect of these Notes. Application will be made for such further securities to be listed and admitted to trading on the stock exchange on which the Notes are from time to time listed or quoted.

16 Notices

Notices to the Noteholders shall be valid if sent to them by first class mail (airmail if overseas) at their respective addresses on the Register or by any means designated from time to time by any clearing system on which trades in Notes settle. Any such notice shall be deemed to have been given on the fourth day after the date of mailing. In addition, so long as the Notes are listed on the Stock Exchange and the rules or guidelines of that exchange so require, notices will be published via the companies announcements office of the Stock Exchange. Any such notice shall be deemed to have been given on the date of such publication or, if published more than once or on different dates, on the first date on which publication is made.

17 Provision of Information

The Issuer and the Guarantors shall, during any period in which they are not subject to or in compliance with the reporting requirements of Section 13 or 15(d) of the United States Securities Exchange Act of 1934 (the "**Exchange Act**") nor exempt from reporting pursuant to Rule 12g3 2(b) under the Exchange Act, duly provide to any holder of a Note which is a "restricted security" within the meaning of Rule 144(a)(3) under the Securities Act or to any prospective purchaser of such securities designated by such Noteholder, upon the written request of such Noteholder or (as the case may be) prospective Noteholder addressed to the Issuer or the respective Guarantor, as the case may be, and delivered to the Issuer or the respective Guarantor, as the case may be, or to the Specified Office of the Registrar, the information specified in Rule 144A(d)(4) under the Securities Act.

18 Currency Indemnity

If any sum due from the Issuer in respect of the Notes or a Guarantor in respect of the Guarantees or any order or judgment given or made in relation thereto has to be converted from the currency (the "**first currency**") in which the same is payable under these Conditions or such order or judgment into another currency (the "**second currency**") for the purpose of (a) making or filing a claim or proof against the Issuer or a Guarantor, (b) obtaining an order or judgment in any court or other tribunal or (c) enforcing any order or judgment given or made in relation to the Notes or the Guarantees, the Issuer, failing whom the Guarantors, shall indemnify each recipient, on the written demand of such recipient addressed to the Issuer and the Guarantors and delivered to the Issuer and the Guarantors or to the specified office of the Registrar, against any loss suffered as a result of any discrepancy between (i) the rate of exchange used for such purpose to convert the sum in question from the first currency into the second currency and (ii) the rate or rates of exchange at which such recipient may in the ordinary course of business purchase the first currency with the second currency upon receipt of a sum paid to it in satisfaction, in whole or in part, of any such order, judgment, claim or proof.

This indemnity constitutes a separate and independent obligation of the Issuer or, as the case may be, the Guarantors and shall give rise to a separate and independent cause of action, will apply irrespective of any indulgence granted by any Noteholder or any other person and will continue in full force and effect despite any judgment, order, claim or proof for a liquidated amount in respect of any sum due under the Trust Deed and/or the Notes or any other judgment or order.

19 Contracts (Rights of Third Parties) Act 1999

No person shall have any right to enforce any term or condition of the Notes under the Contracts (Rights of Third Parties) Act 1999.

20 Governing Law and Arbitration

20.1 The Trust Deed, the Guarantees, the Notes and these Conditions and any non-contractual obligations arising out of or in connection therewith shall be governed by and interpreted in accordance with English law.

20.2 The Issuer and the Guarantors have in the Trust Deed agreed that any dispute, claim or difference of whatever nature arising out of or in connection with the Notes (including a dispute regarding the existence, validity or termination of the Notes or a dispute relating to non-contractual obligations arising out of or in connection with the Trust Deed or the Notes) (a "**Dispute**") shall be referred to and finally resolved by arbitration under the Arbitration Rules (the "**Rules**") of the London Court of International Arbitration ("**LCIA**") (such arbitration to also be administered by the LCIA in accordance with the Rules). The arbitral tribunal shall consist of three arbitrators, each of whom shall be a lawyer experienced in international securities transactions. The claimant(s), irrespective of number, shall nominate jointly one arbitrator; the respondent(s), irrespective of number, shall nominate jointly the second arbitrator. The third arbitrator, who shall serve as Chairman, shall be nominated by agreement of the two party-nominated arbitrators. The seat of arbitration shall be London, England, and the seat of arbitration shall be English. The parties to the Trust Deed have excluded the jurisdiction of the English courts under Section 45 and Section 69 of the Arbitration Act 1996.

20.3 The Issuer undertakes irrevocably to appoint Law Debenture Corporate Services Limited of 8th Floor, 100 Bishopsgate, London, EC2N 4AG, United Kingdom as agent to accept service of process and any other documents in proceedings in England or in any legal action or proceedings arising out of or in connection with these Conditions and the Notes (the "**Issuer's Process Agent**"), provided that:

20.3.1 service upon the Issuer's Process Agent shall be deemed valid service upon the Issuer whether or not the process is forwarded to or received by the Issuer;

20.3.2 the Issuer shall inform the Trustee, in writing, of any change in the address of the Issuer's Process Agent within 14 calendar days of such change;

20.3.3 if the Issuer's Process Agent ceases to be able to act as a process agent or to have an address in England, the Issuer irrevocably agrees to appoint a new process agent in England acceptable to the Trustee and to deliver to the trustee within 14 calendar days a copy of a written acceptance of appointment by the new process agent; and

20.3.4 nothing in these Conditions shall affect the right to serve process in any other manner permitted by law.

20.4 Each Guarantor undertakes irrevocably to appoint Law Debenture Corporate Services Limited of 8th Floor, 100 Bishopsgate, London, EC2N 4AG, United Kingdom as agent to accept service of process and any other documents in proceedings in England or in any legal action or proceedings arising out of or in connection with these Conditions and the Notes (the "**Guarantors' Process Agent**"), provided that:

20.4.1 service upon the Guarantors' Process Agent shall be deemed valid service upon the Guarantors whether or not the process is forwarded to or received by the relevant Guarantor;

20.4.2 each Guarantor shall inform the Trustee, in writing, of any change in the address of the Guarantors' Process Agent within 14 calendar days of such change;

20.4.3 if the Guarantors' Process Agent ceases to be able to act as a process agent or to have an address in England, each Guarantor irrevocably agrees to appoint a new process agent in England acceptable to the Trustee and to deliver to the trustee within 14 calendar days a copy of a written acceptance of appointment by the new process agent; and

20.4.4 nothing in these Conditions shall affect the right to serve process in any other manner permitted by law.

20.5 To the extent that the Issuer or any Guarantor may now or hereafter be entitled, in any jurisdiction in which any legal action or proceeding may at any time be commenced pursuant to or in accordance with these Conditions, to claim for itself or any of its undertaking, properties, assets or revenues present or future any immunity (sovereign or otherwise) from suit, jurisdiction of any court, attachment prior to judgment, attachment in aid of execution of a judgment, execution of a judgment or award or from set-off, banker's lien, counterclaim or any other legal process or remedy with respect to its obligations under these Conditions and/or to the extent that in any such jurisdiction there may be attributed to the Issuer or the Guarantors any such immunity (whether or not claimed), the Issuer and each Guarantor hereby irrevocably agrees not to claim, and hereby waive, any such immunity (to the fullest extent permitted by the laws of such jurisdiction).

20.6 The Issuer and each Guarantor irrevocably and generally consents in respect of any proceedings anywhere to the giving of any relief or the issue and service on it of any process in connection with those proceedings including, without limitation, the making, enforcement or execution against any assets whatsoever (irrespective of their use or intended use) of any order or judgment which may be made or given in those proceedings.

21 Non-Petition

None of the Noteholders or the other creditors (nor any other person acting on behalf of any of them) shall be entitled at any time to institute against the Issuer, or join in any institution against the Issuer of, any bankruptcy, administration, moratorium, reorganisation, controlled management, arrangement, insolvency, examinership, winding-up or liquidation proceedings or similar insolvency proceedings under any applicable bankruptcy or similar law in connection with any obligation of the Issuer relating to the Notes or otherwise owed to the creditors for so long as the Notes are outstanding, save for lodging a claim in the liquidation of the Issuer which is initiated by another party or taking proceedings to obtain a declaration or judgment as to the obligations of the Issuer.

No Noteholder shall have any recourse against any director or officer of the Issuer in respect of any obligations, covenants or agreement entered into or made by the Issuer in respect of the Notes, other than in the case of fraud, wilful default or negligence.

22 Definitions

In these Conditions the following terms have the meaning given to them in this Condition 22.

"**Additional Assets**" means:

(a) any assets (other than Capital Stock, Cash and Cash Equivalents) that are used or useful in the Permitted Business;

(b) the Capital Stock of a Person primarily engaged in the Permitted Business;

An "**Affiliate**" of any specified Person means: (i) any other Person, directly or indirectly, controlling or controlled by or under direct or indirect common control with such specified Person; or (ii) any Person who is a director or officer (A) of such specified Person, (B) of any Subsidiary of such specified Person, or (C) of any Person described in (i) or (ii) above;

"**Agency**" means any agency, authority, central bank, department, government, legislature, minister, official or public statutory Person (whether autonomous or not) of, or of the government of, any state or supra-national body;

"**Asset Sale**" means

(a) the sale, lease, conveyance or other disposition of any tangible or intangible assets or rights or revenues of the Parent or a Subsidiary of the Parent in one or more transactions or series of transactions (whether related or not) provided that the sale, conveyance or other disposition of all or substantially all of the assets of the Parent and its Subsidiaries taken as a whole will be governed by the provisions of Condition 4.4 and not by the provisions of Condition 4.5;

(b) the issuance of Capital Stock in any Subsidiary of the Parent or the sale of Capital Stock in any of its Subsidiaries.

Notwithstanding the foregoing, none of the following items will be deemed to be an Asset Sale:

(a) the sale, lease, conveyance or other disposition of any tangible or intangible assets (including any Capital Stock of any Subsidiary of the Parent) the book value of which does not exceed 15% of the Consolidated Total Assets of the Group in any 12-month period (determined in each case by reference to the most recent consolidated financial statements of the Group delivered to the Trustee pursuant to Condition 4.10);

(b) a transfer of assets solely between or among the Parent and its Subsidiaries;

(c) an issuance of Capital Stock by a Subsidiary of the Parent to the Parent or to a Wholly-Owned Subsidiary of the Parent;

(d) a sale, lease, conveyance or disposition of assets (including, for the avoidance of doubt, coal and other products of the Group under Product Delivery Contracts, inventory or stock-in-trade, products, services or accounts receivable and licensing of rights) in the ordinary course of business;

(e) a sale or other disposition of damaged, worn-out, redundant or obsolete assets in the ordinary course of business;

(f) a sale or other disposition of Cash Equivalents or Cash and Cash Equivalent Amounts (including, without limitation, any disposition pursuant to any Investment);

(g) the creation of a Lien and any disposition in connection with any Permitted Lien;

(h) the lease, assignment or sublease of any property in the ordinary course of business;

(i) the licensing or sublicensing of rights to intellectual property or other intangibles in the ordinary course of business;

(j) a sale or other disposition of any asset made pursuant to any Non-recourse Project Financing; and

(k) sales or other dispositions of assets or property received by the Parent or any Subsidiary of the Parent upon the foreclosure of a Lien granted in favour of the Parent or any Subsidiary

of the Parent or any other transfer of title with respect to any ordinary course secured investment in default;

"**Auditors**" means the auditors of the Group's consolidated financial statements for the time being or, if they are unable or unwilling to carry out any action requested of them under these Conditions, any other internationally recognised firm of accountants;

"**Authorised Signatory**" means, in relation to the Issuer and, as the case may be, the relevant Guarantor, any Person who is duly authorised and in respect of whom the Trustee has received a certificate signed by a director or another Authorised Signatory of the Issuer or, as the case may be, the respective Guarantor setting out the name and signature of such Person and confirming such Person's authority to act;

"**Board of Directors**" means, as to any Person, the board of directors or equivalent competent governing body of such Person, or any duly authorised committee thereof;

"**Business Day**" means a day (other than a Saturday or Sunday) on which banks and foreign exchange markets are open for general business in Dublin, Moscow, New York City and London and the city where the Specified Office (as defined in the Paying Agency Agreement) of the Principal Paying Agent is located, and in relation to any date for payment or purchase of a currency, the principal financial centre of the country of that currency;

"**Capital Stock**" means, with respect to any Person, any and all shares, interests, participations, rights to purchase, warrants, options, or other equivalents (however designated) of capital stock of a corporation and any and all equivalent ownership interests in a Person other than a corporation, in each case whether now outstanding or hereafter issued;

"**Code**" means the United States Internal Revenue Code of 1986, as amended;

"**Conditions**" means the terms and conditions of the Notes;

"**Consolidated EBITDA**" means, for any period, the consolidated net income of the Parent for continuing operations, acquisitions (as a component of continuing obligations) and discontinued operations before taking into account:

(a) the position "other income and expenses" (comprising exchange gains or losses, interest expense, interest and other non-operating income and equity in net loss of affiliates);

(b) all amounts provided for depreciation, amortisation and write downs of goodwill;

(c) amortisation of intangible assets and depreciation of tangible assets;

(d) all taxes;

(e) any share of the profit of any associated company or undertaking; and

(f) any extraordinary gains or losses,

each as determined by reference to the most recent consolidated financial statements of the Group delivered to the Trustee pursuant to Condition 4.10;

"**Cash and Cash Equivalent Amounts**" means with respect to any specified Person and as at any date of determination:

(a) the total amount of cash and cash equivalents that would have been included in a balance sheet of such person prepared in accordance with IFRS if prepared as at such date; and

(b) certificates of deposit, maturing within six months after the relevant date of calculation, issued by a bank or trust company which has a credit rating of "BBB-" or higher by Standard & Poor's Rating Services or Fitch Ratings Ltd or "Baa3" or higher by Moody's Investors Service Limited (an "**Approved Bank**"); *provided, however,* that (x) such certificates of deposit can be withdrawn upon demand; and (y) if the terms of such certificates of deposit provide for a penalty or fee upon early withdrawal, only to the extent of the proceeds which are capable of being remitted to a member of the Group upon such early withdrawal;

"**Cash Equivalents**" means, at any time:

(a) certificates of deposit, maturing within one year after the relevant date of calculation, issued by an Approved Bank;

(b) any investment in marketable obligations issued or guaranteed by the government of the United States of America, the UK, any member state of the European Union, the Russian Federation or by an instrumentality or agency of any of them having an equivalent credit rating which:

(i) matures within one year after the date of the relevant calculation; and

(ii) is not convertible or exchangeable to any other security;

(c) open market commercial paper not convertible to any other security (such commercial paper to be valued at its nominal trading value as at the Measurement Date where this differs from its face value):

(i) for which a recognised trading market exists;

(ii) issued in the United States of America, the UK or any member of the European Union;

(iii) which matures within one year after the relevant date of calculation; and

(iv) which has a credit rating of "BBB-" or higher by Standard & Poor's Rating Services or Fitch Ratings Ltd or "Baa3" or higher by Moody's Investors Service Limited, or, if no rating is available in respect of the commercial paper, the issuer of which has, in respect of its long-term unsecured and non-credit enhanced debt obligations, an equivalent rating;

(d) repurchase obligations with a term of not more than 90 days for underlying securities of the types described in paragraphs (b), (c) and (d) above entered into with any financial institution meeting the qualifications specified in paragraph (b) above;

(e) Sterling bills of exchange eligible for rediscount at the Bank of England and accepted by an Approved Bank (or any dematerialised equivalent);

(f) investments which can be turned into cash within 30 days in money market funds which:

(i) have a credit rating of either "BBB-" or higher by Standard & Poor's Rating Services or Fitch Ratings Ltd or "Baa3" or higher by Moody's Investors Service Limited; and

(ii) invest substantially all their assets in securities of the types described in paragraphs (a) to (e) above;

"**Consolidated Indebtedness**" means, at any date of determination (and without duplication), the aggregate of the Indebtedness of the Parent and its Subsidiaries, on a consolidated basis, determined in accordance with the IFRS;

"**Consolidated Net Indebtedness**" means, at any date of determination (and without duplication), (i) the Consolidated Indebtedness less (ii) any Cash and Cash Equivalent Amounts of the Parent and its Subsidiaries, in the case of each (i) and (ii), as of the Relevant Date (as defined below);

"**Consolidated Net Leverage Ratio**" as of any date of determination (the "**Determination Date**"), means the ratio of (x) the Consolidated Net Indebtedness to (y) the Consolidated EBITDA for the period of two most recent Measurement Periods immediately preceding the date of such determination (the "**EBITDA Calculation Period**"); *provided, however,* that:

(a) if (i) the Parent or any of its Subsidiaries has Incurred any Indebtedness since the end of the EBITDA Calculation Period (the "**Relevant Date**") which remains outstanding on the Determination Date or (ii) the transaction giving rise to the need to calculate the Consolidated Net Leverage Ratio is an Incurrence of Indebtedness, or both, the Consolidated Net Leverage Ratio shall be calculated by adjusting the Consolidated Net Indebtedness as of the Relevant Date to give effect to the Incurrence of any Indebtedness mentioned in (i) or (ii) above, or both, as if such Indebtedness had been Incurred on the Relevant Date; provided that no effect shall be given to any Cash and Cash Equivalent Amounts received by the Parent or any of its Subsidiaries as proceeds of such Indebtedness that gave rise to the need to calculate the Consolidated Net Leverage Ratio;

(b) if (i) the Parent or any of its Subsidiaries has repaid, repurchased, defeased or otherwise discharged any Indebtedness since the Relevant Date or (ii) if any Indebtedness is to be repaid, repurchased, defeased or otherwise discharged on the date of the transaction giving rise to the need to calculate the Consolidated Net Leverage Ratio, or both, the Consolidated Net Leverage Ratio shall be calculated by adjusting the Consolidated Net Indebtedness as of the Relevant Date to give effect to such repayment, repurchase, defeasement or discharge mentioned in (i) or (ii) above, as if such repayment, repurchase, defeasement or discharge had occurred on the Relevant Date;

(c) if since the beginning of the EBITDA Calculation Period the Parent or any Subsidiary of the Parent (by merger or otherwise) shall have made an Investment in any Person which as a result of such Investment becomes a Subsidiary of the Parent or an acquisition of assets which constitutes all or substantially all of an operating unit of a business (including any acquisition of assets occurring in connection with a transaction requiring a calculation to be made hereunder), the Consolidated Net Leverage Ratio shall be calculated by adjusting the Consolidated EBITDA for such EBITDA Calculation Period as if such Investment or acquisition had occurred on the first day of such EBITDA Calculation Period; and

(d) if since the beginning of the EBITDA Calculation Period the Parent or any of its Subsidiaries shall have made an Asset Sale, the Consolidated Net Leverage Ratio shall be calculated by reducing the Consolidated EBITDA for such EBITDA Calculation Period by an amount equal to the Consolidated EBITDA (if positive) directly attributable to the assets which are the subject of such Asset Sale, or increased by an amount equal to the Consolidated EBITDA (if negative), directly attributable thereto for such period as if such Asset Sale had occurred on the first day of such EBITDA Calculation Period;

For the purposes of this definition, pro forma calculations shall be determined in good faith by a responsible financial or accounting officer of the Parent;

"**Consolidated Total Assets**" means the "total assets" as published in the most recent consolidated financial statements of the Group delivered to the Trustee pursuant to Condition 4.10;

"**control**" when used with respect to any Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "**controlling**" and "**controlled**" have meanings correlative to the foregoing;

"**Currency Agreement**" means any foreign exchange contract, currency swap agreement or other similar agreement with respect to currency values;

"**Disqualified Stock**" means, with respect to any Person, any Capital Stock which by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable at the option of the holder) or upon the happening of any event:

(a) matures or is mandatorily redeemable (other than redeemable only for Capital Stock of such Person which is not itself Disqualified Stock) pursuant to a sinking fund obligation or otherwise;

(b) is convertible or exchangeable at the option of the holder for Indebtedness or Disqualified Stock; or

(c) is mandatorily redeemable or must be purchased upon the occurrence of certain events or otherwise, in whole or in part;

in each case on or prior to the first anniversary of the Stated Maturity of the Notes;

The amount of any Disqualified Stock that does not have a fixed redemption, repayment or repurchase price will be calculated in accordance with the terms of such Disqualified Stock as if such Disqualified Stock were redeemed, repaid or repurchased on any date on which the amount of such Disqualified Stock is to be determined pursuant to these Conditions; *provided*, *however*, that if such Disqualified Stock could not be required to be redeemed, repaid or repurchased at the time of such determination, the redemption, repayment or repurchase price will be the book value of such Disqualified Stock as reflected in the most recent financial statements of such Person;

"**Dollars, $**" and "**U.S.$**" means the lawful currency of the United States of America;

"**Environment**" means living organisms including the ecological systems of which they form part and the following media:

(a) air (including air within natural or man-made structures, whether above or below ground);

(b) water (including territorial, coastal and inland waters, water under or within land and water in drains and sewers); and/or

(c) land (including land under water);

"**Environmental Approval**" means any authorisation required by an Environmental Law;

"**Environmental Law**" means any applicable law or regulation in any jurisdiction in which the Group conducts business concerning:

(a) the protection of health and safety;

(b) the environment; or

(c) any emission or substance which is capable of causing harm to any living organism or the environment;

"**Event of Default**" has the meaning assigned to such term in Condition 9 hereof;

"**Fair Market Value**" means the price that would be paid in an arm's-length transaction between an informed and willing seller under no compulsion to sell and an informed and willing buyer under no compulsion to buy, as determined in good faith by the Board of Directors of the Issuer or the relevant Guarantor or Subsidiary of the Parent unless the making of such a determination is not within the competence of the relevant Board of Directors, in which case such determination shall

be made in good faith by the respective chief executive officer, chief financial officer or another competent officer, whose determination shall be conclusive;

"**Fitch**" means Fitch Ratings Ltd. or any successor to its rating business;

"**GAAP**" means, in relation to a company, generally accepted accounting principles and practices in the jurisdiction of its incorporation;

"**Group**" means the Parent and its consolidated Subsidiaries from time to time taken as a whole; a member of the Group means each of the Issuer, the Guarantors and the Parent's consolidated Subsidiaries from time to time;

"**guarantee**" means, in relation to any Indebtedness of any Person, any obligation of another Person to pay such Indebtedness including (without limitation):

(a) any obligation to purchase such Indebtedness;

(b) any obligation to lend money, to purchase or subscribe shares or other securities or to purchase assets or services in order to provide funds for the payment of such Indebtedness;

(c) any indemnity against the consequences of a default in the payment of such Indebtedness; and

(d) any other agreement to be responsible for such Indebtedness;

"**Hedging Obligations**" means, with respect to any Person, the obligations of such Person under:

(a) interest rate swap agreements, interest rate cap agreements and interest rate collar agreements;

(b) other agreements or arrangements designed to protect such Person against fluctuations in any rate or price (including but not limited to fluctuations with respect to any index or the price of any commodity); and

(c) a Currency Agreement;

"**IFRS**" means International Financial Reporting Standards (formerly International Accounting Standards), issued by the International Accounting Standards Board ("**IASB**") and interpretations issued by the International Financial Reporting Interpretations Committee of the IASB (as amended, supplemented or re-issued from time to time);

"**IFRS Fiscal Period**" means any fiscal period for which the Group has produced consolidated financial statements in accordance with IFRS which have either been audited or reviewed by independent accountants of recognised international standing;

"**Incur**" means, with respect to any Indebtedness or other obligation of any Person, to create, issue, incur (including by conversion, exchange or otherwise), assume, guarantee or otherwise become liable in respect of such Indebtedness or other obligation of such Person (and "**Incurrence**", "**Incurred**" and "**Incurring**" shall have meanings correlative to the preceding). Indebtedness of any acquired Person or any of its Subsidiaries existing at the time such acquired Person becomes a Subsidiary of the Parent (or is merged into or consolidated with the Issuer or any Subsidiary of the Parent), whether or not such Indebtedness was Incurred in connection with, as a result of, or in contemplation of, such acquired Person becoming a Subsidiary of the Parent (or being merged into or consolidated with the Issuer or any Subsidiary of the Parent), shall be deemed Incurred at the time any such acquired Person becomes a Subsidiary of the Parent (or merges into or consolidates with the Issuer or any Subsidiary of the Parent); provided, that, solely for the purposes of determining compliance with Condition 4.2 the following will not be deemed to be an Incurrence:

(a) the amortisation of debt discount or the accretion of principal with respect to a non-interest bearing or other discount security;

(b) the payment of regularly scheduled interest in the form of additional Indebtedness of the same instrument or the payment of regularly scheduled dividends on Capital Stock in the form of additional Capital Stock of the same class and with the same terms; and

(c) the obligation to pay a premium in respect of Indebtedness arising in connection with the issuance of the notice of redemption or the making of a mandatory offer to purchase such Indebtedness;

"**Indebtedness**" means, with respect to any Person at any date of determination (without duplication):

(a) the principal in respect of (i) indebtedness of such Person for money borrowed and (ii) indebtedness evidenced by notes, debentures, bonds or other similar instruments for the payment of which such Person is responsible or liable, including, in each case, any premium on such indebtedness to the extent such premium has become due and payable;

(b) all Lease Obligations of such Person;

(c) all obligations of such Person issued or assumed as the deferred or unpaid purchase price of property (except where the purchase price is due no more than (i) 180 days or (ii) no more than 365 days, in each case after the earlier of the placing of such property into service and the taking of delivery and title thereto in accordance with customary trade terms in the ordinary course of business, provided that, in the case of (ii) above, such obligations are not treated as borrowings in accordance with the IFRS);

(d) all obligations of such Person in respect of any letters of credit, bankers' acceptance or similar credit transactions (other than Trade L/C Obligations);

(e) the amount of all obligations of such Person with respect to the redemption, repayment or other repurchase of any Disqualified Stock of such Person;

(f) the outstanding principal amount of all moneys owing in connection with the sale or discounting of receivables (otherwise than on a non-recourse basis);

(g) all obligations of the type referred to in paragraphs (a) through (g) of other Persons and all dividends of other Persons for the payment of which, in either case, such Person is responsible or liable, directly or indirectly, as obligor, guarantor or otherwise, including by means of any guarantee;

(h) all obligations of the type referred to in paragraphs (a) through (h) of other Persons secured by any Lien on any property or asset of such Person (whether or not such obligation is assumed by such Person), the amount of such obligation being deemed to be the lesser of the Fair Market Value of such property or assets and the amount of the obligation so secured; and

and the amount of Indebtedness of any Person at any date shall equal the amount thereof that would appear on a balance sheet of such Person (excluding any notes thereto) prepared on the basis of IFRS at such date of all unconditional obligations, as described above, and with respect to contingent obligations, as described above, the maximum liability which would arise upon the occurrence of the contingency giving rise to the obligation;

The term "Indebtedness" shall not include (i) trade account payables arising solely in the ordinary course of business of such Person (other than (x) those included in paragraph (c) of the first paragraph of this definition and (y) promissory notes and similar obligations Incurred for the

purpose of a borrowing); (ii) any Hedging Obligations entered into in the ordinary course of business and not for speculative purposes; and (iii) Non-recourse Project Financing;

"**Investment**" in any Person means any direct or indirect advance, loan (other than advances to customers in the ordinary course of business that are recorded as accounts receivable on the balance sheet of the lender) or other extensions of credit (including by way of guarantee or similar arrangement) or capital contribution (by means of any transfer of cash or other property to others or any payment for property or services for the account or use of others), or any purchase or acquisition of Capital Stock, Indebtedness or other similar instruments issued by such Person, together with all items that are or would be classified as investments on a balance sheet prepared in accordance with IFRS. If the Parent or any of its Subsidiaries issues, sells or otherwise disposes of any Capital Stock of a Person that is a Subsidiary of the Parent such that, after giving effect thereto, such Person is no longer a Subsidiary of the Parent, any Investment by the Parent or any of its Subsidiaries of such Person remaining after giving effect thereto will be deemed to be a new Investment at such time. The acquisition by the Parent or any of its Subsidiaries of a Person that holds an Investment in a third Person will be deemed to be an Investment by the Parent or such Subsidiary in such third Person at such time. Except as otherwise provided for herein, the amount of an Investment shall be its Fair Market Value at the time the Investment is made and without giving effect to subsequent changes in value;

"**Investment Grade Rating**" means a rating equal to or higher than (i) BBB – (or the equivalent) by S&P; (ii) BBB – (or the equivalent) by Fitch or (iii) Baa3 – (or the equivalent) by Moody's or in each case the equivalent thereof from any duly approved substitute Rating Agency;

"**Investment Grade Status**" means that the Notes have an Investment Grade Rating from two Rating Agencies;

"**Issue Date**" means 15 September 2021;

"**Lease Obligation**" means, at the time any determination thereof is to be made, the amount of the liability under any lease or hire purchase contract that would at that time be required to be treated as a balance sheet liability in accordance with IFRS; *provided, however*, that any liability in respect of a lease or hire purchase contract, which would have been considered an operating lease under IFRS prior to the mandatory application of IFRS 16, will not be treated as Lease Obligation for purposes of the definition of "Indebtedness" and for the calculation of the Consolidated Net Leverage Ratio, unless the Parent has otherwise made an irrevocable election by written notice to the Trustee to re-designate operating leases in accordance with IFRS 16 for purposes of definition of "Indebtedness" and for calculating the Consolidated Net Leverage Ratio;

"**Lien**" means any mortgage, pledge, lien, charge, assignment, hypothecation or other security interest or agreement or arrangement having a similar effect (including, without limitation, anything analogous to any of the foregoing under the laws of any jurisdiction and any conditional sale or other title retention agreement or lease in the nature thereof);

"**Logistics Segment Disposal**" means the transfer of Capital Stock of the Parent's Subsidiaries and assets of such Subsidiaries engaged in the Group's transshipment business to a newly established entity pursuant to a division of (razdeleniye) or spin-off from (vydeleniye) the Parent;

"**Material Adverse Effect**" means a material adverse effect on: (i) the business, operations, property or condition (financial or otherwise) of the Group taken as a whole; (ii) the Issuer's or any Guarantor's ability to perform or comply with its obligations under the Conditions, the Guarantees and the Trust Deed; or (iii) the validity, legality or enforceability of the Conditions, the Guarantees and the Trust Deed or the rights or remedies of the Noteholders or the Trustee thereunder;

"**Material Subsidiary**" means any Subsidiary of the Parent that (a) has assets and/or revenues representing 10 per cent. or more of the Consolidated Total Assets or consolidated revenues of the Group, respectively, as calculated by reference to the Group's consolidated financial statements for

the most recent IFRS Fiscal Period or (b) to which are transferred substantially all of the assets and undertakings of a Subsidiary of the Parent which immediately prior to such transfer was a Material Subsidiary (with effect from the date of such transaction);

"**Measurement Period**" means a period of six months ending on 30 June or 31 December for which consolidated financial statements of the Parent (or the other relevant Person in respect of which the particular calculation is to be made, as the case may be) prepared in accordance with the IFRS are available. For the avoidance of doubt, any non-balance sheet financial information for a Measurement Period ending on 31 December of any year shall be calculated by subtracting (a) the relevant information for the Measurement Period ending on 30 June of that year from (b) the equivalent information for that year;

"**Moody's**" means Moody's Investors Service, Inc. or any successor to its rating business;

"**Net Proceeds**" means the aggregate cash proceeds received by the Issuer or the Parent or any of its Subsidiaries in respect of any Asset Sale (including, without limitation, any cash received upon the sale or other disposition of any non-cash consideration received in any Asset Sale, but only as and when received), net of the direct costs relating to such Asset Sale, including, without limitation, legal, accounting and investment banking fees, sales commission and any relocation expenses incurred as a result of the Asset Sale, and taxes paid or payable as a result of the Asset Sale, in each case, after taking into account any available tax credits or deductions, any tax sharing arrangements and any amounts required to be applied to the repayment of Indebtedness secured by a Lien on the asset or assets that were the subject of such Asset Sale and any reserve for adjustment in respect of the sale price of such asset or assets established in accordance with IFRS (for the avoidance of doubt, any amounts representing liabilities described in sub-paragraph (ii)(A)(2) of Condition 4.5.1 shall not be deemed to constitute Net Proceeds);

"**Non-recourse Project Financing**" means any financing issued, raised or borrowed by a Project Company to finance of all or part of the costs of the acquisition, construction or development of any project if a Person or Persons providing such financing expressly agree to limit their recourse to the project financed (and related assets), the Project Company, the shares in the Project Company and the revenues derived from such project as the principal source of repayment for moneys advanced, provided that:

(a) equity contribution agreements, subordinated debt and similar shareholder funding arrangements (and related guaranties) with respect to the Project Company entered into by any member of the Group;

(b) arm's length commercial agreements between the Project Company and any member of the Group, or performance guarantees given by any member of the Group with respect to commercial agreements relating to the project;

(c) any share purchase agreement entered into by any member of the Group with respect to the shares in the Project Company; or

(d) any other assurance, undertaking or support provided by any member of the Group in relation to the project that is not by way of guarantee, indemnity or other assurance against financial loss,

including, in each case, any assignment by the Project Company of its rights thereunder to the Persons providing such financing, shall not result in such financing being considered recourse to any member of the Group other than the Project Company;

"**Officer's Certificate**" means a certificate signed by two Authorised Signatories of the Issuer or, as the case may be, the relevant Guarantor at least one of who shall be the principal executive officer, principal accounting officer and/or principal financial officer of the Issuer or, as the case may be, the relevant Guarantor;

"**Permitted Liens**" means:

(a) Liens granted by any member of the Group which are existing as at the Issue Date;

(b) Liens arising or created in connection with any Non-recourse Project Financing;

(c) Liens on property, income or assets of a Person existing at the time such Person is merged, consolidated, amalgamated or otherwise combined with or into the Parent or any Subsidiary of the Parent or becomes a Subsidiary of the Parent; provided that such Liens were in existence prior to the contemplation of such merger, consolidation, amalgamation or other combination, were not incurred in contemplation thereof and do not extend to any assets, income or property other than those of the Person merged, consolidated, amalgamated or combined with the Parent or such Subsidiary;

(d) Liens on property, income or assets (including Capital Stock) existing at the time of acquisition of the property or of a Person which owns the property by the Parent or any Subsidiary of the Parent, *provided* that such Liens were in existence prior to, such acquisition, and not incurred in contemplation of, such acquisition, *provided further, however*, that such Liens do not extend to any other property, income or assets owned by the Parent or such Subsidiary;

(e) any Lien on any property or assets of any member of the Group, securing Purchase Money Indebtedness provided that (a) no such Lien shall extend to any other property or assets of any member of the Group, (b) the aggregate principal amount of all Indebtedness secured by such Lien is otherwise permitted to be Incurred under these Conditions and (c) such Lien attaches to such property or assets concurrently with the maintenance or repair thereof or within 180 days after the acquisition or commencement of construction thereof, as the case may be;

(f) Liens incurred, or pledges and deposits in connection with workers' compensation, unemployment insurance and other social security benefits (including, any pension, retirement or post-retirement benefits or arrangements), and leases, appeal bonds and other obligations of like nature in the ordinary course of business;

(g) any Liens imposed by operation of law and in the ordinary course of business (including, without limitation, any Lien over coal and other products of the Group whilst they are in transit created or arising under the common practice for such carriage or standard terms and conditions of the Person transporting the coal);

(h) any leases, licenses, subleases and sublicenses of assets in the ordinary course of business and which do not materially interfere with the ordinary conduct of business of the Group;

(i) limited recourse Liens in respect of ownership interests in, or assets owned by, any joint ventures which are not Subsidiaries of the Parent securing obligations of such joint ventures;

(j) Liens arising pursuant to any title transfer or retention of title arrangement in respect of goods or assets supplied to the Parent or any of its Subsidiaries in the ordinary course of business and on the supplier's standard or usual terms and not arising as a result of any default or omission of the Parent or such Subsidiary of the Parent;

(k) any interest or title of a lessor under any Lease Obligation or operating lease;

(l) Liens for ad valorem, income or property taxes or assessments and similar charges which either are not delinquent or are being contested in good faith by appropriate proceedings for which the Issuer or any of the Guarantors or any member of the Group has set aside in its books of account reserves to the extent required by IFRS, as consistently applied;

(m) easements, rights of way, restrictions (including zoning restrictions), reservations, permits, servitudes, minor defects or irregularities in title and other similar charges or encumbrances, and Liens arising under leases or subleases granted to others, in each case not interfering in any material respect with the business of the Group and existing, arising or incurred in the ordinary course of business;

(n) (i) bankers' Liens in respect of deposit accounts, (ii) statutory landlords' Liens, (iii) deposits to secure the performance of bids, trade contracts, government contracts, leases, statutory obligations, surety and appeal bonds, performance and return-of-money bonds or liabilities to insurance carriers under insurance or self-insurance arrangements and other obligations of like nature (so long as, (X) with respect to items described in (ii) and (iii) above of this paragraph (j), such Liens do not secure obligations constituting Indebtedness and (Y) with respect to items described in (i), (ii) and (iii) above of this paragraph (j), such Liens are incurred in the ordinary course of business), and (iv) Liens arising from any judgment, decree or other order which does not constitute an Event of Default and notices of *lis pendens* and associated rights related to litigation being contested in good faith by appropriate proceedings or for which adequate reserves have been made;

(o) Liens upon, or with respect to, any present or future assets or revenues or any part thereof which are created pursuant to any Repo transaction;

(p) Liens granted by any Subsidiary of the Parent, in favour of (a) the Parent or another Subsidiary of the Parent, or (b) the Parent in favour of its Subsidiary with respect to the property or assets, or any income or profits therefrom, of the Parent or such Subsidiary;

(q) any Lien over any rights, title or interest in, to or under any Product Delivery Contract, including the receivables generated under any such Product Delivery Contract and all other monies and proceeds arising in connection with any such Product Delivery Contract, and any Lien over any bank accounts into which the receivables, monies and proceeds from any such Product Delivery Contract are paid or transferred (including (i) amounts standing to the credit of such bank accounts and (ii) any rights under any agreements establishing or opening such bank accounts);

(r) Liens securing Hedging Obligations that are Incurred in the ordinary course of business (and not for speculative purposes);

(s) a right of set-off, right to combine accounts or any analogous right which any bank or other financial institution may have relating to any credit balance of any member of the Group and Liens Incurred in connection with a cash management programme established in the ordinary course of business; *provided, however*, that such cash management programme does not establish any dedicated cash collateral accounts and cash accounts are not subject to restrictions by the Parent or any of its Subsidiaries;

(t) any Lien securing Indebtedness permitted to be Incurred under paragraphs (vii) and (viii) of Condition 4.2.2;

(u) Liens to secure any Refinancing Indebtedness permitted to be Incurred under these Conditions; *provided, however, that*:

(i) the new Lien is limited to all or part of the same property and assets (or the equivalent Fair Market Value of such property and assets) that secured or, under the written agreements pursuant to which the original Lien arose, could secure the original Lien (plus improvements and accessions to such property or proceeds or distributions thereof); and

(ii) the Indebtedness secured by the new Lien is not increased to any amount greater than the sum of (A) the outstanding principal amount, or, if greater, committed

amount, of the Indebtedness Refinanced with such Refinancing Indebtedness and (B) an amount necessary to pay any fees and expenses, including premiums, related to such Refinancing;

(v) any extension, renewal of or substitution for any Lien permitted by any of the preceding paragraphs (a) through (u); *provided, however*, that, such extension, renewal or replacement shall be no more restrictive in any material respect than the original Lien, with respect to Liens incurred pursuant to this paragraph the principal amount secured has not increased and, if the property, income or assets subject to such Lien are changed in connection with such extension, renewal, replacement of or substitution, the Fair Market Value of the property, income or assets subject to such Lien is not increased; and

(w) any Lien, excluding any Lien arising under sub-paragraphs (a) to (v) above, securing Indebtedness (other than Subordinated Obligations) incurred in an aggregate principal amount at any one time outstanding not to exceed an amount equal to 20 per cent. of the Consolidated Total Assets (excluding any assets of a Project Company);

"**Permitted Business**" means the core business of the Group, comprising:

(a) the generation and sale of electricity, the sale of electricity capacity, and the generation, transmission and sale of heat;

(b) mining, processing, storage, loading, unloading, sale, marketing and distribution of coal and related products;

(c) any logistics business, including railcar transportation and port transshipment; and

(d) any business, services or activity that is related, complementary, incidental, ancillary or similar to any of (a) to (c) above.

"**Person**" means any individual, company, corporation, firm, partnership, joint venture, association, joint-stock company, trust, unincorporated organisation, government, or any agency or political subdivision thereof or any other entity;

"**Potential Event of Default**" means any event or circumstances which, with the lapse of time and/or the issue, making or giving of any notice, certificate, determination and/or request and/or the taking of any similar action and/or fulfilment of any similar condition, would constitute an Event of Default;

"**Product Delivery Contract**" means any contract for the sale or delivery of coal and other products of the Group traded in its ordinary course of business, entered into from time to time between (i) members of the Group or (ii) any member of the Group and any other Person in the ordinary course of such member of the Group's business that is customary in the coal industry, including any commission agency contracts, any spot sale contract and any transportation or other contracts related thereto;

"**Project Company**" means any Person in which the Parent holds a direct or indirect interest or which is a special purpose vehicle, where such person is established or used for the purposes of undertaking the acquisition, construction or development of any project and the primary method used to raise finance for such Person is the Non-recourse Project Financing;

"**Prospectus**" means the prospectus dated 13 September 2021 prepared in connection with the Notes;

"**Purchase Money Indebtedness**" means Lease Obligations, mortgage financings, purchase money obligations or other Indebtedness:

(a) Incurred to finance all or part of the acquisition, maintenance, repair or construction of any property or other assets (including Capital Stock of any Person); and

(b) where the aggregate principal amount of such Indebtedness does not exceed the lesser of Fair Market Value of such property or other assets as at the date of the Incurrence thereof or such purchase price or cost, including any Refinancing of such Indebtedness that does not increase the aggregate principal amount (or accreted amount, if less) thereof as of the date of Refinancing,

provided, however, that such Indebtedness is Incurred within 180 days after the acquisition, construction, improvement or lease of such property or other assets by the Parent or a Subsidiary;

"**Rating Agency**" means Fitch, Moody's, S&P or any of their successors or any rating agency substituted for any of them (or any permitted substitute of them) by the Parent from time to time with the prior written approval of the Trustee;

"**Refinance**" means, in respect of any Indebtedness, to refinance, extend, renew, refund, repay, prepay, purchase, redeem, defease or retire, or to issue other Indebtedness in exchange or replacement for, such Indebtedness. "**Refinances**", "**Refinanced**" and "**Refinancing**" shall have correlative meanings;

"**Refinancing Indebtedness**" means Indebtedness that Refinances any Indebtedness of the Parent or any Subsidiary of the Parent existing on the Issue Date or Incurred in compliance with these Conditions, including Indebtedness that Refinances Refinancing Indebtedness; *provided, however,* that:

(a) where the Indebtedness being Refinanced has a Stated Maturity that is later than the Stated Maturity of the Notes, such Refinancing Indebtedness has a Stated Maturity that is later than the Stated Maturity of the Notes;

(b) where the Indebtedness being Refinanced has a Stated Maturity that is earlier than the Stated Maturity of the Notes, such Refinancing Indebtedness has a Stated Maturity no earlier than the Stated Maturity of the Indebtedness being Refinanced;

(c) where the Indebtedness being Refinanced has a Weighted Average Life to Maturity that is later than the Weighted Average Life to Maturity of the Notes, such Refinancing Indebtedness has a Weighted Average Life to Maturity at the time such Refinancing Indebtedness is incurred that is greater than the Weighted Average Life to Maturity of the Notes;

(d) in all cases, such Refinancing Indebtedness has an aggregate principal amount (or if incurred with original issue discount, an aggregate issue price) that is equal to or less than the aggregate principal amount (or if incurred with original issue discount, the aggregate accreted value) then outstanding (plus fees and expenses, including any premium and defeasance costs) under the Indebtedness being Refinanced; and

(e) where the Indebtedness being Refinanced is subordinated in right of payment to the Notes and the Guarantees, such Refinancing Indebtedness is subordinated in right of payment to the Notes and Guarantees at least to the same extent as the Indebtedness being Refinanced,

provided further, however, that Refinancing Indebtedness shall not include Indebtedness of a Subsidiary of the Parent that is not a Guarantor that refinances Indebtedness of the Parent or a Guarantor;

"**Repo**" means a securities repurchase or resale agreement or reverse repurchase or resale agreement, a securities lending or rental agreement or any agreement relating to securities which is similar in effect to any of the foregoing and for the purposes of this definition, the term "**securities**"

means any Capital Stock, share, debenture or other debt or equity instrument, or derivative thereof, whether issued by any public or private company, any government or Agency or instrumentality thereof or any supranational, international or multinational organisation;

"**S&P**" means Standard & Poor's Credit Market Services Europe Limited, a division of the McGraw Hill Companies, Inc. or any successor to its rating business;

"**Stated Maturity**" means, with respect to any Indebtedness, the date specified in such Indebtedness as the fixed date on which the final payment of principal of such Indebtedness is due and payable, including pursuant to any mandatory redemption provision (but excluding any provision providing for the repurchase of such Indebtedness at the option of the holder or lender thereof upon the happening of any contingency unless such contingency has occurred);

"**Stock Exchange**" means The Irish Stock Exchange plc trading as Euronext Dublin;

"**Subordinated Obligations**" means, with respect to any Person, any Indebtedness of such Person (whether outstanding on the Issue Date or thereafter Incurred) which is subordinate or junior in right of payment to the Notes or the Guarantees pursuant to a written agreement to that effect;

"**Subsidiary**" of any specified Person means any corporation, partnership, joint venture, association or other business or entity, whether now existing or hereafter organised or acquired, (i) in the case of a corporation, of which more than 50 per cent. of the total voting power of the Voting Stock is held by such first-named Person and/or any of its Subsidiaries and such first-named Person or any of its Subsidiaries has the power to direct the management, policies and affairs thereof; or (ii) in the case of a partnership, joint venture, association, or other business or entity, with respect to which such first-named Person or any of its Subsidiaries has the power to direct or cause the direction of the management and policies of such entity by contract or otherwise if (in each case) in accordance with IFRS, as consistently applied, such entity would be consolidated with the first-named Person for financial statement purposes;

"**Taxes**" means any taxes (including interest or penalties thereon) which are now or at any time hereafter imposed, assessed, charged, levied, collected, demanded, withheld or claimed by the Russian Federation, Ireland or, as the case may be, the applicable jurisdiction for any of the Issuer or the Guarantors if different from the aforementioned; and the term "**Taxation**" shall be construed accordingly;

"**Trade L/C Obligations**" means reimbursement obligations of the Parent or the Subsidiaries in respect of any letter of credit, bankers' acceptance or similar credit transaction that relate to trade payables or other obligations not constituting Indebtedness and which are not treated as borrowings in accordance with IFRS and such obligations are reimbursed within 180 days following receipt of a demand for reimbursement;

"**U.S. Dollar Equivalent**" means with respect to any amount denominated in a currency other than U.S. Dollars, at any time for the determination thereof, the amount of U.S. Dollars obtained by converting such other currency involved into U.S. Dollars at the spot rate for the purchase of U.S. Dollars with such other currency as most recently published under "Currency Rates" in the section of the Financial Times entitled "Currencies, Bonds & Interest Rates" or any replacement thereof;

"**Voting Stock**" means, in relation to any Person, Capital Stock entitled (without the need for the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof;

"**Weighted Average Life to Maturity**" means, when applied to any Indebtedness at any date, the number of years obtained by dividing:

(a) the then outstanding aggregate principal amount or liquidation preference, as the case may be, of such Indebtedness into:

(b) the sum of the products obtained by multiplying:

(i) the amount of each then remaining instalment, sinking fund, serial maturity or other required payment of principal or liquidation preference, as the case may be, including payment at final maturity, in respect thereof, by

(ii) the number of years (calculated to the nearest one-twelfth) which will elapse between such date and the making of such payment.

"**Wholly-Owned Subsidiary**" of any specified Person means a Subsidiary of such Person all of the outstanding Capital Stock or other ownership interests of which shall at the time be owned by such Person or by one or more Wholly-Owned Subsidiaries of such Person.

SUMMARY OF THE PROVISIONS RELATING TO THE NOTES IN GLOBAL FORM

The following is a summary of the provisions to be contained in the Trust Deed to constitute the Notes and in the Global Notes which will apply to, and in some cases modify, the Terms and Conditions of the Notes while the Notes are represented by the Global Notes.

The Notes will be evidenced on issue either (i) in the case of Regulation S Notes, by a Regulation S Global Note deposited with, and registered in the name of a nominee for, a common depositary for Euroclear and Clearstream, Luxembourg; or (ii) in the case of Rule 144A Notes, by a Rule 144A Global Note deposited with a custodian for, and registered in the name of Cede & Co, as nominee of DTC.

Beneficial interests in the Regulation S Global Certificate may be held only through Euroclear or Clearstream, Luxembourg at any time. See *Book-Entry Procedures for the Global Notes*. On acquisition of a beneficial interest in a Regulation S Note, as represented by a Regulation S Global Note, the purchaser thereof will be deemed to represent, among other things, that it is not a U.S. person (as defined in Regulation S) and that it will not offer, sell, pledge or otherwise transfer such interest except (i) in an offshore transaction in accordance with Rule 903 or Rule 904 of Regulation S; or (ii) to a person whom the seller reasonably believes to be a person who is eligible to take delivery in the form of an interest in the Rule 144A Global Note. See *Transfer Restrictions*.

Beneficial interests in the Rule 144A Global Note may only be held through DTC at any time. See *Book-Entry Procedures for the Global Notes*. By acquisition of a beneficial interest in a Rule 144A Global Note, the purchaser thereof will be deemed to represent, among other things, that it is a QIB and that, if in the future it determines to transfer such beneficial interest, it will transfer such interest in accordance with the procedures and restrictions contained in the Agency Agreement. See *Transfer Restrictions*.

Beneficial interests in a Global Note will be subject to certain restrictions on transfer set forth in such Global Note and in the Agency Agreement, and with respect to the Rule 144A Global Note, as set forth in Rule 144A. The Rule 144A Global Note will bear the legends regarding such restrictions set forth under *Transfer Restrictions*. A beneficial interest in the Regulation S Global Note may be transferred to a person who takes delivery in the form of an interest in the Rule 144A Global Note, in denominations greater than or equal to the minimum denominations applicable to interests in the Rule 144A Global Note, and only upon receipt by the Registrar of a written certification (in the form provided in the Agency Agreement) to the effect that the transferor reasonably believes that the transferee is a QIB and that such transaction is in accordance with any applicable securities laws of any state of the United States or any other jurisdiction. Beneficial interests in the Rule 144A Global Note may be transferred to a person who takes delivery in the form of an interest in the Regulation S Global Note only upon receipt by the Registrar of a written certification (in the form provided in the Agency Agreement) from the transferor to the effect that the transfer is being made in accordance with Regulation S.

Any beneficial interest in the Regulation S Global Note that is transferred to a person who takes delivery in the form of an interest in the Rule 144A Global Note will, upon transfer, cease to be an interest in the Regulation S Global Note and become an interest in the Rule 144A Global Note and, accordingly, will thereafter be subject to all transfer restrictions and other procedures applicable to beneficial interests in the Rule 144A Global Note for as long as it remains such an interest. Any beneficial interest in the Rule 144A Global Note that is transferred to a person who takes delivery in the form of an interest in the Regulation S Global Note will, upon transfer, cease to be an interest in the Rule 144A Global Note and become an interest in the Regulation S Global Note and, accordingly, will thereafter be subject to all transfer restrictions and other procedures applicable to beneficial interests in the Regulation S Global Note for so long as it remains such an interest. No service charge will be made for any registration of transfer or exchange of Notes, but the Registrar may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection therewith.

Amendments to the Terms and Conditions

In addition, the Global Notes will contain a provision which modifies the Terms and Conditions of the Notes as they apply to the Notes evidenced by the Global Notes.

Notices

Notwithstanding Condition 16 of the Notes, so long as the Global Notes are held by or on behalf of DTC, Euroclear, Clearstream, Luxembourg or any other clearing system (an "**Alternative Clearing System**"), notices to Noteholders represented by the Global Notes may be given by delivery of the relevant notice to DTC, Euroclear, Clearstream, Luxembourg or (as the case may be) such Alternative Clearing System, *provided that*, for so long as the Notes are listed on Euronext Dublin, and the guidelines of Euronext Dublin so require, notice shall also be given in accordance with the guidelines published by Euronext Dublin. Notices will be deemed to have been given to the Noteholders on the second day after the day on which such notice is delivered to the relevant clearing system.

Payments

Payments of principal and interest in respect of Notes evidenced by a Global Note will be made to the person who appears at the relevant time on the register of the Noteholders as holder of the Notes represented by a Global Note against presentation and, if no further payment falls to be made in respect of the relevant Notes, surrender of such Global Note to or to the order of the Principal Paying Agent or such other Paying Agent as shall have been notified to the relevant Noteholders for such purpose. Upon any payment of principal or interest on a Global Note, the amount so paid shall be endorsed by or on behalf of the Principal Paying Agent on behalf of the Issuer in the appropriate schedule to the relevant Global Note, which endorsement will be *prima facie* evidence that such payment has been made in respect of the relevant Notes. Notwithstanding Condition 7, "**Record Date**" should mean the Clearing System Business Day immediately prior to the relevant due date for payments and the "**Clearing System Business Day**" means Monday to Friday inclusive, except 25 December and 1 January. For the purposes of payments made in respect of a Global Note, the relevant place of presentation shall be disregarded in the definition of "business day" set out in Condition 7.4.

Meetings

The holder of the Global Note will be treated as being two persons for the purposes of any quorum requirements of, or the right to demand a poll at, a meeting of holders of the Notes.

In considering the interests of Noteholders while a Global Note is held on behalf of a clearing system, the Trustee may have regard to any information provided to it by such clearing system or its operator as to the identity (either individually or by category) of its accountholders with entitlements to such Global Note and may consider such interests as if such accountholders were the holders of such Global Note.

Issuer's Option

So long as the Notes are evidenced by a Global Note and such Global Note is held by or on behalf of a clearing system, any option of the Issuer provided for in the Conditions shall be exercised by the Issuer giving notice to the Noteholders and the relevant clearing systems (or procuring that such notice is given on its behalf) within the time limits set out in and containing the information required by the Conditions, except that the notice shall not be required to contain the serial numbers of Notes drawn in the case of a partial exercise of an option and, accordingly, no drawing of Notes shall be required and instead the Notes to be redeemed shall be selected (i) in the case of the Regulation S Global Note, in accordance

with the rules and procedures of Euroclear and/or Clearstream, Luxembourg or (ii) in the case of the Rule 144A Global Note, on a pro rata pass-through distribution of principal basis.

Cancellation

Cancellation of any Note required by the Terms and Conditions of the Notes to be cancelled will be effected by reduction in the principal amount of the applicable Global Note.

Prescription

Claims against the Issuer in respect of principal and interest on the Notes while the Notes are represented by Global Notes will become void unless it is presented for payment within a period of ten years (in the case of principal) and five years (in the case of interest) from the appropriate Relevant Date (as defined in Condition 8 of the Notes).

Electronic Consent and Written Resolution

While any Global Note is registered in the name of any nominee for a clearing system, then:

(a) approval of a resolution proposed by the Issuer, the Guarantors or the Trustee (as the case may be) given by way of electronic consents communicated through the electronic communications systems of the relevant Clearing System(s) in accordance with their operating rules and procedures by or on behalf of all the holders of the Notes outstanding (an "Electronic Consent" as defined in the Trust Deed) shall, for all purposes (including matters that would otherwise require an Extraordinary Resolution to be passed at a meeting for which the Special Quorum was satisfied), take effect as an Extraordinary Resolution passed at a meeting of Noteholders duly convened and held, and shall be binding on all Noteholders whether or not they participated in such Electronic Consent; and

(b) where Electronic Consent is not being sought, for the purpose of determining whether a Written Resolution (as defined in the Trust Deed) has been validly passed, the Issuer, the Guarantors and the Trustee shall be entitled to rely on consent or instructions given in writing directly to the Issuer, the Guarantors and/or the Trustee, as the case may be, by accountholders in the clearing system with entitlements to such Global Note or, where the accountholders hold any such entitlement on behalf of another person, on written consent from or written instruction by the person for whom such entitlement is ultimately beneficially held, whether such beneficiary holds directly with the accountholder or via one or more intermediaries and provided that, in each case, the Issuer, the Guarantors and the Trustee have obtained commercially reasonable evidence to ascertain the validity of such holding and have taken reasonable steps to ensure that such holding does not alter following the giving of such consent or instruction and prior to the effecting of such amendment. Any resolution passed in such manner shall be binding on all Noteholders, even if the relevant consent or instruction proves to be defective. As used in this paragraph, "commercially reasonable evidence" includes any certificate or other document issued by Euroclear, Clearstream, Luxembourg or any other relevant clearing system, or issued by an accountholder of them or an intermediary in a holding chain, in relation to the holding of interests in the Notes. Any such certificate or other document shall, in the absence of manifest error, be conclusive and binding for all purposes. Any such certificate or other document may comprise any form of statement or print out of electronic records provided by the relevant clearing system (including Euroclear's EUCLID or Clearstream, Luxembourg's CreationOnline system) in accordance with its usual procedures and in which the accountholder of a particular principal or nominal amount of the Notes is clearly identified together with the amount of such holding. None of the Issuer, the Guarantors nor the Trustee shall be liable to any person by reason of having accepted as valid or not having rejected any certificate or other document to such effect purporting to be issued by any such person and subsequently found to be forged or not authentic.

Exchange for Definitive Notes

Exchange

Each Global Note will be exchangeable, free of charge to the holder, in whole but not in part, for Definitive Note if: (i) interests in the relevant Global Note are held by or on behalf of (A) DTC, and DTC notifies the Issuer that it is no longer willing or able to discharge properly its responsibilities as depositary with respect to the Global Note or ceases to be a "clearing agency" registered under the Exchange Act or if at any time it is no longer eligible to act as such, and the Issuer is unable to locate a qualified successor within 90 days of receiving notice or becoming aware of such ineligibility on the part of DTC; or (B) Euroclear or Clearstream, Luxembourg, as the case may be, is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise) or announces an intention permanently to cease business or does in fact do so, by the holder giving notice to the Registrar or any Transfer Agent; or (ii) if the Issuer would suffer a material disadvantage in respect of the Notes as a result of a change in the laws or regulations (taxation or otherwise) which would not be suffered were the Notes evidenced by Definitive Notes and a notice to such effect signed by two directors of the Issuer is delivered to the Trustee, by the Issuer giving notice to the Registrar or any Transfer Agent and the Noteholders, of its intention to exchange the relevant Global Note for Definitive Notes on or after the date specified in the notice.

The holder of the relevant Global Note may surrender such Global Note to or to the order of the Registrar or any Transfer Agent. In exchange for the relevant Global Note, as provided in the Agency Agreement, the Registrar will deliver, or procure the delivery of, an equal aggregate amount of duly executed and authenticated Definitive Notes in or substantially in the form set out in the relevant schedule to the Trust Deed.

The Registrar will not register the transfer of, or exchange of interests in, a Global Note for interests evidenced by Definitive Notes for a period of 15 calendar days ending on the date for any payment of principal or interest in respect of the Notes.

If only one of the Global Notes (the "**Exchange Global Note**") becomes exchangeable for Definitive Notes in accordance with the above paragraphs, transfers of Notes may not take place between, on the one hand, persons holding Definitive Notes issued in exchange for beneficial interests in the Exchange Global Note and, on the other hand, persons wishing to purchase beneficial interests in the other Global Note.

Delivery

After the circumstances set out above have occurred, the relevant Global Note shall be exchanged in full for Definitive Notes and the Issuer will (against such indemnity as the Registrar or any relevant Transfer Agent may require in respect of any tax or other duty of whatever nature which may be levied or imposed in connection with such exchange), cause sufficient Definitive Notes to be executed and delivered to the Registrar for completion, authentication and dispatch to the relevant Noteholders. A person having an interest in a Global Note must provide the Registrar with (a) a written order containing instructions and such other information as the Issuer and the Registrar may require to complete, execute and deliver such Notes; and (b) in the case of the Rule 144A Global Note, a fully completed, signed certification substantially to the effect that the exchanging holder is not transferring its interest at the time of such exchange or, in the case of simultaneous sale pursuant to Rule 144A, a certification that the transfer is being made in compliance with the provisions of Rule 144A to a purchaser that the transferor reasonably believes to be a QIB. Definitive Notes issued in exchange for a beneficial interest in the Rule 144A Global Note shall bear the legend applicable to transfers pursuant to Rule 144A, as set out under *Transfer Restrictions*.

Legends

The holder of a Definitive Note may transfer the Notes evidenced thereby in whole or in part (subject to the applicable minimum denomination) by surrendering it at the specified office of the Registrar or

any Transfer Agent, together with the completed form of transfer thereon. Upon the transfer, exchange or replacement of a Definitive Note representing a Rule 144A Note (the "**Rule 144A Definitive Note**") bearing the legend referred to under *Transfer Restrictions*, or upon specific request for removal of the legend on a Rule 144A Definitive Note, the Issuer will deliver only Rule 144A Definitive Notes that bear such legend, or will refuse to remove such legend, as the case may be, unless there is delivered to the Issuer and the Registrar such satisfactory evidence, which may include an opinion of counsel, as may reasonably be required by the Issuer that neither the legend nor the restrictions on transfer set forth therein are required to ensure compliance with the provisions of the Securities Act.

TAXATION

The following is a general description of certain United States federal, Russian and Irish tax considerations relating to the Notes. It does not purport to be a complete analysis of all tax considerations relating to the Notes, whether in those countries or elsewhere. Prospective purchasers of the Notes should consult their own advisers as to which countries' tax laws could be relevant to acquiring, holding and disposing of the Notes and receiving payments of interest, principal and/or other amounts under the Notes and the consequences of such actions under the tax laws of those countries. This summary is based upon the law as in effect on the date of this Prospectus and is subject to any change in law that may take effect after such date.

Also, investors should note that an appointment by an investor in the Notes, or any person through which an investor holds Notes, of a custodian, collection agent or similar person in relation to such Notes in any jurisdiction may have tax implications. Investors should consult their own tax advisers in relation to the tax consequences for them of any such appointment.

Certain U.S. Federal Income Tax Considerations

The following discussion is a summary of certain U.S. federal income tax consequences of the purchase, ownership and disposition of the Notes, but does not purport to be a complete analysis of all potential tax effects. The summary is limited to consequences relevant to a U.S. holder (as defined below) and does not address the effects of any U.S. federal tax laws other than U.S. federal income tax laws (such as estate and gift tax laws) or any state, local or non-U.S. tax laws. This discussion is based upon the Internal Revenue Code of 1986, as amended (the "**Code**"), Treasury regulations issued thereunder, and judicial and administrative interpretations thereof, each as of the date hereof, and all of which are subject to change, possibly with retroactive effect. No rulings from the U.S. Internal Revenue Service (the "**IRS**") have been or are expected to be sought with respect to the matters discussed below. There can be no assurance that the IRS will not take a different position concerning the tax consequences of the purchase, ownership or disposition of the Notes or that any such position would not be sustained.

This discussion does not address all of the U.S. federal income tax consequences that may be relevant to a U.S. holder in light of such U.S. holder's particular circumstances, including the impact of the unearned income Medicare contribution tax or alternative minimum tax, or to U.S. holders subject to special rules, such as certain financial institutions, U.S. expatriates, insurance companies, dealers in securities or currencies, traders in securities, persons that have ceased to be U.S. citizens or lawful permanent residents of the United States, investors holding the Notes in connection with a trade or business conducted outside the United States, U.S. holders whose functional currency is not the U.S. dollar, tax exempt organisations, regulated investment companies, real estate investment trusts, entities or arrangements treated as partnerships for U.S. federal income tax purposes or other pass through entities or arrangements and investors in such entities or arrangements, persons subject to special tax accounting rules as a result of any item of gross income with respect to the Notes being taken into account in an applicable financial statement, persons holding the Notes as part of a "straddle," "hedge," "conversion transaction" or other integrated transaction for U.S. federal income tax purposes and holders of the Group's existing indebtedness that will be repaid pursuant to this Offering. In addition, this discussion is limited to persons who purchase the Notes in the offering hereby for cash at original issue and at their "issue price" (the first price at which a substantial amount of the Notes is sold to the public for cash, excluding sales to bond houses, brokers or similar persons or organisations acting in the capacity of underwriters, placement agents or wholesalers) and who hold the Notes as capital assets within the meaning of Section 1221 of the Code (generally, property held for investment).

For purposes of this discussion, a "U.S. holder" is a beneficial owner of a Note that is, for U.S. federal income tax purposes, (i) an individual who is a citizen or resident of the United States; (ii) a corporation created or organized in the United States or under the laws of the United States, any state thereof or the District of Columbia; (iii) any estate the income of which is subject to U.S. federal income taxation regardless of its source; or (iv) any trust if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have the authority to

control all substantial decisions of the trust, or if a valid election is in place to treat the trust as a U.S. person.

If any entity or arrangement treated as a partnership for U.S. federal income tax purposes holds the Notes, the U.S. federal income tax treatment of a partner in the partnership generally will depend upon the status of the partner and the activities of the partner and the partnership. An entity or arrangement treated as a partnership for U.S. federal income tax purposes that is considering an investment in the Notes, and partners in such a partnership, should consult their tax advisors regarding the U.S. federal income tax consequences of the purchase, ownership and disposition of the Notes.

Prospective purchasers of the Notes should consult their tax advisors concerning the tax consequences of holding Notes in light of their particular circumstances, including the application of the U.S. federal income tax considerations discussed below, as well as the application of other U.S. federal tax laws (such as estate and gift tax laws) and state, local, non-U.S. or other tax laws.

Payments of stated interest

Payments of stated interest on the Notes (including any additional amounts and without reduction for any taxes withheld) generally will be includible in the gross income of a U.S. holder as ordinary income at the time that such payments are received or accrued, in accordance with such U.S. holder's method of accounting for U.S. federal income tax purposes.

Foreign tax credit

A U.S. holder may be able to claim a credit (or, at such U.S. holder's election, a deduction in lieu of such credit) with respect to any non-U.S. withholding taxes deducted from a payment on the Notes in computing such U.S. holder's U.S. federal income tax liability, subject to applicable limitations. Stated interest income on a Note generally will constitute foreign source income and generally will be considered "passive category income" in computing the foreign tax credit. There are significant complex limitations on a U.S. holder's ability to claim foreign tax credits. U.S. holders should consult their tax advisors regarding the creditability or deductibility of any withholding taxes.

Sale, exchange, retirement, redemption or other taxable disposition of Notes

Upon the sale, exchange, retirement, redemption or other taxable disposition of a Note, a U.S. holder generally will recognize gain or loss equal to the difference, if any, between the amount realized upon such disposition (less any amount equal to any accrued but unpaid stated interest, which will be taxable as stated interest income as discussed above to the extent not previously included in income by the U.S. holder) and such U.S. holder's adjusted tax basis in the Note. A U.S. holder's adjusted tax basis in a Note generally will be the purchase price of such Note paid by such U.S. holder. Any gain or loss recognised upon the sale, exchange, retirement, redemption or other taxable disposition of a Note generally will be U.S. source capital gain or loss and generally will be long-term capital gain or loss if the U.S. holder held the Note for more than one year on the date of disposition. Long-term capital gains of non-corporate U.S. holders (including individuals) are generally eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations.

Substitution of the Issuer

Condition 12.3 of the Terms and Condition of the Notes provides that, in accordance with provisions of the Trust Deed, the Trustee may agree with the Issuer and the Guarantors to substitute certain other entities in the place of the Issuer as the principal debtor under the Trust Deed and the Notes. Such a substitution of the issuer of the Notes might be treated for U.S. federal income tax purposes as a deemed disposition of the Notes by a U.S holder in exchange for new securities issued by the new obligor. As a result of this deemed disposition, a U.S. holder could be required to recognize gain or loss for U.S. federal income tax purposes equal to the difference, if any, between the fair market value of the new securities and the U.S. Holder's adjusted tax basis in the Notes. Any such gain generally will be taxed as described above under "Sale, exchange, retirement, redemption or other taxable disposition of

Notes". U.S. holders should consult their tax advisors with respect to the appropriate U.S. federal income tax treatment of a change in obligor with respect to the Notes.

Information reporting and backup withholding

In general, payments of stated interest on the Notes and the proceeds of the sale, exchange, retirement, redemption or other taxable disposition of a Note paid to a U.S. holder may be required to be reported to the IRS unless the U.S. holder properly establishes that it is a corporation or other exempt recipient. Backup withholding may apply to such payments if the U.S. holder fails to provide the applicable withholding agent with a taxpayer identification number or a certification that it is not subject to backup withholding. U.S. Holders may be required to provide such certification on IRS Form W-9.

Backup withholding is not an additional tax and any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a U.S. holder's U.S. federal income tax liability provided the required information is timely furnished to the IRS.

Tax return disclosure requirements

Individuals (and certain entities treated as individuals for this purpose) that own "specified foreign financial assets" (which includes debt of foreign entities) with an aggregate value in excess of certain thresholds generally are required to file an information report on IRS Form 8938 with respect to such assets with their tax returns. If a U.S. holder does not file a required IRS Form 8938, such U.S. holder may be subject to substantial penalties and the statute of limitations on the assessment and collection of all U.S. federal income taxes of such U.S. holder for the related tax year may not close before the date which is three years after the date on which such report is filed. The Notes may constitute specified foreign financial assets subject to these reporting requirements unless the Notes are held in an account at certain financial institutions. Under certain circumstances, an entity may be treated as an individual for purposes of these rules.

U.S. holders are urged to consult their tax advisors regarding the application of the foregoing disclosure requirements to their ownership of the Notes, including the significant penalties for noncompliance.

Certain Russian Tax Considerations

Taxation of the Notes

General

The following is an overview of certain Russian tax considerations relevant to the purchase, ownership and disposal of the Notes as well as the taxation of payments under the Guarantee. The overview does not seek to address the applicability of, or procedures in relation to, taxes levied by regions, municipalities or other non-federal level authorities of the Russian Federation, nor does it seek to address the availability of double tax treaty relief in respect of income payable on the Notes, or practical difficulties connected with claiming such double tax treaty relief.

Prospective investors should consult their own tax advisers regarding the tax consequences of investing in the Notes that may arise in their own particular circumstances. No representation with respect to the Russian tax consequences pertinent to any particular Noteholder is made hereby.

Many aspects of the Russian tax laws are subject to significant uncertainty and lack of interpretive guidance, resulting in inconsistent interpretations and application thereof. Further, provisions of the Russian Tax Code applicable to financial instruments and the interpretation and application of those provisions by the Russian tax authorities may be subject to more rapid and unpredictable changes (possibly with retroactive effect) and inconsistent interpretation than in jurisdictions with more developed capital markets or more developed taxation systems. In particular, the interpretation and application of such provisions will in practice rest substantially with local tax inspectorates and relevant interpretations may constantly change. In practice, interpretation by different tax inspectorates may be

inconsistent or contradictory, and may result in the imposition of conditions, requirements or restrictions that are not explicitly stated in the Russian Tax Code. Similarly, in the absence of binding precedents, court rulings on tax or other related matters taken by different Russian courts relating to the same or similar facts and circumstances may also be inconsistent or contradictory.

For the purposes of this overview, the term "**Resident Noteholder**" means:

- a Noteholder which is a legal entity or an organisation and is:
    - a Russian legal entity or organisation (including international companies registered in accordance with the Federal Law "On International Companies" No 290-FZ);
    - a foreign legal entity or organisation, in each case organised under a foreign law, that is, in the case of conflicting tax residency statuses based on the relevant foreign law and Russian law recognised as a Russian tax resident based on the provisions of an applicable double tax treaty (for the purposes of application of such double tax treaty);
    - a foreign legal entity or organisation, in each case organised under a foreign law, recognised as a Russian tax resident based on Russian domestic law (in case the Russian Federation is recognised as the place of effective management of such legal entity or organisation as determined in the Russian Tax Code unless otherwise envisaged by an applicable double tax treaty);
    - a legal entity or an organisation, in each case organised under a foreign law, which has voluntary obtained Russian tax residency;
    - a foreign legal entity or organisation, in each case organised under a foreign law, which holds and/ or disposes of the Notes through its permanent establishment in the Russian Federation (as defined by Russian tax law),

      (the "**Resident Noteholder – Legal Entity**"), and
    - a Noteholder who is an individual and is actually present in Russia for an aggregate period of 183 calendar days or more in any period comprised of 12 consecutive months (the "**Resident Noteholder – Individual**"). Presence in the Russian Federation is not considered interrupted if an individual departs for short periods (less than six months) from Russia for medical treatment or education purposes as well as for the employment or other duties related to the performance of works (services) on offshore hydrocarbons fields. The interpretation of this definition by the Ministry of Finance of the Russian Federation states that, for tax withholding purposes, an individual's tax residence status should be determined on the date of the income payment (based on the number of days in Russia in the 12-month period preceding the date of the payment). An individual's final tax liability in the Russian Federation for any reporting calendar year should be determined based on the number of days spent in Russia in such calendar year. There are some limited exemptions from the above '183 days' rule for certain categories of individuals in certain circumstances (i.e. military men, state and municipal employees, individuals to which measures of a restrictive nature are applied).

For the purposes of this overview, the term "**Non-Resident Noteholder**" means any Noteholder (including any individual (the "**Non-Resident Noteholder – Individual**") and any legal entity or an organisation (the "**Non-Resident Noteholder – Legal Entity**")) that does not qualify as a Resident Noteholder.

The Russian tax treatment of payments under the Guarantee made by the Guarantors to the Noteholders may affect the Noteholders. See "*—Taxation of Payments under the Guarantee*" below. Noteholders should seek professional advice on their tax status in Russia.

Non-Resident Noteholders

Legal entities and organisations

Acquisition of the Notes

The acquisition of the Notes by a Non-Resident Noteholder – Legal Entity (whether upon issuance or in the secondary market) should not trigger any Russian tax implications for the Non-Resident Noteholder – Legal Entity.

Interest on the Notes and repayment of principal on the Notes

Non-Resident Noteholders – Legal Entities generally should not be subject to any Russian taxes in respect of interest payments and repayments of principal on the Notes received from the Issuer as far as the Issuer does not have a permanent establishment in the Russian Federation.

Sale and/or other Disposal of the Notes

Interest on debt obligations of foreign companies (including any portion of the sales or disposal proceeds derived in connection with the disposal of the debt obligations of such non-Russian entities (such as the Notes)), even if payable from Russian sources, should not be subject to Russian withholding tax.

There is some uncertainty regarding the tax treatment of the portion of the sales or disposal proceeds, if any, attributable to accrued interest (coupon) on the bonds (i.e. debt obligations) where proceeds from sale or other disposition of the Notes are received from a source within Russia by a Non-Resident Noteholder – Legal Entity, which is caused by isolated precedents in which the Russian tax authorities challenged the non-application of the Russian tax to the amount of accrued interest (coupon) embedded into the sale price of the Notes. Although the Ministry of Finance of the Russian Federation in its most recent clarification letters opined that the amount of sale or other disposal proceeds attributable to the accrued interest paid to a non-Russian organisation should not be regarded as Russian source income and on this basis should not be subject to taxation in Russia, there remains a possibility that a Russian entity or a foreign entity having a registered tax presence in Russia which purchases the Notes or acts as an intermediary may seek to assess Russian withholding tax at the rate of 20% (or such other rate as could be effective at the time of such sale or other disposal) on the accrued interest portion of the disposal proceeds.

Non-Resident Noteholders – Legal Entities should consult their own tax advisers with respect to the tax consequences of the sale or other disposal of the Notes.

Individuals

Acquisition of the Notes

Under Russian tax legislation, the taxation of the income of Non-Resident Noteholders – Individuals will depend on whether the income qualifies as received from a Russian or non-Russian source. In case the income is not qualified as received from Russian sources no tax consequences should arise. However, according to provisions of the Russian Tax Code relating to the material benefit (deemed income) received by individuals as a result of the acquisition of securities, the acquisition of the Notes by Non-Resident Noteholders – Individuals (either at original issuance if the Notes are not issued at par or in the secondary market) may constitute a taxable event for Russian personal income tax purposes. In particular, if Non-Resident Noteholders – Individuals acquire the Notes in Russia and the acquisition price of the Notes is below fair market value (calculated under a specific procedure for the determination of market prices of securities for Russian personal income tax purposes), the difference may become subject to Russian personal income tax at the rate of 30% (or such other tax rate as may be effective at the time of the acquisition) provided such material benefit is viewed as income from Russian sources.

Although the Russian Tax Code does not contain any provisions as to how the source of the related material benefit should be determined, in practice the Russian tax authorities may infer that such income should be considered Russian source income if the Notes are purchased "in Russia". In the absence of any additional guidance as to what should be considered a purchase of securities in Russia, the Russian tax authorities may apply various criteria to determine the source of the related material benefit, including looking at the place of conclusion of the acquisition transaction, the location of the Issuer, the location of a custodian or other similar criteria.

There is no assurance therefore that as a result any material benefit received by the Non-Resident Noteholders – Individuals in connection with the acquisition of the Notes will not become taxable in Russia. However, when the Notes are initially issued at par, the above provisions are likely to be relevant for the acquisition of the Notes in the secondary market only.

The tax may be withheld at source of payment or, if the tax is not withheld, the Non-Resident Noteholder – Individual may be required to declare its income in Russia by filing a tax return and paying the tax.

Interest on the Notes and repayment of principal on the Notes

Non-Resident Noteholders – Individuals generally should not be subject to any Russian taxes in respect of interest payments and repayments of principal on the Notes received from the Issuer as far as the Issuer is not recognised as Russian tax resident or as far as Issuer's activities do not lead to creation of its permanent establishment in the Russian Federation.

Sale or other Disposal of the Notes

Non-resident Noteholder – Individuals should not be subject to any Russian taxes in respect of gains or other income realised on a redemption, sale or other disposal of the Notes outside of Russia, provided that the proceeds of such sale, redemption, or disposal are not received from a source within Russia.

If proceeds from the sale, redemption or other disposal of the Notes, including any portion of such proceeds attributable to accrued interest income under the Notes, are received from a Russian source, a Non-Resident Noteholder – Individual will generally be subject to Russian personal income tax at a rate of 30% (or such other tax rate as may be effective at the time of disposal) subject to any available double tax treaty relief as discussed below in "*Double Tax Treaty Relief*", in respect of the gross proceeds from such sale, redemption or other disposal less any available cost deduction (which includes the purchase price of the Notes).

Under Russian tax legislation, income received from a sale, redemption or disposal of securities should be treated as having been received from a Russian source if such sale, redemption or disposal occurs in Russia. In absence of any guidance as to what should be considered a sale or other disposal of securities "in Russia", the Russian tax authorities may apply various criteria in order to determine the source of the sale or other disposal, including looking at the place of conclusion of the transaction, the location of the Issuer, the location of the custodian or other similar criteria. There is no assurance, therefore, that proceeds received by Non-Resident Noteholders – Individuals from a sale, redemption or disposal of the Notes will not become subject to tax in Russia.

In case the sales or other disposal proceeds are considered to be derived from Russian sources, Russian personal income tax will apply to the gross amount of proceeds decreased by the amount of any available cost deductions (including the original acquisition costs of the Notes and expenses relating to the acquisition, holding and sale or other disposal) provided that duly executed supporting documentation is provided to the person obliged to calculate and withhold Russian personal income tax in relation to this income in a timely manner. There is a risk that, if the documentation supporting the cost deductions is deemed insufficient by the Russian tax authorities or by the person remitting the proceeds to a Non-Resident Noteholder – Individual (where such person is considered the tax agent, obliged to calculate and withhold Russian personal income tax and remit it to the Russian budget), the cost deductions may be disallowed and the tax will apply to the gross amount of the sales, redemption or disposal proceeds.

Furthermore, there is also some uncertainty regarding tax treatment of the portion of the sales or disposal proceeds derived by a Non-Resident Noteholder – Individual from Russian sources in connection with the sale or disposal of the Notes, that is attributable to accrued interest on the Notes, if any. The Russian tax authorities could argue that such portion of disposal proceeds if deemed to be received from the Russian sources should be subject to Russian personal income tax at the rate of 30% (or such other tax rate as may be effective at the time of payment), even if the sale or other disposal of the Notes results in a loss.

In certain circumstances, if the sales and/or disposal proceeds (including accrued interest on the Notes) are paid to a Non-Resident Noteholder – Individual by a licensed broker or an asset manager who carries out operations in Russia under an asset management agreement, a brokerage service agreement, an agency agreement, a commission agreement or a commercial mandate agreement for the benefit of a Non-Resident Noteholder – Individual or, in the absence of the above licensed broker or asset manager, by a Russian legal entity or individual entrepreneur under the purchase-sale (or barter) agreement concluded with such Non-Resident Noteholder – Individual, the applicable Russian personal income tax at the rate of 30% (or such other tax rate as may be effective at the time of payment) should be withheld at source by such person who will be considered the tax agent. In this case the amount of the withholding tax should be applied to the difference between the proceeds paid to the Non-Resident Noteholder – Individual and the amount of duly documented deductions relating to the original purchase cost and related expenses on the purchase, holding and sale of the Notes to the extent that such deductions and expenses can be determined by the person making the payment.

If Russian personal income tax obligation arises as a result of the sale, redemption or other disposal of the Notes but the tax has not been withheld, a Non-Resident Noteholder – Individual is required to file a personal income tax return in Russia to report the amount of income received to the Russian tax authorities and apply for a deduction in the amount of the acquisition cost and other expenses related to the acquisition, holding, sale or other disposal of the Notes, based on the provision of supporting documentation. The applicable personal income tax will then have to be paid by the individual on the basis of the filed personal income tax return.

Non-resident Noteholders – Individuals should consult their own tax advisers with respect to the tax consequences of the acquisition and disposal of the Notes and the tax consequences of the receipt of proceeds from a source within Russia in respect of a sale, redemption or other disposal of the Notes.

Resident Noteholders

A Resident Noteholder will generally be subject to all applicable Russian taxes and responsible for complying with any documentation requirements that may be established by law or practice in respect of gain from the sale, redemption or other disposal of the Notes and interest income received on the Notes. Resident Noteholders should consult their own tax advisors with respect to the effect that the acquisition, holding and disposal of the Notes may have on their tax position.

Legal entities and organisations

A Resident Noteholder – Legal Entity should, *prima facie*, be subject to Russian profits tax at the rate of up to 20% on interest (coupon) income on the Notes as well as on the capital gain from the sale, redemption or other disposal of the Notes. Generally, Resident Noteholders – Legal Entities are required to submit Russian profits tax returns and assess and pay tax on capital gains and interest (coupon) income.

Individuals

A Resident Noteholder – Individual should generally be subject to personal income tax at a rate of 13% (or 15% on the portion of income above the threshold of RUB 5 million) on (i) deemed income resulting from the acquisition of the Notes at a price below fair market value, (ii) on interest (coupon) income on the Notes and (iii) income received from the sale, redemption or other disposal of the Notes. If such income is paid to a Resident Noteholder – Individual by a tax agent, the applicable Russian personal

income tax of 13% (or 15% as applicable) should be withheld at source by such person. For the purposes of interest (coupon) income and income received from sale, redemption and/or other disposal of the Notes, a tax agent is a licensed broker or an asset manager who carries out operations under an asset management agreement, a brokerage service agreement, an agency agreement, a commission agreement or a commercial mandate agreement for the benefit of a Resident Noteholder – Individual in respect of relevant income. In the absence of the above licensed broker or asset manager for the purposes of income received from sale, redemption and/or other disposal of the Notes, a tax agent is a Russian legal entity or individual entrepreneur under the purchase-sale (or barter) agreement concluded with such Non-Resident Noteholder – Individual. In case the Russian personal income tax has not been withheld Resident Noteholders – Individuals are required to submit annual personal income tax returns, assess and pay the tax.

Resident Noteholders should consult their own tax advisers with respect to their tax position regarding the Notes.

Double Tax Treaty Relief

The Russian Federation has concluded double tax treaties with a number of countries and honours some double tax treaties concluded by the former Union of Soviet Socialist Republics. These double tax treaties may contain provisions that allow for the reduction or elimination of Russian withholding taxes with respect to income received by Non-Resident Noteholders from Russian sources, including income from the sale, redemption or other disposal of the Notes. To the extent double tax treaty relief is available, a Non-Resident Noteholder must comply with the certification, information, documentation and reporting requirements which are in force in the Russian Federation in order to obtain such relief.

In order to benefit from the double tax treaty, a Non-Resident Noteholder – Legal Entity should have the beneficial ownership right to receive income (*i.e.*, to be a person qualified as a "beneficial owner of income") and provide the tax agent with a certificate of tax residence issued by the competent authority of his/her country of residence for tax purposes before the date of each income payment. This certificate should confirm that the respective Non-Resident Noteholder – Legal Entity is a tax resident of the relevant double tax treaty country for the purposes of the relevant treaty in the particular calendar year during which the income is paid. This certificate should be apostilled or legalised and needs to be renewed on an annual basis. A notarised Russian translation of the certificate may be required. Also a Non-Resident Noteholder – Legal Entity should confirm that it has the beneficial ownership right to the income in question. However, the tax agent in practice may request additional documents confirming the beneficial owner status of the Non-Resident Noteholder – Legal Entity ant its eligibility for the benefits of the double tax treaty. There can be no assurance, however, that the advance double tax treaty relief will be available in practice.

In order to obtain the double tax treaty relief at source, a Non-Resident Noteholder – Individual should confirm to a tax agent that he or she is tax resident in a relevant foreign jurisdiction having a double tax treaty with Russia by providing the tax agent with (i) a passport of a foreign resident, or (ii) another document envisaged by an applicable federal law or recognised as a personal identity document of a foreign resident in accordance with the double tax treaty, and (iii) upon request of the tax agent, a tax residency certificate issued by the competent authorities of his or her country of residence for tax purposes. A notarised Russian translation of the certificate is required. The above provisions are intended to provide a tax agent with the opportunity of applying reduced (or zero) withholding tax rates under an applicable double tax treaty at source.

The law does not clearly establish how the tax agent shall determine whether a passport is sufficient to confirm the individual's eligibility to double tax treaty benefits. There are no requirements under the Russian Tax Code for the individuals to provide evidence that they can be deemed as actual recipients (beneficial owners) of income from the Russian sources.

The procedure of elimination of double taxation of Non-Resident Noteholders – Individuals in case of absence of a tax agent is not explicitly indicated in the Russian Tax Code.

Non-Resident Noteholders should consult their own tax advisers with respect to the applicability of any double tax treaty relief and the relevant procedures required in Russia.

Refund of Tax Withheld

If (i) Russian withholding tax on income derived from Russian sources by a Non-Resident Noteholder has been withheld at source or (ii) tax on such income has been paid by a Non-Resident Noteholder – Individual on the basis of a tax return, and such Non-Resident Noteholder is entitled to relief from tax on such income under an applicable double tax treaty allowing it not to pay the tax or to pay the tax at a reduced rate, a claim for a refund of such tax that was excessively withheld at source or paid by the Non-Resident Noteholder can be filed with the Russian tax authorities within three years from the end of the tax period in which the tax was withheld (subject to limitations described below).

The Russian tax authorities may, in practice, require a wide variety of documentation confirming a Noteholder's right to benefits under a double tax treaty. Such documentation, in practice, may not be explicitly required by the Russian Tax Code or the relevant double tax treaty and may to a large extent depend on the position of the local tax inspectors.

If a Non-Resident Noteholder – Individual wishes to obtain a refund, he/she should provide a confirmation of his/her tax residency status and claim for a refund of the tax withheld to the tax agent. In case there is no tax agent on the date of receipt by the individual of confirmation of its tax residence status in a relevant foreign jurisdiction having an applicable double tax treaty with Russia, the individual can file a claim for a refund and documents confirming the right for a refund directly with the Russian tax authorities.

Obtaining a refund of Russian taxes withheld may be a time-consuming process and can involve considerable practical difficulties, including the possibility that a tax refund may be denied for various reasons. Non-Resident Noteholders should consult their own tax advisors regarding the procedures required to be fulfilled in order to obtain a refund of Russian income tax which was excessively withheld at source.

Taxation of Payments under the Guarantees

Russian withholding tax

Non-Resident Noteholders

Legal entities and organisations

Payments following the enforcement of the Guarantee to be made by the Guarantors to Non-Resident Noteholders that are legal entities or organisations to the extent relating to interest on the Notes are likely to be treated as Russian source income. There is a risk that the whole amount of payments under the Guarantees could be treated as Russian-source income. Accordingly, such payments could be subject to withholding tax at a rate of 20% in the event that a payment under the Guarantee is made to a Non-Resident Noteholder – Legal Entity, subject to the provisions outlined in "*–Double Tax Treaty Relief*" above unless specific exemption envisaged by the Russian Tax Code for "Eurobonds structures" applies as discussed below.

Under this specific exemption no Russian withholding tax obligations should arise on Guarantee payments made to legal entity or organisations if such Guarantee is provided in respect of qualifying "traded bonds" issued by a foreign legal entity to finance debt obligations of the Russian debtors. In particular, the Russian Tax Code provides that Guarantors should be released from the obligation to withhold Russian income tax from Guarantee payments following the enforcement of the Guarantee provided that certain conditions are simultaneously met as follows:

(i) there is an underlying debt obligation of the Russian debtor arising in connection to the issuance of such "traded bonds", defined as bonds or other debt obligations

(a) listed and/or admitted to trading on one of the specified foreign exchanges, and/or

(b) that have been registered in the specified foreign depository/clearing organisations.

The lists of qualifying foreign exchanges and foreign depositary/clearing organisations were approved by Order No. 4393-U of the Central Bank of the Russian Federation dated 30 May 2017 (the "**List**"). The Irish Stock Exchange, Euroclear and Clearstream, Luxembourg are included in the List. The List also includes Depository Trust and Clearing Company (DTCC) while Depository Trust Company (DTC), which a subsidiary of DTCC, is not directly and explicitly included in the List. Therefore, there is a risk that the Russian tax authorities could apply a formalistic approach and take a position that DTC is not a qualifying foreign depository organisation.

(ii) there is a double tax treaty between Russia and the jurisdiction of tax residency of the legal entities or organisations which are recipients of guarantee payments; and

(iii) the above recipients of guarantee payments provide the respective Guarantor with tax residency certificates.

Release from the tax agent duty effectively means that, in practice, income tax on Guarantee payments should not arise in Russia, because currently there is no mechanism or requirement for foreign income recipients that are legal entities to self-assess and pay the tax. However, there can be no assurance that such mechanism will not be introduced in the future or that the Russian tax authorities would not seek to collect the tax from foreign income recipients.

If the Rule 144A Notes are delisted from Euronext Dublin, then such notes may potentially not fall within the definition of traded bonds under the Russian Tax Code (as DTC is not explicitly mentioned in the List), and therefore, there is a risk that the Guarantors may be required to withhold Russian withholding tax from payments under the Guarantees made to the recipients of such payments which are foreign legal entities or organisations. In any case, if the Notes are simultaneously (i) delisted from Euronext Dublin and (ii) exchanged for duly executed and authenticated registered Notes in definitive form in the limited circumstances specified under "*Summary of the Provisions Relating to the Notes in Global Form*", the above traded bonds exemption will not apply and the Guarantors may be required to withhold Russian withholding income tax from Guarantee payments made to foreign recipients which are legal entities or organisations, subject to the provisions outlined in "*–Double Tax Treaty Relief*".

Individuals

In the event a payment under the Guarantee is characterised as Russian-source income and is attributable to a Non-Resident Noteholder - Individual, such payment may be subject to personal income tax at a rate of 30%, subject to the provisions outlined in "*–Double Tax Treaty Relief*".

Gross-up

Under the gross-up provisions for the Notes, if payments made under the Guarantee are subject to any withholding taxes for any reason (as a result of which the Guarantors would be obligated to reduce the payments to be made under the Guarantee by the amount of such taxes to be withheld), the Guarantors are required to increase the payments as may be necessary so that the net amounts received in respect of such payments after such withholding or deduction will equal the respective amounts that would have been received in respect of such payments in the absence of such withholding or deduction. It is currently unclear whether the provisions obliging the Guarantors to gross-up payments will be enforceable in the Russian Federation. There is a risk that the tax gross-up for withholding tax will not take place and that the full amount of the payments made by the Guarantors will be subject to reduction by the Russian income tax at a rate of 20% in respect of Non-Resident Noteholders which are legal entities or organisations (or 30% in respect of Non-Resident Noteholders - Individuals) (or such other tax rate as may be effective at the time of such payments).

Non-Resident Noteholders should consult their tax advisors with respect to the tax consequences of the receipt of payments under the Guarantee, including applicability of any available double tax treaty relief.

Resident Noteholders legal entities and organisations and individuals

A Resident Noteholder is subject to all applicable Russian taxes and responsible for complying with any documentation requirements that may be established by law or practice in respect of payments to be received by such Noteholder under the Guarantee.

Due to the specifics of the Guarantee payments structure where the immediate recipient of the Guarantee payments is the Trustee (or the Principal Paying Agent to the order of the Trustee), which is a non-resident legal entity, it cannot be excluded that in case the "traded bonds" exemption is not applied, the Guarantee payments eventually received by Russian resident Noteholders may be taxed at source at 20% tax rate normally applicable to non-resident recipients of Russian sourced income which are legal entities or organisations. Russian Resident Holders may apply for a refund of excessively withheld tax in accordance with the general tax refund procedure envisaged by the Russian Tax Code. Resident Noteholders should consult their tax advisers with respect to the tax consequences of the receipt of payments under the Guarantee.

Russian VAT

Payments under the Guarantee to be made by the Guarantors attributable to the principal amount or interest under the Notes and the additional tax gross-up amounts, should not be subject to Russian VAT. Payments under the Guarantee attributable to compensation of other expenses (if any) could be subject to Russian VAT depending on the nature of such expenses.

Certain Irish Tax Considerations

The following is a summary of the principal Irish withholding tax consequences for individuals and companies of ownership of the Notes based on the laws and practice of the Irish Revenue Commissioners currently in force in Ireland and may be subject to change. It deals with Noteholders who beneficially own their Notes as an investment. Particular rules not discussed below may apply to certain classes of taxpayers holding Notes, such as dealers in securities, trusts, etc. The summary does not constitute tax or legal advice and the comments below are of a general nature only. Prospective investors in the Notes should consult their professional advisers on the tax implications of the purchase, holding, redemption or sale of the Notes and the receipt of interest thereon under the laws of their country of residence, citizenship or domicile.

Taxation of Noteholders

Withholding Tax

In general, tax at the standard rate of income tax (currently 20%) is required to be withheld from payments of Irish source interest which should include interest payable on the Notes. The Issuer will not be obliged to make a withholding or deduction for or on account of Irish income tax from a payment of interest on a Note where:

(a) the Notes are Quoted Eurobonds, i.e., securities which are issued by a company (such as the Issuer), which are listed on a recognised stock exchange (such as Euronext Dublin) and which carry a right to interest; and

(b) the person by or through whom the payment is made is not in Ireland, or if such person is in Ireland, either:

    (i) the Notes are held in a clearing system recognised by the Irish Revenue Commissioners; (DTC, Euroclear and Clearstream, Luxembourg are, amongst others, so recognised); or

(ii) the person who is the beneficial owner of the Notes is not resident in Ireland and has made a declaration to a relevant person (such as a paying agent located in Ireland) in the prescribed form.

Thus, subject to the discussion below, so long as the Notes continue to be quoted on Euronext Dublin and are held in a clearing system recognised by the Irish Revenue Commissioners (DTC, Euroclear, Clearstream, Luxembourg are, amongst others, so recognised) interest on the Notes can be paid by any Paying Agent acting on behalf of the Issuer free of any withholding or deduction for or on account of Irish income tax. If the Notes continue to be quoted but cease to be held in a recognised clearing system, interest on the Notes may be paid without any withholding or deduction for or on account of Irish income tax provided such payment is made through a Paying Agent outside Ireland.

Interest or other distributions paid on the Notes which are profit dependent or any part of which exceeds a reasonable commercial return could, under certain anti-avoidance provisions, be re-characterised as a non-deductible distribution and be subject to dividend withholding tax in certain circumstances. However, this should not apply on the basis of a confirmation by the Issuer that, at the time the Notes were issued, the Issuer was not in possession or aware of any information which could reasonably be taken to indicate that interest or other distributions paid on the Notes would not be subject, without reduction computed by reference to the amount of such interest or other distribution, to a tax in a relevant territory which generally applies to profits, income or gains received in that relevant territory by persons from sources outside that relevant territory, where the term "relevant territory" means a member state of the European Union (other than Ireland) or a country with which Ireland has signed a double tax treaty.

Encashment Tax

Irish tax will be required to be withheld at the rate of 25% from interest on any Note, where such interest is collected or realised by a bank or encashment agent in Ireland on behalf of any Noteholder. There is an exemption from encashment tax where (i) the beneficial owner of the interest is not resident in Ireland and has made a declaration to this effect in the prescribed form to the encashment agent or bank or (ii) the beneficial owner of the interest is a company which is within the charge to Irish corporation tax in respect of the interest.

Stamp Duty

No stamp duty or similar tax is imposed in Ireland on the issue, transfer or redemption of the Notes provided the Issuer is a qualifying company for the purposes of Section 110 of the Taxes Consolidation Act 1997 and the proceeds of the Notes are used in the course of the Issuer's business.

TRANSFER RESTRICTIONS

You are advised to consult legal counsel prior to making any offer, resale or other transfer offered hereby because of the following restrictions.

Rule 144A Notes

Each purchaser of Rule 144A Notes and the Guarantees within the United States, by accepting delivery of this Prospectus, will be deemed to have represented, agreed and acknowledged that:

(1) it is (a) a QIB; (b) acquiring such Securities for its own account, or for the account of a QIB; and (c) aware, and each beneficial owner of such Notes has been advised, that the seller of such Securities may be relying on the exemption from the provision of section 5 of the Securities Act provided by Rule 144A;

(2) it understands that the Rule 144A Notes and Guarantees have not been and will not be registered under the Securities Act and may not be offered, sold, pledged or otherwise transferred except (a) in accordance with Rule 144A to a person that it or any person acting on its behalf reasonably believes is a QIB purchasing for its own account or for the account of one or more QIBs; (b) in an offshore transaction in accordance with Rule 903 or 904 of Regulation S; or (c) pursuant to an exemption from registration under the Securities Act provided by Rule 144 thereunder (if available), in each case in accordance with any applicable securities laws of any state or another jurisdiction of the United States;

(3) it understands that the Rule 144A Notes, unless otherwise agreed between the Issuer and the Trustee in accordance with applicable law, will bear a legend to the following effect:

THIS NOTE AND THE GUARANTEES IN RESPECT THEREOF HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**") OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT (1) IN ACCORDANCE WITH RULE 144A UNDER THE SECURITIES ACT ("**RULE 144A**") TO A PERSON THAT THE HOLDER AND ANY PERSON ACTING ON ITS BEHALF REASONABLY BELIEVE IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A (A "**QIB**") PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF ONE MORE QIBs; OR (2) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH RULE 903 OR 904 OF REGULATION S UNDER THE SECURITIES ACT ("**REGULATION S**") OR (3) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT PROVIDED BY RULE 144 THEREUNDER (IF AVAILABLE), IN EACH CASE IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. NO REPRESENTATION CAN BE MADE AS TO THE AVAILABILITY OF THE EXEMPTION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT FOR RESALES OF THIS NOTE.

(4) the Issuer, the Guarantors, the Registrar, the Joint Bookrunners and their affiliates, and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements and agrees that, if any of the acknowledgements, representations or agreements deemed to have been made by it by its purchase of Rule 144A Notes is no longer accurate, it shall promptly notify the Guarantors and the Joint Bookrunners. If it is acquiring any Securities as a fiduciary or agent for one or more investor accounts, it represents that it has sole investment discretion with respect to each of those accounts and that it has full power to make the foregoing acknowledgements, representations and agreements on behalf of each account;

(5) it understands that the Rule 144A Notes will be evidenced by the Rule 144A Global Certificate. Before any interest in the Rule 144A Global Certificate may be offered, sold, pledged or

otherwise transferred to a person who takes delivery in the form of an interest in the Regulation S Global Certificate, it will be required to provide a Transfer Agent with a written certification (in the form provided in the Agency Agreement) as to compliance with the foregoing acknowledgements, representations and agreements and applicable securities laws; and

(6) it is relying on the information contained in this Prospectus in making its investment decision with respect to the Rule 144A Notes. It acknowledges that none of the Issuer, the Guarantors or the Joint Bookrunners has made any representation to it with respect to Guarantors or the offering or sale of the Rule 144A Notes, other than the information contained in this Prospectus which has been delivered to it and upon which it is relying in making its investment decision with respect to the Rule 144A Notes. It has had access to such financial and other information concerning the Issuer, the Guarantors and the Rule 144A Notes as it has deemed necessary in connection with its decision to purchase the Rule 144A Notes, including an opportunity to ask questions of and request information from the Issuer, the Guarantors and the Joint Bookrunners.

Prospective purchasers are hereby notified that sellers of the Securities may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A.

Book-Entry Procedures for the Global Notes

Custodial and depository links are to be established between DTC, Euroclear and Clearstream, Luxembourg to facilitate the initial issue of the Notes and cross market transfers of the Notes associated with secondary market trading. See *Book-Entry Ownership* and *Settlement and Transfer of Notes* below.

Investors may hold their interests in the Global Notes directly through DTC, Euroclear or Clearstream, Luxembourg if they are accountholders ("**Direct Participants**") or indirectly ("**Indirect Participants**" and together with Direct Participants, "**Participants**") through organisations which are accountholders therein.

Euroclear and Clearstream, Luxembourg

Euroclear and Clearstream, Luxembourg each hold securities for their customers and facilitate the clearance and settlement of securities transactions through electronic book-entry transfer between their respective accountholders. Indirect access to Euroclear and Clearstream, Luxembourg is available to other institutions which clear through or maintain a custodial relationship with an accountholder of either system. Euroclear and Clearstream, Luxembourg provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream, Luxembourg also deal with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream, Luxembourg have established an electronic bridge between their two systems across which their respective customers may settle trades with each other. Their customers are worldwide financial institutions including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations.

DTC

DTC is a limited purpose trust company organised under the laws of the State of New York, a "banking organisation" under the laws of the State of New York, a member of the U.S. Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial code and a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act. DTC was created to hold securities for its Participants and to facilitate the clearance and settlement of securities transactions between Participants through electronic computerised book-entry changes in accounts of its Participants, thereby eliminating the need for physical movement of certificates. Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organisations. Indirect access to DTC is available to others, such as banks, securities brokers, dealers and trust companies, which clear through or maintain a custodial relationship with a DTC Direct Participant, either directly or indirectly.

Investors may hold their interests in the Rule 144A Global Note directly through DTC if they are Direct Participants in the DTC system, or as Indirect Participants through organisations which are Direct Participants in such system.

DTC has advised the Issuer that it will take any action permitted to be taken by a holder of Notes only at the direction of one or more Direct Participants and only in respect of such portion of the aggregate principal amount of the Rule 144A Global Note as to which such Participant or Participants has or have given such direction. However, in the circumstances described under *Summary of Provisions Relating to the Notes while in Global Form*, DTC will surrender the Rule 144A Global Note for exchange for Definitive Notes (which Definitive Notes will bear the legend applicable to transfers pursuant to Rule 144A).

Book-Entry Ownership

Euroclear and Clearstream, Luxembourg

The Regulation S Global Note representing the Regulation S Notes will have an ISIN, a Common Code and a CFI Code and will be registered in the name of a nominee for, and deposited with a common depositary on behalf of, Euroclear and Clearstream, Luxembourg. The address of Euroclear is 1 Boulevard du Roi Albert II, 1210 Brussels, Belgium, and the address of Clearstream, Luxembourg is 42 Avenue JF Kennedy, L-1855, Luxembourg.

DTC

The Rule 144A Global Note representing the Rule 144A Notes will have an ISIN, a Common Code, and a CUSIP number and will be deposited with a custodian (the "**DTC Custodian**") for, and registered in the name of Cede & Co. as nominee of, DTC. The DTC Custodian and DTC will electronically record the principal amount of the Notes held within the DTC system. The address of DTC is 55 Water Street, New York, New York 10041, United States of America.

Relationship of Participants with Clearing Systems

Each of the persons shown in the records of DTC, Euroclear, Clearstream, Luxembourg as the holder of a Note evidenced by a Global Certificate must look solely to DTC, Euroclear or Clearstream, Luxembourg (as the case may be) for his share of each payment made by the Issuer to the holder of such Global Certificate and in relation to all other rights arising under such Global Certificate, subject to and in accordance with the respective rules and procedures of DTC, Euroclear or Clearstream, Luxembourg (as the case may be). The Issuer expects that, upon receipt of any payment in respect of Notes evidenced by a Global Certificate, the common depositary by whom such Certificate is held, or the nominee in whose name it is registered, will immediately credit the relevant Participants' or accountholders' accounts in the relevant clearing system with payments in amounts proportionate to their respective beneficial interests in the principal amount of the relevant Global Certificate as shown on the records of the relevant common depositary or its nominee. The Issuer also expects that payments by Direct Participants in any clearing system to owners of beneficial interests in any Global Certificate held through such Direct Participants in any clearing system will be governed by standing instructions and customary practices. Save as aforesaid, such persons shall have no claim directly against the Issuer in respect of payments due on the Notes for so long as the Notes are evidenced by such Global Certificate, and the obligations of the Issuer will be discharged by payment to the registered holder, as the case may be, of such Global Certificate in respect of each amount so paid. None of the Issuer, the Trustee or any Agent (as defined in the *Terms and Conditions of the Notes*) will have any responsibility or liability for any aspect of the records relating to or payments made on account of ownership interests in any Global Certificate or for maintaining, supervising or reviewing any records relating to such ownership interests.

Settlement and Transfer of Notes

Subject to the rules and procedures of each applicable clearing system, purchases of Notes held within a clearing system must be made by or through Direct Participants, which will receive a credit for such Notes on the clearing system's records. The ownership interest of each actual purchaser of each such Note (the "**Beneficial Owner**") will in turn be recorded on the Direct and Indirect Participants' records.

Beneficial Owners will not receive written confirmation from any clearing system of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which such Beneficial Owner entered into the transaction.

Transfers of ownership interests in Notes held within the clearing system will be effected by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in such Notes, unless and until interests in any Global Certificate held within a clearing system are exchanged for Definitive Notes.

No clearing system has knowledge of the actual Beneficial Owners of the Notes held within such clearing system, and its records will reflect only the identity of the Direct Participants to whose accounts such Notes are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers. Conveyance of notices and other communications by the clearing systems to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

The laws of some jurisdictions may require that certain persons take physical delivery in definitive form of securities. Consequently, the ability to transfer interests in a Global Certificate to such persons may be limited. As DTC can only act on behalf of Direct Participants, who in turn act on behalf of Indirect Participants, the ability of a person having an interest in the Rule 144A Global Note to pledge such interest to persons or entities that do not participate in DTC, or otherwise take actions in respect of such interest, may be affected by a lack of physical certificate in respect of such interest.

Trading between Euroclear and/or Clearstream, Luxembourg Participants

Secondary market sales of book-entry interests in the Notes held through Euroclear or Clearstream, Luxembourg to purchasers of book-entry interests in the Notes held through Euroclear or Clearstream, Luxembourg will be conducted in accordance with the normal rules and operating procedures of Euroclear and Clearstream, Luxembourg and will be settled using the procedures applicable to conventional Eurobonds.

Trading between DTC Participants

Secondary market sales of book-entry interests in the Notes between DTC Participants will occur in the ordinary way in accordance with DTC rules and will be settled using the procedures applicable to United States corporate debt obligations in DTC's same-day funds settlement system in same-day funds, if payment is effected in U.S. dollars, or free of payment, if payment is not effected in U.S. dollars. Where payment is not effected in U.S. dollars, separate payment arrangements outside DTC are required to be made between the DTC Participants.

Trading between DTC seller and Euroclear/Clearstream, Luxembourg purchaser

When book-entry interests in Notes are to be transferred from the account of a DTC Participant holding a beneficial interest in the Rule 144A Global Note to the account of a Euroclear or Clearstream, Luxembourg accountholder wishing to purchase a beneficial interest in the Regulation S Global Note (subject to the certification procedures provided in the Agency Agreement), the DTC Participant will deliver instructions for delivery to the relevant Euroclear or Clearstream, Luxembourg accountholder

to DTC by 12 noon, New York time, on the settlement date. Separate payment arrangements are required to be made between the DTC Participant and the relevant Euroclear or Clearstream, Luxembourg Participant. On the settlement date, the DTC Custodian of the Rule 144A Global Note will instruct the Registrar to: (i) decrease the amount of Notes registered in the name of Cede & Co. and evidenced by the Rule 144A Global Note of the relevant class; and (ii) increase the amount of Notes registered in the name of the nominee of the common depositary for Euroclear and Clearstream, Luxembourg and evidenced by the Regulation S Global Note. Book-entry interests will be delivered free of payment to Euroclear or Clearstream, Luxembourg, as the case may be, for credit to the relevant accountholder on the first business day following the settlement date.

Trading between Euroclear/Clearstream, Luxembourg seller and DTC purchaser

When book-entry interests in the Notes are to be transferred from the account of a Euroclear or Clearstream, Luxembourg accountholder to the account of a DTC Participant wishing to purchase a beneficial interest in the Rule 144A Global Note (subject to the certification procedures provided in the Agency Agreement), the Euroclear or Clearstream, Luxembourg Participant must send to Euroclear or Clearstream, Luxembourg delivery free of payment instructions by 7.45 p.m., Brussels or Luxembourg time, one business day prior to the settlement date. Euroclear or Clearstream, Luxembourg, as the case may be, will in turn transmit appropriate instructions to the common depositary for Euroclear and Clearstream, Luxembourg and the Registrar to arrange delivery to the DTC Participant on the settlement date. Separate payment arrangements are required to be made between the DTC Participant and the relevant Euroclear or Clearstream, Luxembourg accountholder, as the case may be. On the settlement date, the common depositary for Euroclear and Clearstream, Luxembourg will: (a) transmit appropriate instructions to the DTC Custodian of the Rule 144A Global Note who will in turn deliver such book-entry interests in the Notes free of payment to the relevant account of the DTC Participant; and (b) instruct the Registrar to (i) decrease the amount of Notes registered in the name of the nominee of the common depositary for Euroclear and Clearstream, Luxembourg and evidenced by the Regulation S Global Note; and (ii) increase the amount of Notes registered in the name of Cede & Co. and evidenced by the Rule 144A Global Note.

Although DTC, Euroclear and Clearstream, Luxembourg have agreed to the foregoing procedures in order to facilitate transfers of beneficial interests in Global Certificates among Participants and accountholders of DTC, Euroclear and Clearstream, Luxembourg, they are under no obligation to perform or continue to perform such procedure, and such procedures may be discontinued at any time. None of the Issuer, the Trustee or any agent will have the responsibility for the performance by DTC, Euroclear, Clearstream, Luxembourg or their respective Direct or Indirect Participants of their respective obligations under the rules and procedures governing their operations.

Pre-issue Trades Settlement

It is expected that delivery of the Notes will be made against payment therefor on the Closing Date, which could be more than three business days following the date of pricing. Under Rule 15c6-1 under the Exchange Act, trades in the United States secondary market generally are required to settle within two business days (T+2), unless the parties to any such trade expressly agree otherwise.

Accordingly, purchasers who wish to trade the Notes in the United States on the date of pricing or the next succeeding business days until three days prior to the Closing Date will be required, by virtue of the fact the Notes initially will settle beyond T+2, to specify an alternate settlement cycle at the time of any such trade to prevent a failed settlement. Settlement procedures in other countries will vary.

Purchasers of the Notes may be affected by such local settlement practices, and purchasers of the Notes between the relevant date of pricing and the Closing Date should consult their own advisers.

SUBSCRIPTION AND SALE

Summary of Subscription Agreement

AO "ALFA-BANK" (acting jointly with Alfa Capital Markets Ltd), Alfa Capital Markets Ltd (acting jointly with AO "ALFA-BANK"), Bank of China Limited, London Branch, Citigroup Global Markets Limited, Commerzbank Aktiengesellschaft, Gazprombank (Switzerland) Ltd, Merrill Lynch International, Renaissance Securities (Cyprus) Limited, Sberbank CIB (UK) Limited and VTB Capital plc (collectively the "**Joint Bookrunners**") have, pursuant to the terms and conditions set forth in a subscription agreement dated 13 September 2021 (the "**Subscription Agreement**"), severally (and not jointly nor jointly and severally) agreed with the Issuer and the Guarantors, subject to the satisfaction of certain conditions set forth therein, to subscribe and pay for the Notes at the issue price of 100% of the principal amount of the Notes in accordance with the Subscription Agreement in the amounts set out below:

	Purchase commitment
	(U.S.$)
Joint Bookrunners	
AO "ALFA-BANK" (acting jointly with Alfa Capital Markets Ltd), Alfa Capital Markets Ltd (acting jointly with AO "ALFA-BANK")	55,400,000
Bank of China Limited, London Branch	55,400,000
Citigroup Global Markets Limited	56,800,000
Commerzbank Aktiengesellschaft	55,400,000
Gazprombank (Switzerland) Ltd	55,400,000
Merrill Lynch International	55,400,000
Renaissance Securities (Cyprus) Limited	55,400,000
Sberbank CIB (UK) Limited	55,400,000
VTB Capital plc	55,400,000
Total	**500,000,000**

The Company has agreed to pay to the Joint Bookrunners a combined management, underwriting and selling commission pursuant to the Subscription Agreement. The Company has also agreed to reimburse, the Joint Bookrunners and the Trustee for certain of their expenses in connection with the offering of the Notes. The Joint Bookrunners are entitled to be released and discharged from their obligations under the Subscription Agreement in certain circumstances prior to payment being made to the Issuer. For investors in the Notes, the yield to maturity is 3.375% per annum. This calculation is based on the coupon rate, length of time to maturity and market price. It assumes that the interest paid over the life of the Notes is reinvested at the same rate.

Selling Restrictions

United States

Certain Joint Bookrunners are not broker-dealers registered with the SEC and, therefore, may not make sales of any Notes in the United States or to U.S. persons except in compliance with applicable U.S. laws and regulations. To the extent that such Joint Bookrunners intend to effect sales of the Notes in the United States, they will do so only through one or more U.S. registered broker-dealers affiliates (or, in the case of VTB Capital plc only, through Xtellus Capital Partners Inc. ("**Xtellus**") who acts as an agent of VTB Capital plc pursuant to Rule 15a-6 under the Exchange Act in connection with securities transactions effected with U.S. investors) or otherwise as permitted by applicable U.S. law.

The Notes and the Guarantees (the "**Securities**") have not been and will not be registered under the Securities Act, or the securities laws of any State or other jurisdiction of the United States, and may not be offered or sold within the United States except pursuant to an exemption from, or in a transaction not subject to the registration requirements of the Securities Act.

The Securities are being offered and sold outside of the United States in reliance on Regulation S. The Subscription Agreement provides that the Joint Bookrunners may directly or through their respective U.S. broker-dealer affiliates (or, in the case of VTB Capital plc only, through Xtellus who acts as an agent of VTB Capital plc pursuant to Rule 15a-6 under the Exchange Act in connection with securities transactions effected with U.S. investors) arrange for the offer and resale of the Securities within the United States only to qualified institutional buyers in reliance on Rule 144A.

In addition, until 40 days after the commencement of the offering of the Securities, an offer or sale of Securities within the United States by a dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A.

Terms used in this section have the meanings given to them by Regulation S.

The Issuer, the Guarantors and the Joint Bookrunners reserve the right to reject any offer to purchase the Notes, in whole or in part, for any reason.

Prohibition of Sales to EEA Retail Investors

Each Joint Bookrunner has severally (and not jointly nor jointly and severally) represented, warranted and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes to any retail investor in the EEA. For these purposes the expression "retail investor" means a person who is one (or more) of the following:

(a) a retail client as defined in point (11) of Article 4(1) of MiFID II; or

(b) a customer within the meaning of the IDD, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

United Kingdom

Prohibition of Sales to UK Retail Investors

Each Joint Bookrunner has severally (and not jointly nor jointly and severally) represented and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes to any retail investor in the UK. For the purposes of this provision the expression "retail investor" means a person who is one (or more) of the following:

(a) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA; or

(b) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA.

Other Regulatory Restrictions

Each Joint Bookrunner has severally (and not jointly nor jointly and severally) represented, warranted and agreed that:

(a) **Financial promotion**: it has only communicated or caused to be communicated, and will only communicate or cause to be communicated, any invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 (the "**FSMA**")) received by it in connection with the issue or sale of any Notes in circumstances in which section 21(1) of the FSMA does not apply to the Issuer; and

(b) **General compliance**: it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Notes in, from or otherwise involving the United Kingdom.

Russian Federation

Each Joint Bookrunner has severally and not jointly and severally represented, warranted and agreed with the Issuer, the Guarantors and each of the other Joint Bookrunners that the Notes will not be offered or sold or otherwise transferred as part of their initial distribution or at any time thereafter, to or for the benefit of any persons (including legal entities) resident, incorporated, established or located in the Russian Federation unless and to the extent otherwise permitted under Russian law.

Ireland

Each Joint Bookrunner has severally (and not jointly nor joint and severally) represented, warranted and agreed that:

(a) it will not underwrite the issue of, or place the Notes, otherwise than in conformity than with the provisions of the European Union (Markets in Financial Instruments) Regulations 2017 (as amended, the **"MiFID II Regulations"**), including, without limitation, Regulation 5 (*Requirement for Authorisation (and certain provisions concerning MTFs and OTFs)*) thereof and any codes of conduct made under the MiFID II Regulations, and the provisions of the Investor Compensation Act 1998 (as amended);

(b) it will not underwrite the issue of, or place, the Notes, otherwise than in conformity with the provisions of the Companies Act 2014, the Central Bank Acts 1942-2018 (as amended) and any codes of conduct rules made under Section 117(1) of the Central Bank Act 1989 (as amended);

(c) it will not underwrite the issue of, or place, or do anything in Ireland in respect of, the Notes otherwise than in conformity with the provisions of the Regulation (EU) 2017/1129 (as amended) and any rules issued by the CBI under Section 1363 of the Companies Act 2014; and

(d) it will not underwrite the issue of, place or otherwise act in Ireland in respect of, the Notes, otherwise than in conformity with the provisions of the Market Abuse Regulation (EU 596/2014) (as amended) and any rules and guidance issued by the CBI under Section 1370 of the Companies Act 2014.

Singapore

Each Joint Bookrunner has severally (and not jointly nor jointly and severally) represented, warranted and undertaken that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (the "**SFA**")) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

General

Each Joint Bookrunner has severally (and not jointly nor jointly and severally) undertaken that it has, to the best of its knowledge and belief, complied and will comply in all material respects with applicable laws and regulations in each jurisdiction in which it offers, sells or delivers Notes or distributes this

Prospectus (and any amendments thereof and supplements thereto) or any other offering or publicity material relating to the Notes, the Issuer or the Guarantors.

Certain of the Joint Bookrunners and their affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may perform services for the Issuer, the Guarantors and their respective affiliates in the ordinary course of business. Certain of the Joint Bookrunners and their affiliates may have positions, deal or make markets in the Notes, related derivatives and reference obligations, including (but not limited to) entering into hedging strategies on behalf of the Issuer, the Guarantors and their respective affiliates, investor clients, or as principal in order to manage their exposure, their general market risk, or other trading activities.

In addition, in the ordinary course of their business activities, the Joint Bookrunners and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers.

Such investments and securities activities may involve securities and/or instruments of the Issuer, the Guarantors and their respective affiliates. Certain of the Joint Bookrunners and their affiliates that have a lending relationship with the Issuer and the Guarantors routinely hedge their credit exposure to Issuer consistent with their customary risk management policies. Typically, such Joint Bookrunners and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in securities, including potentially the Notes. Any such positions could adversely affect future trading prices of the Notes. The Joint Bookrunners and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

The Issuer and the Guarantors are parties to the Subscription Agreement and have given certain representations and warranties, covenants and indemnities to the Joint Bookrunners therein.

GENERAL INFORMATION

1. Application has been made to list the Notes on Euronext Dublin, through the Listing Agent, Arthur Cox Listing Services Limited ("**ACLSL**"). ACLSL is acting solely in its capacity as listing agent for the Issuer in relation to the Notes and is not itself seeking admission to the Official List or to trading on the regulated market. It is expected that the listing of the Notes will be granted on or before 13 September 2021. Transactions will normally be effected for delivery on the third working day after the day of the transaction, subject only to the issue of the Global Notes.

2. The Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg and DTC. The International Securities Identification Number ("**ISIN**") of the Regulation S Global Note is XS2384174228 and the Common Code of the Regulation S Global Note is 238417422. The CUSIP number of the Rule 144A Global Note is 78486M AA8, the ISIN of the Rule 144A Global Note is US78486MAA80 and the Common Code of the Rule 144A Global Note is 238417899. The Regulation S FISN code is SUEK SECURITIES/3.5EUR NT 20260915 and the Regulation S CFI code is DBFNFR. The Rule 144A FISN code is SUEK SEC DESIGN/GTD NT 20260915 GTD and the Rule 144A CFI code is DBFGGR.

3. No consents, approvals, authorisations or orders of any regulatory authorities in the Russian Federation are required by the Issuer or the Guarantors for the issue of the Notes, giving of the Guarantees and performance of their obligations thereunder.

4. The Legal Entity Identifier of the Issuer is 635400WACQ1BCYSYZS41. The Legal Entity Identifier of the Company is 98450068F4EBA751BA19. The Legal Entity Identifier of SUEK-Khakasia is 984500BR65BO82BDVE37. The Legal Entity Identifier of Tugnuisky Opencast Mine is 9845007D476B5137BA95. The Legal Entity Identifier of SUEK-Kuzbass is 98450048073EOC1CCB48.

5. The issue of the Notes and the execution and performance by the Issuer of documents to be entered into by the Issuer in relation to the Notes have been approved and authorised by a resolution at a meeting of the Board of the Directors of the Issuer dated 10 September 2021. The Issuer has obtained all necessary consents, approvals and authorisations in Ireland in connection with the issue and performance of the obligations under the Notes.

6. The Guarantee and the other documents to be entered into by the Company in relation to the issue of the Notes have been approved and authorised by a resolution at a meeting of the Board of Directors of the Company dated 30 August 2021. The Company has obtained all necessary consents, approvals and authorisations in Russia in connection with the Guarantee and the issue and performance of the obligations under the Notes.

7. The Guarantee and the other documents to be entered into by SUEK-Khakasia in relation to the issue of the Notes have been approved and authorised by a resolution of the sole participant of SUEK-Khakasia dated 30 August 2021. SUEK-Khakasia has obtained all necessary consents, approvals and authorisations in Russia in connection with the Guarantees and the issue and performance of the obligations under the Notes.

8. The Guarantee and the other documents to be entered into by Tugnuisky Opencast Mine in relation to the issue of the Notes have been approved and authorised by a resolution of the sole shareholder of Tugnuisky Opencast Mine dated 30 August 2021. Tugnuisky Opencast Mine has obtained all necessary consents, approvals and authorisations in Russia in connection with the Guarantees and the issue and performance of the obligations under the Notes.

9. The Guarantee and the other documents to be entered into by SUEK-Kuzbass in relation to the issue of the Notes have been approved and authorised by a resolution of the board of directors of SUEK-Kuzbass dated 27 August 2021. SUEK-Kuzbass has obtained all necessary consents,

approvals and authorisations in Russia in connection with the Guarantees and the issue and performance of the obligations under the Notes.

10. There are no, and have not been, any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Guarantors are aware) which may have or have had during the 12 months prior to the date of this Prospectus, a significant effect on the financial position or profitability of the Guarantors or the Group, except as disclosed in this Prospectus (see "*Business–Litigation*").

11. Since 29 June 2021, there has been no material adverse change in the prospects of the Issuer, nor any significant change in the financial performance or financial position of the Issuer.

12. The consolidated financial statements of the Group as at and for the years ended 31 December 2020 and 31 December 2019, included in this Prospectus, have been audited by JSC KPMG, independent auditors, as stated in their reports appearing herein. The consolidated financial information of the Group set out in this Prospectus, as at and for years ended 31 December 2018, has been derived or calculated based on, except where noted otherwise, from the consolidated financial statements of the Group as at and for the years ended 31 December 2019. JSC KPMG's address is 10 Presnenskaya Naberezhnaya, Moscow, Russia. JSC KPMG is a member of self-regulatory organisation of auditors non-profit partnership "Auditor Association Sodruzhestvo".

13. The consolidated interim condensed financial information of the Group as at for the six months ended 30 June 2021 have been reviewed by AO Deloitte & Touche CIS, independent auditors, as stated in their report appearing herein. With respect to the unaudited interim financial information for the period ended 30 June 2021, included in this Prospectus, the independent registered public accounting firm has reported that they applied limited procedures in accordance with professional standards for a review of such information. However, their separate report included in the Group's unaudited interim financial information for the period ended 30 June 2021, and included in this Prospectus, states that they did not audit and they do not express an opinion on that interim financial information. Accordingly, the degree of reliance on their report on such information should be restricted in light of the limited nature of the review procedures applied. AO Deloitte & Touche CIS is a member of self-regulatory organisation of auditors non-profit partnership "Auditor Association Sodruzhestvo".

14. There has been no material adverse change in the prospects of the Guarantors or the Group since 31 December 2020, which is the date of the Group's last audited consolidated financial statements included in this Prospectus, and there has been no significant change in the Guarantors' or the Group's trading position, financial position or financial performance since 30 June 2021.

15. There are no, and have not been, any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Issuer is aware) which may have or have had since 29 June 2021, a significant effect on the financial position or profitability of the Issuer.

16. None of Guarantors, the Issuer or any other member of the Group has entered into any material contracts outside the ordinary course of business which could result in the Guarantors, the Issuer or any member of the Group becoming subject to an obligation or entitlement that would be material to the Issuer's ability to meet its obligations to Noteholders in respect of the Notes or the Company's or the Guarantors' ability to meet its obligations under the Guarantees.

17. For so long as any of the Notes is outstanding, copies (and certified English translations where documents at issue are not in English, unless indicated otherwise below) of the following documents may be inspected at and are available at https://live.euronext.com/en/product/bonds-detail/27579/documents and in physical form at the registered office of the Issuer and the

specified offices of the Trustee and the Principal Paying Agent in London during usual business hours on any business day (Saturdays, Sundays and public holidays excepted):

(a) a copy of this Prospectus along with any supplement to this Prospectus;

(b) the Constitution of the Issuer;

(c) the charter of the Company (an English copy which is available for information purposes only and has not been certified);

(d) the charter of SUEK-Khakasia (an English copy which is available for information purposes only and has not been certified);

(f) the charter of Tugnuisky Opencast Mine (an English copy which is available for information purposes only and has not been certified);

(g) the charter of SUEK-Kuzbass (an English copy which is available for information purposes only and has not been certified);

(h) the Consolidated Financial Statements, including the related independent auditor's report in respect thereof; and

(j) the Trust Deed, which includes the Guarantees and the form of Global Notes.

18. SRK Consulting (UK) Limited is an independent consulting engineering organisation, wholly owned by its employees, that has been active in the mining and metals sector for approximately 45 years. The firm has its registered address at 21 Gold Tops, City and County of Newport, NP20 4PG, Wales, United Kingdom. The historical SRK Executive Summary of the SRK CPR and the accompanying SRK Consent Letter is included in this Prospectus in the form and context in which it is included, with the consent of SRK which consent as provided is expressly subject to all cautionary language, accompanying statements and qualifiers as outlined the SRK Consent Letter. Furthermore, given that the SRK Executive Summary, SRK CPR, 2019 Statements, Economic Evaluation, Mine Closure and accompanying opinion, conclusions and recommendations (collectively the "**SRK Work Products**") are historic and not current as of the date of publication of this prospectus. Accordingly, SRK cannot and does not accept any responsibility nor liability implied or otherwise assumed for the reproduction of the non-current and historical SRK Work Products reproduced in this Prospectus solely as a statement of historical fact. For the avoidance of doubt, SRK is not acting as an independent expert in the context of this Prospectus, has neither undertaken any further technical due diligence nor physical inspection of the facilities since authoring of the 2019 Statements and as such cannot attest to the continued validity of such statements in the context of any material change in historic or current assumptions which underpin the 2019 Statements. As of the date of this Prospectus, SRK does not have any material interest in the Issuer.

19. The Trust Deed and the Guarantee will be filed with Euronext Dublin and published at https://live.euronext.com/en/product/bonds-detail/27579/documents on the Issue Date. This Prospectus will be published at https://live.euronext.com/en/product/bonds-detail/27579/documents.

20. Citibank Europe plc will act as Registrar in relation to the Notes.

21. There are no potential conflicts of interest between any duties of the Board of Directors of the Company to the Company, and their private interests and/or other duties.

22. There are no potential conflicts of interest between any duties of the board of directors of SUEK-Khakasia to SUEK-Khakasia, and their private interests and/or other duties.

23. There are no potential conflicts of interest between any duties of the board of directors of Tugnuisky Opencast Mine to Tugnuisky Opencast Mine, and their private interests and/or other duties.

24. There are no potential conflicts of interest between any duties of the board of directors of SUEK-Kuzbass to SUEK-Kuzbass, and their private interests and/or other duties.

25. The website of the Guarantors is http://www.suek.ru/. The information on http://www.suek.ru/ does not form part of this Prospectus.

26. The Issuer estimates the total expenses directly related to the admission of the Notes to trading on the regulated market to be EUR 8,000.

APPENDIX A

SRK Consulting (UK) Limited
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City and County of Cardiff
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United Kingdom
E-mail: enquiries@srk.co.uk
URL: www.srk.com
Tel: + 44 (0) 2920 348 150

The Directors,
JSC SUEK,
Building 7, 53 Dubininskaya,
Moscow, 115054
Russian Federation

The Directors,
SUEK Securities Designated Activity Company
2nd Floor, Palmerston House
Denzille Lane, Dublin 2
Ireland

13 September 2021

Dear Sirs,

Ref: **"A Competent Persons' Report on the Coal Mining Assets of SUEK" (the "CPR")**

We refer to the Prospectus published in relation to the notes issued by SUEK Securities Designated Activity Company (the "**Issuer**") and unconditionally, irrevocably and fully guaranteed by JSC SUEK (the "**Company**"), LLC SUEK-Khakasia, JSC Tugnuisky Opencast Mine and JSC SUEK-Kuzbass, which reproduces the "**Executive Summary**" of the CPR at Appendix B of the Prospectus, which Prospectus is published in accordance with the Rules and Regulations of the regulated market of Euronext Dublin.

The CPR which was published in January 2020 includes, inter alia, Coal Resource and Coal Reserve statements for certain "**Coal Mining Assets**" of the Company with effective date of 1 January 2019 (hereinafter the "**2019 Statements**") published in accordance with the terms and definitions of the JORC Code as defined below.

"The 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia" (the "**JORC Code**"). The JORC Code is a reporting code which has been aligned with the Committee for Mineral Reserves International Reporting Standards ("**CRIRSCO**") reporting template. Accordingly, SRK considers the JORC Code to be an internationally recognised reporting standard that is adopted worldwide for market-related reporting and financial investments.

In providing its consent for the reproduction of the Executive Summary of the CPR in the Prospectus, SRK respectfully notes the following conditions and limitations:

1. The Executive Summary, the CPR (as published on the Company's website at www.suek.com), the 2019 Statements, the Mine Closure Costs, the Economic Evaluation and all accompanying technical opinion and related conclusions are historical in nature and are not deemed to be current within the context of the Publication of the Prospectus.

2. SRK does not provide any express warranties in respect of the validity of the Executive Summary, the CPR, the 2019 Statements, the Mine Closure Costs, the Economic Evaluation and all accompanying technical opinion and related conclusions other than at the effective date of the 2019 Statements, that being 1 January 2019.

3. SRK has not undertaken any subsequent technical analysis nor investigation to confirm the validity of the Executive Summary, the CPR, the 2019 Statements, the Mine Closure Costs, the Economic Evaluation, and all accompanying technical information and opinion and related conclusions at the date of publication of the Prospectus. Accordingly, SRK cannot provide any assurances or confirmation as to the validity and reasonableness, nor accept any responsibility, in respect of any potential material change to the Coal Mining Assets which would necessitate any substantive change to the Executive Summary, the CPR, the 2019 Statements, the Mine Closure Costs, the Economic Evaluation and all accompanying technical information and opinion and related conclusions. For the avoidance of doubt SRK cannot provide a no material change statement in this regard.

4. SRK has neither acted nor been engaged to act as an independent technical expert for the purpose of assessing the validity of the Executive Summary, the CPR, the 2019 Statements, the Mine Closure Costs, the Economic Evaluation, and all accompanying technical opinion and related conclusions in the context of publication of the Prospectus, other than at the effective date of the 2019 Statements, that being 1 January 2019.

5. SRK does not accept any responsibility for any technical information contained in the Prospectus save for the reproduction of the Executive Summary as a matter of historical fact. As such SRK cannot provide any confirmation as to the validity and reasonableness of any such technical information included in the Prospectus nor whether such technical information is accurate, balanced, complete or consistent with the historical CPR including the 2019 Statements.

6. Accordingly, given the historical nature of the Executive Summary, SRK clarifies that its consent for the inclusion of the Executive Summary in the Prospectus is provided on a no reliance basis. Specifically, that any and all investors considering any financial decisions/analysis made in consideration of any sale of securities or offerings relating to the Prospectus cannot rely on the Executive Summary, the CPR, the 2019 Statements, the Mine Closure Costs, the Economic Evaluation and all accompanying technical opinion and related conclusions included therein.

7. SRK has given and not withdrawn its consent for the reproduction of the Executive Summary in the Prospectus and all references to SRK in the form and context in which they appear on the sole understanding that the full CPR is published on the Company's website and that this letter is published in the Prospectus and specifically referenced as Appendix A.

8. SRK expressly notes that only Coal Resource and Coal Reserves reported in accordance with a defined reporting code which has been aligned with the Committee for Mineral Reserves International Reporting Standards ("**CRIRSCO**") reporting template are considered to be valid and aligned with on-market practice specifically the rules and regulations governing public disclosure of Coal Resources and Coal Reserves. Accordingly, the only statements which conform with this practice are the historical 2019 Statements as reported in the Executive Summary and the CPR referenced herein which also include the following key elements:

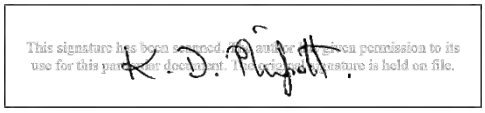
    a) The sub-divisions of confidence categories for Coal Resources and Coal Reserves.

    b) The names and professional registrations of the relevant Competent Persons relating to each of the Coal Resource and Coal Reserve statements.

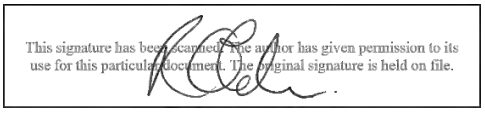
c) A summary of the accompanying additional information including assumed commodity price assumptions, coal qualities, yield assumptions and other modifying factors.

In closing and for the avoidance of doubt, SRK does not take responsibility for any of the technical, legal or financial information as reported in the Prospectus, save for confirmation of it being the author of the historical 2019 Statements and accompanying Executive Summary for which the effective date of the Coal Resource and Coal Reserve statements are 1 January 2019 and which are reproduced in the Prospectus purely for information purposes. These, not being current, cannot be relied upon for any financial and/or investment related decision. As such SRK cannot accept any liability implied or otherwise for the reproduction of the historical 2019 Statements in this Prospectus. Specifically, SRK cannot take any responsibility or liability for any other 'reserve estimates' presented in the Prospectus as appropriate after 1 January 2019 and referenced as 'Management and/or Company Estimates.

For and behalf of SRK Consulting (UK) Limited



Keith Philpott,
Corporate Consultant,
SRK Consulting (UK) Limited.



Richard Oldcorn,
Corporate Consultant,
SRK Consulting (UK) Limited.

APPENDIX B

A COMPETENT PERSONS REPORT ON THE COAL MINING ASSETS OF SUEK

Prepared For

JSC SUEK

Report Prepared by

SRK Consulting (UK) Limited
UK30232

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SRK Legal Entity:		SRK Consulting (UK) Limited
SRK Address:		5th Floor Churchill House 17 Churchill Way Cardiff, CF10 2HH Wales, United Kingdom.
Date:		January 2020
Project Number:		UK30232
SRK Project Director:	Richard Oldcorn	Corporate Consultant (Due Diligence)
SRK Project Manager:	Keith Philpott	Corporate Consultant (Coal Geology)
Client Legal Entity:		JSC SUEK
Client Address:		Building 7, 53 Dubininskaya, Moscow, 115054 Russian Federation .

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EXECUTIVE SUMMARY
A COMPETENT PERSONS REPORT ON THE COAL MINING ASSETS OF SUEK

1 INTRODUCTION

SRK Consulting (UK) Ltd (SRK) has been retained by JSC SUEK (SUEK or the Company) to conduct an independent technical appraisal of and to prepare a Competent Persons' Report (CPR) on the coal assets (Coal Assets) owned and operated by SUEK and its subsidiaries in Siberia and the Russian Far East.

This CPR principally comprises a technical appraisal of the Coal Assets and does not contain a valuation of the Coal Reserves of the Company.

SUEK provided, where applicable, detailed technical mine plans and schedules for a period of at least 20 years from 2019 to 2038 (Mine Plans) together with Life of Mine Plans (LoMPs) beyond 2038, sometimes at a reduced level of detail but in some cases sufficient to allow SRK to consider the estimated coal quantities for inclusion in the Coal Resource and Reserve Statements. These were approved by SUEK's Board of Directors and formed the basis of the technical review by SRK. SUEK headquarters staff provided technical-economic models consistent with the Mine Plans and Life of Mine Plans, including predictions of coal production, underground development, overburden removal, coal washing, capital expenditure, operating expenditure and sales proceeds. This has permitted a full technical-economic appraisal of the Coal Assets by SRK.

The basis of this CPR comprises inspection visits to the majority of open pits and underground mines, wash plants, surface structures and infrastructure at each of the Coal Assets during 2019, and previous site visits in 2011, 2010, 2008, 2007 and 2005. SRK has been granted full access to key personnel at the mine sites, regional offices and head office.

SRK has reviewed SUEK's estimates and classification of coal resources and reserves (Balance and Industrial Reserves), as prepared in accordance with the requirements of the GKZ in the Russian Federation, including the methodologies applied by SUEK in determining such estimates and classifications for each of the Coal Assets, including check calculations where appropriate. SRK has restated these as Coal Resources and Coal Reserves in accordance with the terms and definitions given in the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code) as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy. SRK has modified and translated SUEK's GKZ resource and reserve statements for reporting in accordance with the JORC Code without recourse to fundamental recalculation.

In addition, SRK has reviewed all modifying factors that could affect the Coal Resources and Reserves, including environmental and social issues, closure costs, health and safety issues, processing and marketing at the mining operations and from a company-wide perspective.

2 SUEK'S COAL ASSETS

SUEK is the largest coal producing company and the largest producer of heat and electricity from solid fossil fuel in the Russian Federation, and a global top-five exporter of thermal coal. In 2018 SUEK produced 112.2 Mt of coal, exceeding the 100 Mt mark for the third consecutive year. 67% of production was from hard coal (74.6 Mt) and the remainder from brown coal (37.6 Mt); 70% was from open pit operations and the remainder from underground mines. More than half of all hard coal is washed. Some 3.4 Mt of sales comprised metallurgical (coking) coal, the remaining hard coal comprising steam coal. Most of the brown coal and some of the hard coal is for consumption in the Russian electricity supply industry (power stations) but may also be distributed for local domestic and utilities use and for supply to various federal agencies such as the armed forces and Russian Railways, and for export. Approximately 60% of the hard coal produced in 2018 was exported to both the Asia-Pacific and Atlantic markets (43.2 Mt).

SUEK operates and extracts coal from nine operating underground mines and 23 open pits. Several of the mines and open pits have multiple mining licences and some have more than one mining area. There are Coal Processing Plants (CPPs) with washing facilities at eight different locations and one pneumatic (dry) cleaning unit. In addition, there are a number of underground mines and open pits which have recently closed or are on care and maintenance, and for which licences are still held. There are also a number of as yet not fully defined areas or extensions for which SUEK does not currently hold licences but expects to acquire them for working in the next 20 years.

SUEK plans to further increase the production of washed coal through the construction of three new CPPs.

SUEK's subsidiaries represent large-scale regional production enterprises combining mining and mining-related service entities engaged in coal washing, transportation, maintenance and other similar activities. Table ES 1 below sets out the list of the Coal Assets.

A map showing the location of SUEK's coal producing regions and main ports is presented in Figure ES 1. A map showing the location of SUEK's Coal Assets is presented in Figure ES 2.

Table ES 1: SUEK's Coal Assets

Location	Company name	SUEK's Effective Ownership Stake(1)	Mining Assets of Company
Kemerovo Region	JSC SUEK-Kuzbass	100.00%	Kirov Mine and CPP (2 modules) Ruban Mine (Magistralny, Krasnoyarsk and Ruban Gluboky Areas) 7th November Mine (closed) November 7th Novaya Mine Komsomolets Mine and CPP Polysaevskaya Mine and CPP Yalevsky Mine (formerly Kotinskaya Mine and Mine 7) Taldinskaya-Zapadnaya 1 Mine and CPP Taldinskaya-Zapadnaya 2 Mine Zarechny Open Pit Zarechny Severny Open Pit Kamyshansky Open Pit Kamyshansky Severny Open Pit Licence Area Maisky Open Pit (closed)
Krasnoyarsk Territory	JSC Razrez Nazarovsky	100.00%	Nazarovsky Open Pit
	JSC Razrez Berezovsky		Berezovsky-1 Open Pit
	JSC SUEK-Krasnoyarsk		Borodinsky Open Pit Kansky Open Pit Sereulsky Open Pit
Zabaikalye Territory	JSC Razrez Kharanorsky	100.00%	Kharanorsky Open Pit
	LLC Razrez Vostochny	100.00%	Vostochny Open Pit (Tataurovskoye Deposit)
	LLC Arcticheskie Razrabotki	100.00%	Apsatsky Open Pit
Republic of Buryatia	JSC Tugnuisky Open Cast Mine	100.00%	Tugnuisky Open Pit and CPP Nikolsky Open Pit
Republic of Khakassia	LLC SUEK-Khakassia	100.00%	Chernogorsky Open Pit (including Kurganny Area) and CPP Khakasskaya Mine (closed) Abakansky Open Pit
	LLC Vostochno-Beisky Open Cast Mine	50.00%	Vostochno-Beisky Open Pit (including areas completed coaling)
	JSC Izykhsky Open Cast Mine	100.00%	Izykhsky Open Pit (No.4 Area and areas completed coaling)
Primorsky Territory	LLC Primorskugol	100.00%	Pavlovsky-2 Open Pit Severnaya Depressia Open Pit Nekkovy Open Pit and Dry Processing Facility Osinovsky Licence Area Vostochny-2 Mine and Open Pit (closed) Yuzhny Licence Area (closed) Rakovsky Open Pit (care and maintenance)
Khabarovsk Territory	JSC Urgalugol	100.00%	Severnaya Mine and Chegdomyn CPP Bureinsky Open Pit and OU-22 Wash Unit Marekansky Open Pit Urgal Mine and Urgalsky Open Pit Pravoberezhny Open Pit

JSC=Joint-Stock Company

LLC=Limited Liability Company

CPP=Coal Processing Plant

(1) Effective ownership stake shown as at 01 January 2019, including ownership through SUEK's subsidiaries.

Figure ES 1: Map of Russian Federation Showing Regional Location of SUEK Coal Assets and Principal Ports

Figure ES 2: Location Map of SUEK Operating Mines, Open Pits, Greenfield Sites and Wash Plants

3 MINING LICENCES

Licences for coal extraction in the Russian Federation are currently issued by the Federal Agency for Subsurface Use (RosNedra) or by its territorial agencies through competitive auctions, organised and performed in constituent entities of the Russian Federation and approved by order of the Federal agency RosNedra's management. In accordance with Article 10 of the Russian Federation Law "On Subsoil", the sites are granted for use for a definite period or without any expiry date. A licence becomes valid once it is issued by RosNedra. The licence allows the extraction of coal from the designated coal deposit within certain specified boundaries whose co-ordinates are listed in the licence document, usually as an appendix to the main licence document.

SRK has reviewed the exploration licences and mining licences, together with the significant environmental operating permits and access to land for working. SUEK has the necessary authorisations for current and planned future operations as set out in Table ES 2. SRK notes that this review does not constitute a legal title search and is unaware of any other mining licences held by SUEK.

Most of the mining licences for specific operations expire before scheduled completion of production from that operation and several expire within the next five years. However, SRK understands that the terms of the licences permit for appropriate time extensions, providing that there have been no major breaches of the licence or operating conditions and also providing that the Balance Reserves have not been depleted.

Table ES 2: Summary of SUEK Mining Licences

Legal entity (Licence Holder)	Mine/Open Pit	Series and Number of the Licence	Issued	Expiry Date	Remaining Term of Licence 01/01/2019
Kemerovo Region					
JSC SUEK-Kuzbass	Kirov Mine	KEM 01359 ТЭ	12/02/2008	31/12/2041	23
		KEM 01558 ТЭ	20/04/2011	20/04/2031	12
		KEM 02110 ТЭ	10/12/2018	10/12/2038	20
	Ruban Mine	KEM 01340 ТЭ	07/12/2007	20/12/2023	5
		KEM 15462 ТЭ	17/12/2012	14/12/2032	14
		KEM 02109 ТЭ	10/12/2018	10/12/2038	20
	7th November Novaya Mine	KEM 14712 ТЭ	08/07/2009	31/12/2035	17
		KEM 01903 ТЭ	23/07/2015	20/07/2035	17
		KEM 02122 ТЭ	22/04/2019	15/04/2039	20
		KEM 01360 ТЭ	12/02/2008	31/05/2019	0
	Polysaevskaya Mine	KEM 14707 ТЭ	30/06/2009	31/12/2033	15
	Komsomolets Mine	KEM 15184 ТЭ	05/08/2011	31/12/2034	16
JSC SUEK-Kuzbass	Yalevsky Mine	KEM 01339 ТЭ	07/12/2007	31/12/2038	20
		KEM 01356 ТЭ	04/02/2008	31/01/2028	9
		KEM 01938 ТР	18/01/2016	18/01/2041	22
		KEM 01342 ТЭ	18/12/2007	31/05/2021	2
	Taldinskaya-Zapadnaya 1 Mine	KEM 01337 ТЭ	07/12/2007	31/05/2021	2
	Taldinskaya-Zapadnaya 1 Mine and Zarechny Severny Open Pit	KEM 01987 ТЭ	28/11/2016	28/11/2036	18
	Zarechny Severny Open Pit	KEM 01338 ТЭ	07/12/2007	31/05/2021	2
	Taldinskaya Zapadnaya 2 Mine and Zarechny Severny Open Pit	KEM 01341 ТЭ	07/12/2007	01/07/2025	6
	Taldinskaya Zapadnaya 2 Mine	KEM 01999 ТЭ	11/01/2017	20/01/2037	18
	Taldinskaya Zapadnaya 1 Mine	KEM 02042 ТЭ	13/11/2017	07/11/2037	19
	Zarechny Open Pit	KEM 01343 ТЭ	18/12/2007	31/05/2021	2
	Maisky Open Pit	KEM 14706 ТЭ	30/06/2009	31/12/2018	0
	Kamyshansky Open Pit	KEM 14705 ТР	26/06/2009	31/12/2023	5
		KEM 01517 ТЭ	01/11/2010	31/10/2030	12

Legal entity (Licence Holder)	Mine/Open Pit	Series and Number of the Licence	Issued	Expiry Date	Remaining Term of Licence 01/01/2019
	Kamyshansky Severny Open Pit	КЕМ 01851 ТЭ	04/12/2014	04/12/2034	16
Krasnoyarsk Territory					
JSC Razrez Nazarovsky	Nazarovsky Open Pit	КРР 02670 ТЭ	14/04/2015	31/12/2020	2
JSC Razrez Berezovsky	Berezovsky-1 Open Pit	КРР 02745 ТЭ	30/11/2015	31/12/2027	9
JSC SUEK-Krasnoyarsk	Borodinsky Open Pit	КРР 02744 ТЭ	30/11/2015	31/12/2031	13
	Sereulsky Open Pit	КРР 01676 ТЭ	27/10/2006	31/12/2023	5
	Sereulsky Open Pit	КРР 02767 ТЭ	29/01/2016	01/02/2041	22
	Kansky Open Pit	КРР 01911 ТЭ	30/05/2008	31/12/2031	13
	Kansky Open Pit	КРР 01910 ТР	30/05/2008	31/12/2030	12
Republic of Buryatia					
JSC Tugnuisky Opencast Mine	Tugnuisky Open Pit (Olon-Shibirskoye deposit)	ЧИТ 00926 ТЭ	06/10/1998	31/12/2031	13
	Nikolsky Open Pit Site (East area)	ЧИТ 13019 ТЭ	11/03/2005	01/03/2025	6
	Nikolsky Open Pit Site (West area)	УДЭ 13244 ТЭ	20/07/2005	01/07/2025	6
Zabaikalye Territory					
JSC Razrez Kharanorsky	Kharanorsky Open Pit	ЧИТ 02607 ТЭ	10/11/2015	31/12/2021	3
LLC Razrez Vostochny	Vostochny Open Pit (Tataurovskoye Deposit)	ЧИТ 13137 ТЭ	05/05/2005	31/12/2019	1
LLC Arcticheskie Razrabotki	Apsatsky Open Pit	ЧИТ 14483 ТР	29/05/2008	27/05/2033	14
Khakassia Republic					
LLC SUEK-Khakassia	Khakasskaya Mine	АБН 14668 ТЭ	24/04/2009	31/12/2035	17
	Khakasskaya Mine	АБН 00578 ТЭ	29/08/2011	29/08/2031	13
	Abakansky Open Pit	АБН 14702 ТЭ	26/06/2009	31/12/2034	16
	Chernogorsky Open Pit	АБН 00473 ТЭ	25/12/2007	01/01/2028	9
	Chernogorsky Open Pit	АБН 15469 ТЭ	10/01/2013	28/12/2032	14
JSC Izykhsky Opencast Mine	Izykhsky Open Pit	АБН 00718 ТЭ	03/08/2016	31/12/2028	10
	Izykhsky Open Pit	АБН 00719 ТЭ	03/08/2016	30/12/2024	6
LLC Vostochno-Beisky Opencast Mine	Vostochno-Beisky Open Pit	АБН 00223 ТЭ	17/11/2000	01/11/2020	2
	Vostochno-Beisky Open Pit	АБН 00341 ТЭ	02/06/2003	30/11/2020	2
	Vostochno-Beisky Open Pit	АБН 00545 ТЭ	04/10/2010	13/09/2030	12
Primorye Territory					
LLC Primorskugol	Vostochny-2 Mine and Open Pit	ВЛВ 02567 ТЭ	18/12/2018	31/12/2020	2
	Yuzhny Licence Area	ВЛВ 02566 ТЭ	14/12/2018	27/08/2033	15
	Severnaya Depressia Open Pit	ВЛВ 02541 ТЭ	29/01/2018	11/01/2021	2
	Pavlovsky-2 Open Pit	ВЛВ 02545 ТЭ	12/03/2018	01/01/2034	14
	Osinovsky Licence Area	ВЛВ 02542 ТЭ	29/01/2018	18/12/2032	14
	Vostochny Area, Pavlovsky-1 Open Pit	ВЛВ 02540 ТЭ	29/01/2018	01/01/2034	15
	Nekkovy Open Pit	ВЛВ 02543 ТЭ	31/01/2018	31/12/2036	18
	Rakovsky Open Pit	ВЛВ 02565 ТЭ	14/12/2018	09/07/2021	3
	Rakovsky Open Pit	ВЛВ 02564 ТЭ	14/12/2018	31/12/2023	5
Khabarovsk Territory					
JSC Urgalugol	Marekansky Open Pit	ХАБ 12577 ТЭ	09/08/2004	31/12/2027	9
	Bureinsky Open Pit	ХАБ 12578 ТЭ	09/08/2004	31/12/2025	7
	Severnaya Mine	ХАБ 12579 ТЭ	09/08/2004	31/12/2036	17
	Severny Urgal Mine	ХАБ 02645 ТЭ	06/03/2014	31/12/2033	15
	Pravoberezhny Open Pit	ХАБ 02696 ТЭ	08/12/2014	31/12/2034	16
Yakutia					
JSC Kabaktinskoe	Kabakhtinskoye	ЯКУ 04382 ТР	30/06/2015	15/05/2038	19

SUEK generally has surface rights to use or work a substantial part, and occasionally all, of the land within their Mine Plan and mining licence areas. SRK does not generally envisage a problem in SUEK acquiring the remaining land when it is needed to fulfil the Mine Plans. Most of the required land is held by the local municipality but some is held by the State or is in private ownership. That owned by the State, for example all of the land required by Urgalugol, comprises forest. SUEK's mining licences give the right of access to the required land but this is subject to financial agreement between the parties and occasionally goes to court arbitration. The acquisition process starts when the mine design documentation is approved, with SUEK usually preferring rental rather than purchase agreements. Rental is at 2% of the cadastral value and tax has to be paid on purchased land until it is sold, regardless of whether any operations are still continuing. The federal and local governments will release new blocks for open pit mining as areas of satisfactorily restored land are handed back by SUEK, upon completion of working. As far as SRK is aware, this process is working satisfactorily on the existing sites.

One of SUEK's non-operational licence areas, Kabaktinskoe in Yakutia, was excluded by SUEK from this CPR.

4 GEOLOGY AND RESOURCES

Overall, the geology at the various sites is well understood and is generally not considered to be particularly structurally complex. Coal seams generally dip at a shallow angle (an exception is Apsatsky Open Pit where seams dip steeply in mountainous terrain) and faulting is infrequent, but seam splitting and seam thinning are common at some sites. Historical exploration was undertaken to a high standard, which is indicated by the Balance Reserves being approved by the GKZ. The majority of the deposits are considered to be well explored, with little or no additional exploration required. Where exploration has been undertaken since the approval of the original GKZ Balance Reserves, it has been carried out to a high standard. A condition of licensing for some sites on which the drilling is incomplete is that SUEK has to carry out additional drilling, which is designed, approved and assessed by the appropriate authorities before extraction can commence. Geological interpretation is supported by a long working history at most operations.

SUEK largely mines five main grades of coal according to the Russian classification system: D grade (Д - Long Flame Coal); G grade (Г- Gas Coal); DG grade (ДГ- Long Flame Gas Coal); lesser quantities of GZh grade (ГЖ - Gas Fat Coal) and B grade (Б - Brown Coal). The first four are "hard coal": sub-bituminous thermal coal with high volatile content (>30%). Various grades of coking coal are also mined from the Apsatsky Opencast Mine (К, КО, КЖ, ОС). The average quality of RoM coal for the period from 2016 to 2018 is generally consistent with the exploration and in-situ sample analysis results examined by SRK. SUEK prepares tables of analyses on a seam by seam and weighted average basis for in-situ quality, with and without dirt bands and for saleable products, including diluting material, utilising XPAC software. In general, SRK notes that seam quality variations are well understood for all the sites and generally variation is relatively minor. Careful consideration of future changes in saleable product is required for those sites for which a considerably increased output is proposed, where new wash plants are to be built or have recently been commissioned, or where new export markets are targeted. Table ES 3 and Table ES 4 below show the historical and forecast RoM quality for each site.

Table ES 3: RoM Coal Quality, Historical and Forecast: Ash, Moisture, Net CV

	Grade (1)	Ash content (%)				Moisture content (%)				Net Calorific Value (kcal/kg)			
		2016 actual	2017 actual	2018 actual	2019 Forecast	2016 actual	2017 actual	2018 actual	2019 Forecast	2016 actual	2017 actual	2018 actual	2019 Forecast
Kemerovo Region - hard coal													
Kirov Mine	G, GZh	33.9	33.8	34.9	29.5	6.6	6.4	6.5	8.0	4,768	4,861	4,932	5,019
Zarechny Open Pit	D	11.4	11.6	12.2	12.4	12.2	11.8	12.0	12.1	5,800	5,824	5,773	5,770
Zarechny Severny Open Pit	D, DG	-	-	12.2	11.8	-	-	11.2	10.0	-	-	5,851	6,000
Komsomolets Mine	G, GZh	34.1	29.3	32.5	26.1	7.0	7.1	6.8	7.5	4,657	4,983	4,734	5,080
7th November Novaya Mine	D, DG	-	20.8	21.2	18.1	-	10.4	11.4	12.0	-	5,297	5,210	5,380
Taldinskaya-Zapadnaya 1 Mine	D	13.6	13.8	17.7	13.6	11.7	11.5	11.3	11.5	5,714	5,724	5,455	5,730
Taldinskaya-Zapadnaya 2 Mine	D, DG, G	12.8	14.1	18.0	18.3	11.1	9.8	11.4	11.9	5,888	5,894	5,500	5,450
Polysaevskaya Mine	G	34.4	34.3	38.4	32.6	7.5	7.5	7.0	7.5	4,539	4,533	4,272	4,555
Ruban Mine	D, DG	22.7	25.7	20.4	17.5	10.0	9.9	10.4	10.2	5,191	4,997	5,317	5,531
Kamyshansky Open Pit	D	14.6	15.0	15.5	16.3	16.2	15.5	15.0	15.3	5,068	5,109	5,099	5,036
Yalevsky Mine	D, DG	13.5	13.0	13.5	13.5	9.1	8.1	7.9	9.0	5,957	6,105	6,055	5,980
Kamyshansky Severny Open Pit	D	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Khakassia - hard coal													
Izykhsky Open Pit	D	-	-	-	-	-	-	-	-	-	-	-	-
Chernogorsky Open Pit	D	21.2	21.2	21.2	-	13.3	13.3	13.2	-	4,832	4,837	4,837	-
Abakansky Open Pit	D	25.9	26.2	24.2	-	13.3	13.0	13.4	-	4,479	4,527	4,533	-
Vostochno-Beisky Open Pit	D	16.9	18.4	18.8	19.3	12.4	11.6	11.4	11.2	5,280	5,127	5,217	5,142
Republic of Buryatiya - hard coal													
Nikolsky Open Pit	D	24.1	23.8	25.1	24.8	9.9	10.9	10.4	11.4	4,930	4,872	4,816	4,764
Tugnuisky Open Pit	D	28.5	27.7	28.5	28.2	9.2	9.7	9.4	9.6	4,685	4,675	4,655	4,662
Khabarovsk Territory - hard coal and brown coal													
Urgal Chegdomyn Mines	G												
Severnaya Mine	G	36.9	36.4	35.5	-	8.5	8.5	7.6	-	4,260	4,310	4,430	-
Bureinsky Open Pit	G	36.3	36.5	37.8	-	6.9	7.3	7.4	-	4,520	4,470	4,360	-
Pravoberezhny Open Pit	GZhO	-	40.5	39.0	-	-	8.3	8.1	-	-	3,940	4,090	-
Marekansky Open Pit	2B	12.0	12.0	12.0	-	45.0	45.0	45.0	-	2,900	2,900	2,900	-
Krasnoyarsk Territory - brown coal													
Berezovsky Open Pit	2B	5.2	5.3	4.8	5.6	35.4	35.1	35.1	35.5	3,500	3,500	3,500	3,500
Borodinsky Open Pit	2B	8.1	8.2	8.1	8.7	32.1	32.1	32.1	32.6	3,990	4,000	4,000	3,940
Nazarovsky Open Pit	2B	9.0	9.0	9.1	9.2	39.1	39.1	39.1	39.2	3,285	3,284	3,285	3,280
Sereulsky Open pit	2B	-	-	12.0	12.0	-	-	36.0	36.0	-	-	3,530	3,530
Kansky Open Pit	2B	7.7	7.3	7.8	8.0	34.7	34.7	34.2	34.8	3,800	3,850	3,800	3,755
Primorsky Territory - hard coal and brown coal													
Pavlovsky-2 Open Pit	1B	17.3	17.2	17.1	17.8	41.9	42.0	42.0	42.0	2,818	2,828	2,835	2,809
Severnaya Depressia	1B	27.3	-	26.8	26.9	42.0	-	42.1	42.0	2,452	-	2,457	2,460
Nekkovy Open Pit	D	-	44.0	42.0	40.0	-	8.1	7.8	8.0	-	3,777	3,896	4,000
Zabaikalie Territory - brown coal													
Kharanorsky Open Pit	2B	15.6	15.6	15.6		39.7	39.7	39.7		3,164	3,163	3,164	
Vostochny Open Pit	2B	13.2	13.2	13.1	-	35.2	34.4	34.7	-	3,603	3,653	3,621	-
Apsatsky Open Pit	(OC, KO, K, KZh, SS)	16.7	17.1	16.3	-	3.5	3.4	3.9	-	6,625	6,536	6,579	-

Table ES 4: RoM Coal Quality, Historical and Forecast: Sulphur, Volatiles and Density

	Grade (1)	Sulphur (%)				Volatiles (%)				Average Density (t/m³)
		2016 actual	2017 actual	2018 actual	2019 Forecast	2016 actual	2017 actual	2018 actual	2019 Forecast	2016-2019
Kemerovo Region - hard coal										
Kirov Mine	G, GZh	0.26	0.22	0.25	0.30	43.1	42.7	42.6	42.5	1.25
Zarechny Open Pit	D	0.41	0.40	0.38	0.35	39.2	39.5	39.5	39.0	1.37
Zarechny Severny Open Pit	D, DG	-	-	0.38	0.35	-	-	39.3	39.0	-
Komsomolets Mine	G, GZh	0.48	0.47	0.56	0.90	43.4	43.1	43.4	42.0	1.29
7th November Novaya Mine	D, DG	-	0.19	0.13	0.20	-	43.1	42.7	44.5	1.31
Taldinskaya-Zapadnaya 1 Mine	D	0.32	0.36	0.37	0.30	38.0	37.8	38.8	38.0	1.36
Taldinskaya-Zapadnaya 2 Mine	D, DG, G	0.32	0.34	0.35	0.40	37.5	37.9	38.1	39.0	1.37
Polysaevskaya Mine	G	0.42	0.38	0.48	0.50	43.8	43.7	44.1	43.0	1.29
Ruban Mine	D, DG	0.64	0.56	0.33	0.28	40.8	40.3	42.6	43.9	1.30
Kamyshansky Open Pit	D	0.42	0.41	0.38	0.40	41.4	41.8	41.6	40.0	-
Yalevsky Mine	D, DG	0.21	0.22	0.23	0.20	42.6	42.1	41.8	41.6	1.31
Kamyshansky Severny Open Pit	D	-	-	-	-	-	-	-	-	-
Republic of Khakassia - hard coal										
Izykhsky Open Pit	D	-	-	-	-	-	-	-	-	-
Chernogorsky Open Pit	D	-	-	-	-	-	-	-	-	-
Abakansky Open Pit	D	-	-	-	-	-	-	-	-	-
Vostochno-Beisky Open Pit	D	0.50	0.51	0.49	0.50	39.6	40.0	39.9	39.7	1.38
Republic of Buryatia - hard coal										
Nikolsky Open Pit	D	0.39	0.38	0.40	0.40	44.1	45.5	44.4	45.3	1.40
Tugnuisky Open Pit	D	0.40	0.39	0.42	0.36	43.4	41.5	47.4	49.4	1.43
Khabarovsk Territory - hard coal and brown coal										
Urgal Chegdomyn Mines	G									
Severnaya Mine	G	0.25	0.25	0.25	-	42.5	42.5	42.5	-	-
Bureinsky Open Pit	G	0.25	0.25	0.25	-	42.5	42.5	42.5	-	-
Pravoberezhny Open Pit	GZhO	-	0.25	0.25	-	-	43.0	43.0	-	-
Marekansky Open Pit	2B	0.30	0.30	0.30	-	53.0	53.0	53.0	-	-
Krasnoyarsk Territory - brown coal										
Berezovsky Open Pit	2B	0.30	0.25	0.22	0.30	48.0	48.2	47.8	48.1	1.25
Borodinsky Open Pit	2B	0.27	0.27	0.28	0.31	47.6	47.6	47.6	47.8	1.26
Nazarovsky Open Pit	2B	0.52	0.58	0.60	0.70	47.9	47.9	47.9	48.3	1.25
Sereulsky Open pit	2B	-	-	1.00	1.00	-	-	48.0	48.0	1.26
Kansky Open Pit	2B	0.60	0.50	0.50	0.60	47.9	47.4	47.4	47.4	1.24
Primorsky Territory - hard coal and brown coal										
Pavlovsky-2 Open Pit	1B	0.36	0.37	0.36	0.40	57.3	57.2	57.2	60.0	1.22
Severnaya Depressia Open Pit	1B	0.40	-	0.40	0.40	59.9	-	59.7	60.0	1.26
Nekkovy Open Pit	D	-	0.30	0.30	0.20	-	50.2	52.2	55.0	1.62
Zabaikalie Territory - brown coal										
Kharanorsky Open Pit	2B	0.35	0.35	0.36		40.5	40.5	40.7		
Vostochny Open Pit	2B	0.26	0.19	0.21	-	42.4	42.3	41.7	-	-
Apsatsky Open Pit	(OC, KO, K, KZh, SS)	0.26	0.24	0.27	-	25.7	24.5	24.5	-	-

Note (1): Grade according to Russian Classification System:
Brown coals:
1B (1Б) = Brown Coal with >40% moisture, 2B (2Б) = Brown Coal with 30-40% moisture, 3B (3Б) = Brown Coal with <30% moisture
Hard coals all high volatile (>30%) sub-bituminous coals:
D (Д) = Long-Flame Coal, DG (ДГ) = Long-Flame Gas Coal, G (Г) = Gas Coal, GZh (ГЖ) = Gas Fat Coal
Coking Coals:
K (К) = Coking; KO (КО) = Coking Meagre; SS (СС) = Semi-Soft, KZh (КЖ) = Coking Fat

5 MINING AND PRODUCTION

SRK has reviewed the mining and processing operations within each SUEK region. SRK observed that each operation is using or planning to use equipment and technology that is appropriate for the respective geological, mining and processing conditions.

Between 2016 and 2018, production from the Coal Assets currently owned by SUEK increased by approximately 9% or 10.6 Mt, from 105.0 Mt in 2016 to 115.6 Mt in 2018. The overall increase resulted from both increases and decreases in production at individual sites, for operational and market reasons. Production increases were seen in all the regions:

- Kemerovo Region (3.0 Mt);
- Krasnoyarsk Territory (2.3 Mt);
- Republic of Khakassia (1.5 Mt);
- Republic of Buryatia (0.3 Mt);
- Zabaikalie Territory (1.6 Mt),
- Primorye Region (0.7 Mt), and
- Khabarovsk Region (1.3 Mt).

SUEK forecasts production of approximately 114.5 Mt in 2019, a slight decrease of 1.1 Mt from 2018.

- The Kemerovo Region is forecast to mine 2.6 Mt less than in 2018, primarily due to a temporary decrease in production from Taldinskaya-Zapadnaya 2 Mine and gradual long term decreases in production at Polysaevskaya Mine from 4 to 5 Mt to 3 Mtpa and at Ruban Mine from 6.5 Mt to 3.5 Mt. However, Yalevsky Mine is increasing production to 10 Mtpa in 2019, up from 8.5 Mt previously, Zarechny Severny Open Pit is ramping up to 2 Mtpa in 2020, and 7th November Novaya Mine is ramping up to 4 Mtpa over the next four years (2022).
- The Khakassia Republic is forecast to increase overall production by 1.1 Mt in 2019, with the increase coming from Abakansky and Vostochno-Beisky Open Pits.
- The Krasnoyarsk Territory is forecast to increase production by 2.3 Mt in 2019, largely as a result of increased production at Borodinsky Open Pit.
- All the other regions are forecasting similar production rates in 2019 from 2018, apart from the Khabarovsk Region, which is forecast to reduce production by 1.5 Mt due to a temporary reduction in output from Severnaya Mine.

SUEK's current 20 year mining plan is to increase production over the next six years to 145 Mt, then to maintain production at between 141 and 142 Mtpa until 2035, and thereafter gradually reduce production to approximately 123 Mt in 2038, as certain mines and open pits become depleted. SRK has used SUEK's 20 year Mine Plans as the basis of reporting forecasts for future production.

SRK acknowledges that the implementation of XPAC and XERAS software has been significant in improving the mine planning process. This system enables the estimation process to be much more transparent, and it facilitates the concept of an audit trail. It also enables alternative scenarios to be examined quickly and efficiently and links to be made to the technical economic models in respect of Coal Resources, Coal Reserves and mine scheduling.

The Mine Plans are summarised for each of the mines and open pits in individual subsections of the CPR. These summaries show only key periods in terms of significant changes in production levels over the Mine Plan period, which may vary from site to site. SRK has commented on the likely achievability of the Mine Plans, as well as on the classification of Coal Reserves, based upon technical aspects of the production schedule, forecast operating costs and capital expenditure plans, all of which form part of SUEK's technical-economic models.

SRK has not modified SUEK's Mine Plans but has reviewed the production plans and other specific events and issues which are likely to affect mine or open pit production. A summary of historical production from 2016 to 2018 and planned production from 2019 to 2038 is shown in Table ES 5.

Table ES 5: Summary of Historical Production from 2016 to 2018, and Planned Production from 2019 to 2038 (kt)

Production (kt)	Grade	2016	2017	2018	Total 20-Year Plan	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
SUEK	- Overall	102,198	109,349	112,192	2,759,250	112,908	122,599	132,901	137,201	140,001	142,401	145,330	143,691	142,666	143,769	144,196	142,093	141,696	141,279	141,213	141,110	140,882	139,223	140,147	123,944
	- Hard coal	68,522	73,752	74,643	1,775,434	73,292	83,199	89,001	91,801	93,401	94,801	94,530	92,891	91,866	92,869	93,296	90,193	89,796	89,379	89,313	89,210	88,982	87,323	88,247	72,044
	- Brown coal	33,676	35,597	37,549	983,816	39,616	39,400	43,900	45,400	46,600	47,600	50,800	50,800	50,800	50,900	50,900	51,900	51,900	51,900	51,900	51,900	51,900	51,900	51,900	51,900
Kemerovo Region	- Hard coal	37,299	40,304	40,353	894,236	37,730	42,099	45,900	46,701	46,802	46,726	46,382	46,134	46,372	47,812	48,143	44,505	43,895	44,199	44,093	44,097	43,822	43,142	43,303	42,378
Kirov Mine	G, GZh	5,720	7,177	5,042	99,949	4,950	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,001	4,999	5,001
Zarechny Open Pit	D	4,000	4,380	4,546	80,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Zarechny Severny Open Pit	D, DG	-	-	759	40,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Komsomolets Mine	G, GZh	2,416	2,011	2,293	55,451	2,500	2,500	2,500	2,500	2,500	2,500	2,530	2,627	2,258	2,744	3,217	2,605	3,094	3,398	3,291	3,298	3,321	2,590	3,200	2,277
7th November Novaya Mine	D, DG	-	-	106	68,946	231	2,000	3,700	4,001	4,001	4,001	4,001	4,000	3,800	3,701	3,801	3,701	3,501	3,501	3,501	3,500	3,501	3,503	3,503	3,501
Taldinskaya-Zapadnaya 1 Mine	D	3,524	5,371	1,117	67,025	1,800	3,000	3,500	3,500	3,500	3,425	3,051	3,207	3,500	3,494	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,548	3,500	3,500
Taldinskaya-Zapadnaya 2 Mine	D, DG, G	3,801	1,310	3,085	93,317	317	3,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Polysaevskaya Mine	G	4,603	4,167	5,021	27,914	2,500	2,500	2,500	3,000	3,000	3,000	3,000	2,500	2,015	2,073	1,826	-	-	-	-	-	-	-	-	-
Ruban Mine	D, DG	2,438	3,206	6,352	72,433	5,432	4,000	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Kamyshansky Open Pit	D	3,102	3,320	3,502	30,400	4,000	4,000	4,000	3,000	2,500	2,000	2,000	2,000	2,000	2,000	2,000	900	-	-	-	-	-	-	-	-
Yalevsky Mine	D, DG	7,695	9,362	8,529	203,301	10,001	10,100	10,200	10,200	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,000	10,000	9,600	9,600
Kamyshansky Severny Open Pit	D	-	-	-	55,500	-	-	-	1,000	1,500	2,000	2,000	2,000	3,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Khakassia	- Hard coal	11,423	12,581	12,917	307,229	14,000	15,000	15,500	16,000	16,000	16,000	16,000	15,999	15,999	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	14,730	8,000
Izykhsky Open Pit	D	1,006	1,252	1,370	30,000	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Chernogorsky Open Pit	D	7,039	7,716	7,500	150,230	7,500	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	6,730	-
Abakansky Open Pit	D	111	112	500	29,499	1,000	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Vostochno-Beisky Open Pit	D	3,267	3,501	3,547	97,500	4,000	4,000	4,500	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Buryatia	- Hard coal	14,023	13,637	14,292	300,309	14,000	15,500	15,500	15,500	15,500	15,500	15,500	15,501	15,500	15,501	15,501	15,501	15,501	15,500	15,500	15,500	15,500	15,500	15,500	7,301
Nikolsky Open Pit	D	1,020	2,139	3,239	256,501	7,000	9,500	9,500	13,000	13,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	14,500	12,500	3,000
Tugnuisky Open Pit	D	13,003	11,498	11,053	43,808	7,000	6,000	6,000	2,500	2,000	1,000	1,000	1,001	1,000	1,001	1,001	1,001	1,001	1,000	1,000	1,000	1,000	1,000	3,000	4,301
Khabarovsk Region	- Hard coal	5,474	6,546	6,116	210,562	6,362	9,000	10,000	11,000	12,000	13,075	13,148	11,756	10,494	10,056	10,152	10,687	10,900	10,180	10,220	10,112	10,160	9,181	11,214	10,866
Bureinsky Open Pit	G	2,660	3,001	1,644	22,644	3,000	3,000	3,000	3,000	3,000	3,000	3,000	1,644	-	-	-	-	-	-	-	-	-	-	-	-
Pravoberezhny Open Pit	GZhO	0	115	1,001	106,500	2,000	2,500	3,000	4,000	5,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Severnaya Mine	G	2,813	3,431	3,470	81,418	1,362	3,500	4,000	4,000	4,000	4,075	4,148	4,112	4,494	4,056	4,152	4,687	4,900	4,180	4,220	4,112	4,160	3,181	5,214	4,866
Krasnoyarsk Region	- Brown coal	27,076	27,578	29,358	802,176	31,676	31,300	35,200	36,700	37,900	38,900	42,100	42,100	42,100	42,200	42,200	42,200	42,200	42,200	42,200	42,200	42,200	42,200	42,200	42,200
Berezovsky Open Pit	2B	4,955	4,547	4,258	182,053	4,753	4,500	5,000	6,600	7,300	8,300	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Borodinsky Open Pit	2B	19,077	19,542	21,571	550,523	23,623	23,500	26,700	26,600	27,100	27,100	28,200	28,200	28,200	28,300	28,300	28,300	28,300	28,300	28,300	28,300	28,300	28,300	28,300	28,300
Nazarovsky Open Pit	2B	3,043	3,490	3,529	69,600	3,300	3,300	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Primorye Region	- Overall	2,477	3,540	3,178	70,001	3,401	3,600	4,000	4,000	4,000	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400
	- Hard coal	-	23	347	3,001	601	600	600	600	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Brown coal	2,477	3,517	2,831	67,000	2,800	3,000	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400
Pavlovsky Open Pit	1B	2,477	3,517	2,831	67,000	2,800	3,000	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400
Nekkovy Open Pit	D	-	23	347	3,001	601	600	600	600	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zabaikalye Region	- Overall	4,426	5,162	5,979	174,738	5,740	6,100	6,800	7,300	7,799	8,800	8,800	8,800	8,800	8,800	8,800	9,800	9,800	9,800	9,800	9,800	9,800	9,800	9,800	9,800
	- Hard coal	304	661	619	60,098	600	1,000	1,500	2,000	2,499	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
	- Brown coal	4,122	4,502	5,360	114,640	5,140	5,100	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300
Kharanorsky Open Pit	2B	3,241	3,233	4,037	88,640	3,840	3,800	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Vostochny Open Pit	2B	881	1,269	1,323	26,000	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Apsatsky Open Pit	OC, KO, K, KZh, SS	304	661	619	60,098	600	1,000	1,500	2,000	2,499	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500

Excludes historical mining for operations which have since ceased production.
Excludes Marekansky, Kansky, Sereulsky and Severnaya Depressia
Ruban Mine includes Magistralny, Yalevsky Mine includes Kotinskaya Mine.

6 COAL RESOURCES AND RESERVES

In the reporting of SUEK's Coal Resources and Reserves, SRK has used the guidelines of the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (the JORC Code).

In reporting the Coal Resources, SRK has reviewed the reported GKZ Balance Reserve statements as at 01 January 2019, and the underlying estimation Protocols where appropriate, but has not conducted a detailed audit of the estimates and instead has relied on SUEK reports and estimation certifications by the designated project geologists. SRK has thus restated and modified the GKZ reserve statements for reporting in accordance with the JORC Code, without recourse to fundamental recalculation.

In reporting of Coal Reserves, SRK has reviewed the mine plans, schedules and estimates provided by SUEK and adjusted them where appropriate to report them in line with the guidelines of the JORC Code.

The Coal Resources and Reserves for the Company, as at 01 January 2019, are summarised in Table ES 6 and ES 7 and for each region in Table ES 8 to ES 14.

All the Coal Reserves are reported as Run of Mine (RoM) tonnages. The average in-situ quality of the Coal Resources is reported in Section 3 of the main report and based on extensive exploration data and historical reporting, and changes very little on a year by year basis. SUEK has calculated the future annual average quality of the Coal Reserves, and the quality generally remains consistent across coal seams and within mines and open pits.

Coal sales are almost exclusively dependent upon reaching certain specifications of ash, moisture and net CV only, along with sulphur for export coals. Tables ES 6 and ES 7 summarise the marketable tonnages as a proportion of the total Coal Reserves. Table ES 15 shows the washplant yields and marketable coal planned to be sold within SUEK's 20-year mine plans.

SRK has classified for each site all of the Reserves scheduled to be worked in the first 20 years of the Mine Plan as Proved if the total quantity of Measured Resources is greater than the 20 year Reserve. If it is less than 20 years, then SRK has split the Reserves into Proved and Probable Reserves in the same proportion as the proportion of Measured to Indicated Resources.

It should be noted that SUEK has prepared Life of Mine Plans which consider the exploitation of the full Resource and may also include exploration areas and new licences. Many of these plans extend beyond 20 years. Each plan is supported by a technical economic model developed by SUEK, of which SRK has examined in detail the data provided for the 20 years to the end of 2038. Beyond this period SRK considers that the financial and technical data should be treated with some caution due to the inevitability of changes and future developments that are unpredictable for this timescale. The level of technical and environmental approvals from the Russian authorities varies between assets and with time for individual assets.

Although the Resources and Reserves statement is dated 01 January 2019, SRK has taken cognisance of information provided by SUEK during site visits and discussions throughout 2019, along with permissions received or applied for during 2019.

The following statements apply to all of SRK's Reserve and Resource Statements in this report:

- All Coal Resources and Reserves are quoted as at 01 January 2019.
- SRK has modified and translated SUEK's GKZ reserve statements (Forms 5GR, 2 and 1PZ) for reporting in accordance with the JORC Code 2012 without recourse to fundamental recalculation.
- Measured and Indicated Resources are inclusive of those Resources modified to produce Proved and Probable Reserves. Inferred Resources, although sometimes included by SUEK in its financial models and LoMPs for some operations, were excluded from consideration as Reserves, and make only a minor contribution to the overall Resource base.
- All Resources and Reserves are quoted as 100% and are assumed entirely attributable to the licence holder and in turn to SUEK.
- All Reserves are quoted as RoM products and are within areas of valid licences, or where SUEK has reasonable expectations of obtaining licences and has made financial provision for doing so.
- Wherever possible Resources and Reserves have both been attributed to operating assets, even though the operating assets in some cases "share" licences and the Balance Reserves within those licences.

The projected mine life for individual operations, based on the mine plans and financial models provided to SRK, varies considerably. Generally, the mine life for the hard coal assets, many of which provide export coal, are less than 100 years; whilst those for the brown coal assets, which provide products for the internal Russian market, mainly for power generation, are for a much longer period and up to more than 300 years for Berezovsky-1. SRK is of the opinion that Reserves declared beyond 20 years will represent a greater risk and for this reason has declared them as Probable Reserves.

Table ES 6: Summary of Resources and Reserves as at 1 January 2019, Grouped by Coal Type and Mine Type

SUEK	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019			
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable	Marketable coal (1)
Hard Coal Underground	1,529.0	1,577.2	3,106.2	704.3	1,282.2	1,986.4	1700.7
Hard Coal Open Pit	608.1	654.2	1,262.3	497.0	661.2	1,158.2	938.7
Brown Coal Open Pit	3,455.7	2,197.3	5,653.0	642.4	3,937.3	4,579.7	4579.7
Total	**5,592.8**	**4,428.7**	**10,021.5**	**1,843.6**	**5,880.7**	**7,724.3**	**7,219.1**

(1) Marketable coal is coal remaining after washing

Table ES 7: Coal Resource and Coal Reserve Statement, as at 1 January 2019. Coal Assets Grouped by Region

SUEK Assets	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019			
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable	Marketable coal
Kemerovo Region	1310.9	1366.8	2677.6	758.5	1398.1	2156.5	1905.4
Krasnoyarsk Territory	3162.3	1827.2	4989.5	502.0	3496.4	3998.4	3998.4
Zabaikalie Territory	244.6	344.5	589.2	134.3	411.2	545.5	509.7
Republic of Buryatia	55.4	275.7	331.1	55.7	275.4	331.1	246.1
Republic of Khakassia	372.4	91.8	464.2	264.2	91.6	355.8	285.7
Primorsky Territory	65.6	56.6	122.2	25.7	83.2	108.9	108.2
Khabarovsk Territory	381.6	466.1	847.7	103.2	124.8	228.0	165.7
Total All Regions	**5592.8**	**4428.7**	**10021.5**	**1843.6**	**5880.7**	**7724.3**	**7219.1**

Table ES 8: Kemerovo Region. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019			SUEK LoMP	20-year Mine Plan 01/2019 - 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable		
Kirov Mine	274.3	480.6	754.8	99.9	494.8	594.7	594.7	99.9
Komsomolets Mine	93.0	38.6	131.6	55.5	72.3	127.7	181.5	55.5
7th November - Novaya Mine	167.4	113.1	280.5	68.9	180.4	249.4	249.4	68.9
Taldinskaya-Zapadnaya 1 Mine	69.6	42.2	111.8	67.0	79.9	147.0	147.0	67.0
Taldinskaya-Zapadnaya 2 Mine	83.6	159.3	242.9	53.3	103.5	156.8	156.8	93.3
Zarechny Severny Open Pit	32.3	25.9	58.1	25.1	20.5	45.7	45.7	40.0
Zarechny Open Pit	66.0	14.2	80.2	68.8	15.1	83.9	83.9	80.0
Polysaevskaya Mine	32.8	4.7	37.5	27.9	0.0	27.9	27.9	27.9
Ruban Mine	129.8	63.9	193.7	72.4	80.0	152.4	152.4	72.4
Yalevsky Mine	345.6	314.5	660.1	203.3	238.8	442.1	442.1	203.3
Kamyshansky Open Pit	8.7	24.2	32.9	8.1	22.4	30.4	40.8	40.8
Kamyshansky Severny Open Pit	7.8	85.7	93.5	8.2	90.4	98.6	98.6	55.5
TOTAL	**1310.9**	**1366.8**	**2677.6**	**758.5**	**1398.1**	**2156.5**	**2220.7**	**904.6**

Table ES 9: Krasnoyarsk Territory. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019			SUEK LoMP	20-year Mine Plan 01/2019 - 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable		
Nazarovsky Open Pit	192.9	6.8	199.7	69.6	0.0	69.6	266.2	69.6
Berezovsky-1 Open Pit	2592.0	1037.1	3629.1	90.3	3284.2	3374.5	3607.0	90.3
Borodinsky Open Pit	349.0	749.5	1098.5	342.1	208.4	550.5	1026.5	550.5
Sereulsky Open Pit	1.8	1.8	3.5	0.0	1.0	1.0	0.0	1.0
Kansky Open Pit	26.6	32.0	58.7	0.0	2.8	2.8	0.0	2.8
TOTAL	**3162.3**	**1827.2**	**4989.5**	**502.0**	**3496.4**	**3998.4**	**4899.7**	**714.2**

Table ES 10: Zabaikalie Territory. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019			SUEK LoMP	20-year Mine Plan 01/2019 - 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable		
Kharanorsky Open Pit	129.6	217.3	346.9	88.6	230.5	319.2	319.2	88.6
Vostochny Open Pit	94.6	83.9	178.4	26.0	129.7	155.7	155.7	26.00
Apsat Open Pit	20.4	43.4	63.8	19.7	51.0	70.6	80.8	60.1
TOTAL	**244.6**	**344.5**	**589.2**	**134.3**	**411.2**	**545.5**	**557.7**	**174.7**

Table ES 11: Republic of Buryatia. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019			SUEK LoMP	20-year Mine Plan 01/2019 - 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable		
Tugnuisky Open Pit	11.3	43.9	55.3	12.7	49.4	62.1	62.1	43.8
Nikolsky Open Pit	44.1	231.8	275.8	43.0	226.0	269.0	269.0	256.5
TOTAL	**55.4**	**275.7**	**331.1**	**55.7**	**275.4**	**331.1**	**331.1**	**300.3**

Table ES 12: Republic of Khakassia. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019			SUEK LoMP	20-year Mine Plan 01/2019 - 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable		
Chernogorsky Open Pit	117.1	33.6	150.7	100.3	49.9	150.2	150.2	150.2
Abakansky Open Pit	33.7	5.5	39.2	34.7	5.4	40.1	40.1	29.5
Vostochno-Beisky Open Pit	94.4	34.0	128.3	94.9	31.6	126.5	516.5	97.5
Izykhsky Open Pit	127.2	18.8	145.9	34.3	4.7	39.0	115.1	30.0
TOTAL	**372.4**	**91.8**	**464.2**	**264.2**	**91.6**	**355.8**	**821.9**	**307.2**

Table ES 13: Primorye Territory. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019			SUEK LoMP	20-year Mine Plan 01/2019 - 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable		
Pavlovsky-2 Open Pit	64.9	50.0	114.9	25.1	79.3	104.4	273.6	67.0
Vostochny (Pavlovsky-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severnaya Depressia Open Pit	0.6	1.1	1.8	0.5	1.0	1.5	1.5	1.5
Nekkovy Open Pit	0.1	2.6	2.7	0.1	2.9	3.0	3.6	3.6
Rakovsky Open Pit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Osinovsky Deposit	0.0	2.9	2.9	0.0	0.0	0.0	0.0	0.0
Vostok-2 Mine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	**65.6**	**56.6**	**122.2**	**25.7**	**83.2**	**108.9**	**278.7**	**72.1**

Table ES 14: Khabarovsk Territory. Coal Resource and Coal Reserve Statement as at 1 January 2019

	Coal Resources (Mt) as of 01/01/2019			Coal Reserves (Mt) as of 01/01/2019			SUEK LoMP	20-year Mine Plan 01/2019 - 31/12/2038 (Mt)
	Measured	Indicated	Measured & Indicated	Proved	Probable	Proved & Probable		
Severnaya Mine (UG: Severny Urgal, Severo Zapadny Urgal, Urgal)	**332.9**	**360.4**	**693.3**	55.97	32.51	88.5	340.79	81.42
Severny Urgal licence (XAB 12579)	111.1	126.1	237.2					
Severo Zapadny Urgal licence (XAB 02645)	106.2	69.2	175.4					
Urgal licence (XAB 12578), Underground, +200m	54.5	37.0	91.5					
Urgal licence (XAB 12578), Underground, +200m to 0m	61.1	128.1	189.2					
Bureinsky Open Pit	6.8	22.9	29.7	5.2	17.5	22.6	22.6	22.6
Pravoberezhny Open Pit	38.2	67.8	106.0	41.9	74.4	116.3	180.4	106.5
Marekansky Open Pit	3.7	15.0	18.7	0.1	0.4	0.5	0.5	0.5
TOTAL	**381.6**	**466.1**	**847.7**	**103.2**	**124.8**	**228.0**	**544.4**	**211.1**

7 WASH PLANTS

SUEK operates ten Coal Processing Plants (CPP or “Wash Plants”) that are designed to upgrade coal quality, primarily for export:

- There are five wash plants in the Kemerovo Region, four of which are in the Leninsk-Kuznetsky Area, at Kirov Mine (Kirov 1 and Kirov 2), Komsomolets Mine, Polysaevskaya Mine, and one located in the Kiselevsk Area at Taldinskaya-Zapadnaya 1 Mine. In this region, between 2011 and 2018, the amount of ROM coal washed increased from 5.7 Mtpa to 14.4 Mtpa as a result of the construction of new capacity, upgrading existing equipment, and providing additional fine coal beneficiation in plants to improve recovery.
- Tugnuiskaya Wash Plant in the Republic of Buryatia at Tugnuisky Open Pit. Originally constructed to process 4.5 Mtpa, has been increased to 7.2 Mtpa and works are currently ongoing to increase capacity further to 12 Mtpa. It processes the production from Tugnuisky and Nikolsky Open Pits.
- Chernogorskaya Wash Plant in the Republic of Khakassia at Chernogorsky Open Pit. The plant formerly processed Khakasskaya Mine production and has a capacity of 8.5 Mtpa. Work is currently underway to increase capacity to 10.5 Mtpa.
- Nekkovy Dry Processing Facility (formerly referred to as FGX-12 Processing Plant) in the Primorsky Territory. This plant employs Chinese pneumatic cleaning technology but only processes to a low grade specification. It currently processes coal from Nekkovy Open Pit.
- OU-22 Wash Unit in the Khabarovsk Territory. The OU-22 Wash Unit processes coal from Bureinsky Open Pit and has a design capacity of 2.0 Mtpa.
- Chegdomyn Wash Plant in the Khabarovsk Territory. Chegdomyn plant processes coal from Severnaya Underground Mine and Pravoberezhny Open Pit and currently has a capacity of 6 Mtpa but this will increase to 10 Mtpa with an extended processing facility currently under design.

A new washery (Terentyevskaya) is to be built at the Yalevsky Mine in the Kiselevsk Area to process RoM coal, initially at a rate of 5 Mtpa, and is due for completion in 2023. Further plants are planned and provided for in SUEK’s financial model at Apsatsky Open Pit and Vostochno-Beisky Open Pit. SUEK has no wash plants in the Krasnoyarsk Region which only produces brown coal for utilisation within Russia.

Table ES 15 shows the wash plant yields and marketable coal planned to be sold within SUEK’s 20-year mine plans.

Table ES 15: Marketable Yields from Wash Plants Relative to Coal in 20-Year Plans

Summary 20 Year Plan	Coal Mined (kt) - 20 Year Plan	Coal Sold Direct (kt)	Coal Washed (kt)	% washed of RoM (%)	Yield (%)	Wash Product (kt)	Coal for Sale (kt)	Coal Sold Total (kt)
Kemerovo Region	**894,236**	**490,828**	**403,408**	**45%**	**74%**	**299,261**	**790,089**	**792,381**
Kirov Mine	99,949	-	99,949	100%	69%	68,739	68,739	70,939
Zarechny Open Pit	80,000	69,837	10,163	13%	91%	9,248	79,085	79,003
Zarechny Severny Open Pit	40,000	40,000	-	0%	-	-	40,000	40,000
Komsomolets Mine	55,451	-	55,451	100%	72%	39,664	39,664	39,664
7th November Novaya Mine	68,946	68,946	-	0%	-	-	68,946	68,946
Taldinskaya-Zapadnaya 1 Mine	67,025	34,708	32,317	48%	81%	26,064	60,772	60,772
Taldinskaya-Zapadnaya 2 Mine	93,317	74,417	18,900	20%	80%	15,053	89,470	89,453
Polysaevskaya Mine	27,914	1	27,913	100%	59%	16,506	16,506	16,506
Ruban Mine	72,433	23,671	48,762	67%	81%	39,255	62,926	63,198
Kamyshansky Open Pit	30,400	30,400	-	0%	-	-	30,400	30,321
Yalevsky Mine [(1)]	203,301	101,548	101,753	50%	77%	78,254	179,803	179,803
Kamyshansky Severny Open Pit	55,500	47,300	8,200	15%	79%	6,478	53,778	53,776
Krasnoyarsk Region	**802,176**	**802,176**	**-**	**0%**	**0%**	**-**	**802,176**	**800,216**
Berezovsky Open Pit	182,053	182,053	-	0%	-	-	182,053	182,053
Borodinsky Open Pit	550,523	550,523	-	0%	-	-	550,523	548,563
Nazarovsky Open Pit	69,600	69,600	-	0%	-	-	69,600	69,600
Zabaikalye Region	**174,738**	**120,041**	**54,697**	**31%**	**79%**	**43,211**	**163,252**	**163,296**
Kharanorsky Open Pit	88,640	88,640	-	0%	-	-	88,640	88,640
Vostochny Open Pit	26,000	26,000	-	0%	-	-	26,000	26,000
Apsatsky Open Pit	60,098	5,401	54,697	91%	79%	43,211	48,612	48,656
Buryatia	**300,309**	**66,209**	**234,100**	**78%**	**67%**	**156,994**	**223,203**	**223,203**
Nikolsky Open Pit	256,501	49,321	207,180	81%	68%	141,147	190,468	190,468
Tugnuisky Open Pit	43,808	16,888	26,920	61%	59%	15,848	32,735	32,735
Khakassia	**307,229**	**42,375**	**264,854**	**86%**	**77%**	**204,270**	**246,645**	**246,438**
Izykhsky Open Pit	30,000	30,000	-	0%	-	-	30,000	30,000
Chernogorsky Open Pit	150,230	-	150,230	100%	75%	112,368	112,368	112,368
Abakansky Open Pit	29,499	1,000	28,499	97%	77%	21,944	22,944	22,736
Vostochno-Beisky Open Pit	97,500	11,375	86,125	88%	81%	69,957	81,332	81,334
Primorye Region	**70,001**	**67,680**	**2,321**	**3%**	**82%**	**1,899**	**69,579**	**69,615**
Pavlovsky Open Pit	67,000	67,000	-	0%	-	-	67,000	67,000
Nekkovy Open Pit	3,001	680	2,321	77%	82%	1,899	2,579	2,615
Khabarovsk Region	**210,562**	**-**	**210,562**	**100%**	**73%**	**153,009**	**153,009**	**153,009**
Bureinsky Open Pit	22,644	-	22,644	100%	87%	19,718	19,718	19,718
Pravoberezhny Open Pit	106,500	-	106,500	100%	70%	74,488	74,488	74,488
Severnaya Mine	81,418	-	81,418	100%	72%	58,804	58,804	58,804
Total	**2,759,250**	**1,589,309**	**1,169,941**	**42%**	**73%**	**858,643**	**2,447,952**	**2,448,158**

8 ENVIRONMENT AND SOCIAL, CLOSURE COSTS

SUEK's environmental protection activities are influenced by the applicable legislation of the Russian Federation and by the Environmental Policy of the Company. SUEK has developed a strong corporate governance culture based on common principles and approaches (including environmental performance) and applies a Code of Corporate Ethics across the Company. In 2018 one of SUEK's strategic decisions was to focus on developing a sustainability niche in the international coal market. One of the five strategic priorities is an emphasis on sustainable development.

Environmental legislation in the Russian Federation is primarily based on the Constitution and the Federal Law No.7 "On Environmental Protection". This Law requires environmental impact assessment of any project that has the potential for direct or indirect effects on the environment. The law also provides for environmental permitting and monitoring and requires that decisions made at all stages of project development have environmental justification. This does not only apply to project planning/ engineering, but also to exploration, construction and operation.

The focus of SUEK's environmental management is on compliance with legislation and permits. Elements of an environmental and social management system have been introduced by several operations, but fully functional systems have not yet been established, even though some operations have received official ISO certification. There is a good set of internal procedures but at the same time the necessary understanding of the system's principles and implementation of these on the daily basis by all staff is missing. Integrated environmental monitoring databases are maintained, but monitoring data is generally not analysed by the operations to determine whether the management measures are effective and additional measures are required.

SUEK has calculated life of mine closure (LoM) cost estimates that present the cost that SUEK would incur to perform all the actions required to fulfil the closure liabilities. Asset retirement obligations (ARO) have also been estimated for the mines as they are now. These differ from the life of mine estimates since they do not include closure liabilities that will be incurred in the future, over the remaining life of the mine.

There is no legislative requirement in Russia to create any type of financial guarantee instrument (liquidation fund, bank guarantees or deposits etc) to accumulate financial resources for settling closure liabilities.

The estimates as shown in Table ES 16 are based on currently available information, with volumes of works defined either in existing liquidation or project documentation, or based on assumptions made by multidisciplinary groups of technical specialists based at mines or open pits. The closure costs were derived using a combination of unit rates based on Russian cost estimation norms and methodology for various construction works, site specific assumptions on equipment and manpower productivity, and actual data from third parties. These were based on SUEK's experience to date and estimates made by engineering staff.

Table ES 16: Closure and Rehabilitation Liabilities

Description	LoM, 2011 (USDm)	Contingency (%)	LoM, 2019 (USDm)[1)] w/ cont.	ARO, 01.01.2019 (RUBk) -w/ cont.	LoM, (RUBk) w/ cont.	Salvage value at end of LoM, (RUBk)	Planned Closure Year
Kemerovo Region	**87.60**		**237.71**	**16,210,584**	**16,514,028**	**9,729,184**	
JSC SUEK-Kuzbass			**237.71**	**16,210,584**	**16,514,028**	**9,729,184**	
Kirov Mine		12%	31.59	2,194,534	2,194,534	1,114,131	2142
Kirov Wash Plants 1 and 2		16%	3.59	249,666	249,666	132,828	2142
Ruban (Magistralny section)		12%	20.81	1,446,022	1,446,022	863,293	2061
Ruban (Krasnoyarskaya section)		12%	19.53	1,356,805	1,356,805	540,516	2019
7th November Mine (closing)		16%	4.33	300,484	300,484	0	No longer operating
Komsomolets Mine		12%	24.70	1,715,734	1,715,734	272,805	2064
Komsomolets Wash Plant		16%	2.07	143,523	143,523	119,367	2064
Polysaevskaya Mine		12%	19.77	1,373,225	1,373,225	317,065	2029
Polysaevskaya Wash Plant		16%	1.82	126,225	126,225	223,877	2061
Yalevsky Mine		12%	30.79	2,138,773	2,138,773	2,382,631	2073
Terentyevskaya Wash Plant		16%	3.15	218,747	218,747	112,809	2073
Taldinskaya-Zapadnaya 1 Mine		12%	20.60	1,431,251	1,431,251	1,066,888	2061
Taldinskaya-Zapadnaya 1 Wash Plant		16%	1.37	95,385	95,385	93,071	2061
Taldinskaya-Zapadnaya 2 Mine		12%	20.08	1,395,280	1,395,280	1,281,523	2051
Zarechny Open Pit		12%	14.32	977,094	994,635	879,949	2039
Zarechny Severny Open Pit		16%	4.24	198,943	294,859	0	2041
Kamyshansky Open Pit		12%	14.95	848,893	1,038,879	328,432	2030
Krasnoyarsk Territory	**50.50**		**105.03**	**6,874,694**	**7,296,200**	**2,111,320**	
JSC SUEK-Krasnoyarsk			**105.03**	**6,874,694**	**7,296,200**	**2,111,320**	
Nazarovsky Open Pit		12%	39.40	2,736,284	2,736,854	560,693	2038
Berezovsky-1 Open Pit		12%	32.47	2,017,310	2,256,025	503,496	2347
Borodinsky Open Pit		12%	27.49	1,754,734	1,909,965	937,636	2038
Kansky Open Pit		16%	2.45	155,695	169,858	41,635	2038
Sereulsky Open Pit		16%	3.22	210,672	223,498	67,861	2038
Republic of Buryatia	**38.40**		**63.85**	**3,374,519**	**4,435,404**	**3,590,960**	
JSC Tugnuisky Open Pit			**63.85**	**3,374,519**	**4,435,404**	**3,590,960**	
Tugnuisky Open Pit		12%	28.78	2,240,035	1,999,490	2,415,839	2043
Tugnuisky CPP		16%	4.14	287,591	287,591	679,105	2043
Nikolsky Open Pit		12%	30.92	846,893	2,148,323	496,015	2043
Zabaikalye Territory	**22.40**		**32.60**	**1,797,584**	**2,264,562**	**1,434,175**	
JSC Razrez Kharanorsky			**13.15**	**886,730**	**913,471**	**522,383**	
Kharanorsky Open Pit		12%	13.15	886,730	913,471	522,383	2085
LLC Razrez Vostochny			**9.43**	**471,187**	**655,210**	**159,669**	
Vostochny Open Pit		12%	9.43	471,187	655,210	159,669	2138
LLC Arcticheskie Razrabotki			10.02	**439,666**	**695,882**	**752,123**	
Apsatsky Open Pit		12%	10.02	439,666	695,882	752,123	2041
Republic of Khakassia	**44.70**		**48.22**	**3,185,931**	**3,349,987**	**1,944,179**	
LLC SUEK-Khakassia			**28.14**	**1,904,960**	**1,955,125**	**1,320,805**	
Khakasskaya Mine		12%	3.10	215,404	215.404	101,022	No longer operating
Abakansky Open Pit		16%	2.17	134,971	150,854	43,680	2046

Description	LoM, 2011 (USDm)	Contingency (%)	LoM, 2019 (USDm)[1] w/ cont.	ARO, 01.01.2019 (RUBk) -w/ cont.	LoM, (RUBk) w/ cont.	Salvage value at end of LoM, (RUBk)	Planned Closure Year
Chernogorsky Open Pit		12%	17.35	1,171,142	1,205,424	964,136	2037
Chernogorsky Wash Plant		12%	5.52	383,443	383,443	211,967	2046
JSC Izykhsky Opencast Mine			**10.07**	**663,583**	**699,271**	**127,359**	
Izykhsky Open Pit		12%	10.07	663,583	699,271	127,359	2044
LLC Vostochno-Beisky Opencast Mine			**10.01**	**617,387**	695,591	**608,824**	
Vostochno-Beisky Open Pit		12%	10.01	617,387	695,591	496,015	2044
Primorye Territory	**51.50**		**41.70**	**2,126,253**	**2,897,251**	**722,538**	
LLC Primorskugol			41.70	**2,126,253**	**2,897,251**	**722,538**	
Pavlovsky-2 Open Pit		12%	33.73	1,635,624	2,343,560	509,022	2049
Severnaya Depressia Open Pit		16%	1.70	115,239	117,959	2,531	2022
Nekkovy Open Pit and Dry Processing Facility		16%	2.78	132,641	192,983	33,376	2023
Vostochny-2 Mine (closing)		12%	3.00	208,743	208,743	175,851	No longer operating
Rakovsky Open Pit (care and maintenance)		20%	0.49	34,006	34,006	1,757	2024
Khabarovsk Territory	**18.30**		**45.82**	**3,162,950**	**3,182,874**	**3,308,154**	
JSC Urgalugol			**45.82**	**3,162,950**	**3,182,874**	**3,308,154**	
Marekansky Open Pit		16%	0.79	50,870	54,681	33,404	2038
Bureinsky Open Pit		12%	6.03	411,677	418,885	584,641	2026
OU-22 Wash Plant		16%	1.92	133,688	133,688	20,315	2026
Severnaya Mine		12%	29.02	2,015,924	2,015,924	1,991,035	2040
Chegdomyn Wash Plant		16%	4.17	289,396	289,396	400,983	2040
Pravoberezhny Open Pit		16%	3.89	261,395	270,300	277,777	2040
TOTAL	**313.40**		**574.92**	**36,732,515**	**39,940,306**	**22,840,510**	

1) at an exchange rate of 69.5 RUB:USD as at 1/1/2019.
2) Closure costs have been estimated for the following assets, which were not in commercial production as at 1/1/2019, but which do form part of the Coal Reserve: 7th November Novaya Mine USD12m, Apsat Wash Plant USD2m, Vostochno-Beisky Wash Plant USD2m.

9 HEALTH AND SAFETY MANAGEMENT

Coal mining has inherent risks and requires high standards of health and safety management to protect the workforce, to prevent catastrophic events and to safeguard against loss or serious damage to assets. The risks are different for underground mines, open pits and wash plants.

SRK carried out a brief, desk top review of the management of health and safety (H&S) within SUEK to identify existing strategies and processes to manage H&S risk. SRK was provided with accident statistics for the majority of the sites and operating regions, as well as specific health and safety presentations provided by the SUEK Head Office, some of the Regional Offices and/or individual mines.

SRK undertook visits to nearly all of the assets during May and June 2019 and was able to view at first hand SUEK's H&S practices and implementation of its policies at its mining and processing operations. SRK specialists undertaking the visits were of the opinion that safety practices and awareness had improved significantly since SRK's 2011 audit.

A clear improvement in the total number of injuries and also the number of light injuries can be seen across the group, though severe and fatal injuries have stayed relatively static, but are still infrequent given the large workforce. In terms of fatalities in 2018, the four that occurred were single incidents and in different regions (Kuzbass, Krasnoyarsk, Zabaikalye and Khakassia). There were no multiple (group) fatal accidents and none of the fatalities related to underground coal mining activities.

The average lost time per severe injury has decreased substantially. In 2018 it was 38% of the average in 2011, and the total number of days lost has halved. This represents a very significant improvement.

The general overall positive trend of the operations is reflected in the results from SUEK-Kuzbass. This is particularly encouraging, with Kuzbass being the region with the highest number of operations, mostly underground mines, with commensurate higher levels of operational risk. It should also be noted that during the period since the 2011 audit underground mines have become significantly deeper, resulting in greater requirements for support of roadways and higher gas emissions. Longwall face lengths have also increased and longwall outputs have risen, exacerbating the liberation of gas and coal dust. Despite the more demanding conditions significant improvement in injury rates has been accomplished.

Other regions are more variable, but also encouragingly, the Khabarovsk region (Urgal) shows a similar marked decrease in LTIFR since 2011. The sharp increase of LTIFR for Primorskugol in 2018 was due to a significant increase in the industrial accident rate in a new company formed to develop roadways in Severnaya Mine (Urgalugol), which was established based on the Vostochny Mine Complex workforce and included inexperienced and poorly trained workers. However, in 2019 the situation improved and there were no accidents involving employees of this unit.

SUEK has initiated and implemented a number of key safety practices that are fundamental to improved safe working conditions at its underground mines and open pits, including:

- Minimizing accidents
- Technical measures to reduce occupational injuries
- Culture and organisation

Of particular note have been the following:

- A Mine Ventilation Modernization Initiative has been undertaken to increase the total amount of air supplied to the workings by 21%, from 124,000 m^3/minute in 2011 to 151,000 m^3/minute in 2018. This includes construction of new ventilation fans at Severnaya (Urgal); Kirov, Taldinskaya-Zapadnaya-1, Ruban, Polysaevskaya and November 7th Novaya Mines in the Kuzbass, and additional modernization of other fans, plus acquisition of a fleet of mobile fan units.
- Integrated Degasification System, to ensure safe conditions during working of the gas-bearing coal seams in its underground mines. This included advanced gas drainage technology, based on hydraulic fracturing of the coal seam, which has reduced the gas content of the longwall panel in the fractured area by 30%; degassing of the goaf and adjacent seams of the operating mines, with boreholes drilled from the surface in advance of mining, followed by hydrofracturing of the seam and pumping out of the water and gas; directional drilling of degasification wells, and automation of degassing operations with monitoring and control systems at all mines.
- Monitoring of Underground Air, Gas and Personnel, using multifunctional, automated and continuous monitoring systems designed to ensure the safety and control of the mining operations.
- Coal Dust Management (Stone Dusting), to reduce the risk of coal dust explosions. SUEK now has over 350 mechanical stone-dusting units, some of which it produces itself. From 2011 to 2018 the quantity of dust used has increased from 8.9 kt per year to 19.7 kt.
- Monitoring and Control of H&S Processes.
- Safety Culture, Training and Development, and Promotion, which SUEK has developed in line with modern health and safety thinking, and which increasingly acknowledges the importance of safety at every level of the workforce in ensuring sustainable, acceptable health and safety performance. SUEK's Industrial Safety Committee was formed in 2010 as part of the management board and is chaired by the CEO. The Committee is mandated to meet monthly and reviews performance and implements key initiatives to address health and safety at a strategic level.

10 MARKETING AND INFRASTRUCTURE

Infrastructure and Logistics

In 2018, SUEK's coal constituted 23.3% of the total coal cargo conveyed on the Russian rail network, which is operated by the State monopoly Russian Railways. This amounted to a total of 85.8 Mt in 2018, up 4% from 2017 (82.6 Mt), of which 44.4 Mt was export coal (51%) and 41.4 Mt for the domestic market. The Russian Railways network is critical in delivering SUEK's coal from the mines and processing plants to both internal customers and to seaports for export.

SUEK owns and manages a large fleet of rail cars for coal transportation (over 40,000 units). It has recently invested in additional higher capacity 'innovative' rail cars of 75 t and 77 t, compared to normal cars with 69 t capacity, which is expected to reduce operating costs due to improved unloading at customers' port infrastructure and by reducing rail car availability risks. SUEK also owns 930.5 km of rail track, linking its mines and coal processing sites to the Russian Railways' network, with 16 dedicated loading stations, mostly owned by SUEK.

SUEK has implemented a number of initiatives with Russian Railways to eliminate infrastructure constraints by increasing capacity and efficiency on the network in the Far East, including electrification of new sections, laying of additional track, bridges and junctions and upgrading diesel locomotives to improve haulage capacity. These initiatives are a key element supporting SUEK's plan to increase transhipment from Daltransugol (formerly Vanino) Port to 40 Mtpa.

SUEK owns three dedicated coal transhipment terminals: Vanino Bulk Terminal (Far East Russia for Asia-Pacific trade); Murmansk Commercial Seaport (NW Russia for Atlantic trade), and Maly Port (Far East Russia for predominantly Japan and South Korea). SUEK also uses a number of other commercial seaports, including St Petersburg, Ust-Luga and Vyborg (Baltic Sea), Azov (Black Sea) and Vostochny (Far East).

In 2018, SUEK shipped 20 Mt through Vanino, 14.1 Mt through Murmansk, 2.5 Mt through Maly and 6.9 Mt through other ports, totalling 43.5 Mt, with the SUEK owned ports handling approximately 84% of the total.

SUEK's planned increase from Vanino is timed to coincide with the capacity improvements deriving from the planned rail network upgrades by 2024. At Maly Port, works were ongoing through 2018 and 2019 to increase capacity to 4 Mt and were expected to be completed in Autumn 2019. SUEK expects to export 36.3 Mt of its own coal in 2019, including 17.5 Mt from Vanino, 12 Mt from Murmansk and 2.6 Mt from Maly.

SRK understands that the geographical proximity of SUEK's Far East ports to major Asian importers gives SUEK a competitive advantage with higher FOB prices compared to Australian and Indonesian suppliers. Total transportation costs in US Dollar terms increased by USD 23m (+1%) compared to 2017, rail costs increased by 2% (USD 21m) and freight costs increased by approximately 5% (USD 11m), as a result of higher volumes of freight. Increases in rail and freight costs were partially offset by the weakening of the Ruble.

Thermal (Hard Coal) Export Outlook

SUEK is an exporter of good quality thermal coal to the international market and SUEK plans to include a growth in the export of steam coal shipments from 46.7 Mt in 2018 to a maximum of 61.2 Mt in 2024 (32%), and thereafter averaging approximately 56 Mtpa with a gradual decline in sales to 54.1 Mt in 2037 (SUEK 20-year plan). SUEK's strategies for long term production growth are based on the following key assumptions:

- Economic growth in developing countries (primarily Asian) driven by large-scale industrialization and associated requirement for power, including coal fired power.
- Increased use of electric vehicles and associated power requirements.
- Despite initiatives to move to low-carbon energy and to limit coal use, growth rates in the next 10-20 years are not expected to be high enough to permit complete substitution of coal generation.

In addition to the overall market demands, in 2018 there was an increasing differentiation between demand and prices for high-CV (>5,700 kcal/kg), low ash and low sulphur coals. This provides SUEK's export coals with a competitive advantage at present. SUEK's focus on washing hard coals is critical, but SUEK recognises that the currently achieved level of discount appears to be close to its maximum and will most likely decrease as more lower quality coal is washed by other suppliers.

SUEK's base case also takes account of the price differential between coal and gas, and recognises that whilst there is still currently a gap between demand and supply in the gas market, significant new infrastructure is being developed to increase LNG producing plants and receiving terminals over the next 10 to 15 years.

Whilst SUEK expects capacity decommissioning to continue globally, this will be offset by increased demand in other Asian countries, and the gap between demand and supply from the existing assets will be 180-200 Mt at the Asian market alone over the next 10 years, supporting a SUEK forecast price for FOB Newcastle 6,000 kcal/kg product of approximately US$ 75/t.

SUEK considers itself highly competitive in the export market and well placed to take advantage of increased demand in Asia, based on its well-situated ports on the Pacific coast, its high-quality coals and its low overall operating costs. SUEK's projected increases in export sales over the next 20 years, of around 10 Mt but up to 15 Mt in 2024, as set out in SUEK's mine plans and financial models reviewed by SRK, are therefore considered to be well supported on the basis of the above analysis, with focus on high quality products and the planned Far East rail infrastructure and Vanino port capacity upgrades being key factors in achieving this.

Coking Coal Export Outlook

SUEK forecasts that over the next 10 years the PCI and SSCC markets will show relatively stable average annual growth rates of 1.7% and 1.3% respectively. Their share in the total volume of metallurgical coal consumption will remain at the current levels of 20-21% and 18-19% for PCI and SSCC respectively.

SUEK's Kirov mine in the Kemerovo Region supplies coking coal to the international market, and whilst this is a relatively small proportion of the overall coal produced for export by SUEK (3 Mt in 2018, projected to increase to 3.5 Mt by 2025, less than 7% of the total exports), the higher prices obtained for these products are a significant revenue driver over the next 20 years and beyond, especially with respect to Kirov mine's large reserves. SUEK's long term price forecast for Kirov mine of USD 101/t FOB is considered suitably conservative by SRK.

Apsatsky Open Pit mine is currently planned to ramp up production and although SUEK's current plans are for Apsatsky to supply the domestic market predominantly, it is also planned for around 400 ktpa to be exported from 2024 onwards.

Domestic Market (Thermal and Coking)

SUEK states that the volume of thermal coal consumption in the domestic market increased in 2018 by 3 Mt to 157 Mt (up 2% from 2017). Most of the consumption increase was attributable to industrial users, utilities, state-owned enterprises and other consumers, with 69% for power generation, 16% for domestic heating and public utilities, and 5% for manufacturing. From 2013 to 2018 SUEK maintained its position as supplier of approximately one third of the domestic market, at around 50 Mt.

SUEK's base case scenario includes projected growth of thermal coal consumption in the domestic market by 5 Mt in 2020 and then 10 to 15 Mt over the next 6 to 10 years. The key driver for this increase is the commissioning of new UC RUSAL aluminium smelting facilities in the Krasnoyarsk Territory and the Irkutsk Region, with the latter largely supplied by non-SUEK mines. SRK notes that US Government sanctions on UC RUSAL have caused delays to the Taishet project and it is not clear when this facility will be commissioned. Minor additional utilization of coal-fired generation facilities is also expected to be associated with the growth of electric power consumption in the Far East.

SUEK recognises, however, that the risks of a decline in coal consumption remain in the domestic market, primarily due to the plans for gas infrastructure development in the housing and utilities segment of Siberia and the Far East. In the European part of Russia and in the Urals, power generation companies are either decommissioning coal fired plants or retrofitting them to switch to natural gas: 2.9 GW of coal generation has been decommissioned over the last three years and another 2.8 GW is expected to be decommissioned by 2025.

Notwithstanding the above, SRK considers SUEK's small increase in expected demand for the domestic thermal market to 2025 to be reasonable.

The Russian metallurgical coal market is characterized by high integration with metallurgical production and over 50% of Russian coking coal is supplied to major vertically-integrated steel-making companies (Evraz, Severstal and Mechel). SUEK plans to ramp up sales from Apsatsky open pit mine to approximately 2.5 Mtpa by 2025 (through to 2044).

11 ECONOMIC EVALUATION

SRK has reviewed the 20-year technical-economic models prepared by SUEK and compiled audited technical-economic models ("SRK Adjusted Models") to verify the integrity of the SUEK models and to allow for adjustments if any have been deemed appropriate. The SUEK models capture all revenue and costs assuming a mine gate (also referred to as FCA) point of sale. The SRK Adjusted Models include transportation costs up to the relevant point of sale (CPT for domestic sales, FOB for export). It should be noted that these transportation costs assume that SUEK's logistics department is a separate business and a profit margin is included in the rates, and hence no expenditure for capital projects relating to logistics is included in the SRK Adjusted Models.

The SRK Adjusted Models have been produced to support the Coal Reserves by demonstrating their economic viability on a mine by mine basis. SRK has undertaken an assessment of the economic viability of the Coal Reserves based on assumed long-term prices for hard thermal coal (domestic and export markets) and brown coal (domestic market) and the projected total (mine gate and transport) operating expenditures for the individual operating mines. Table ES 17 shows the basis for the long-term price assumptions used by SUEK to support the Mine Plans and models, as well as the total weighted average cash cost (including a Head/Regional office allocation, but excluding closure, corporate income tax and capital expenditure) on an undiscounted basis. The Coal Reserves will become uneconomic when sales prices approach their total cost of production.

Table ES 17: Prices for Economic Basis of Coal Reserves (Weighted Average over 20 year Mine Plan)

	Coal Reserve Price Base (USD/t)	Total Cash Cost (USD/t)
Hard coal domestic (1)	28	26
Hard coal export (2)	72	48
Coking coal(3)	104	70
Brown coal domestic (1)	15	10

(1) Hard coal domestic and brown coal domestic prices are on a CPT basis.
(2) Hard coal export price is on an FOB basis
(3) Minor sales, weighted average of domestic (CPT) and export (FOB).

For most of the operations, the Coal Reserve life exceeds 20 years. The closure costs as presented in Section 7 of the CPR are not included in the numbers presented below. Should a valuation of the assets be undertaken, the closure costs would need to be taken into account.

SRK has considered the following:

- The SRK Adjusted Models are in real terms. The exchange rate applied by SRK going forward equals the exchange rate assumption for 2019. Historical and forecast exchange rates applied are RUB 66.9, 58.3, 62.8 and 68.0 per USD for 2016, 2017, 2018 and 2019, respectively, in line with the Company's financial reports.
- SUEK uses software to determine the most efficient sales routes, minimising transportation requirements whilst keeping client specification requirements in mind. Sales prices for the different types of coal and their respectively markets are presented in Table ES 18, along with the average long-term prices applied. Long term prices appear realistic and in line with historical prices achieved. Domestic sales prices are on a carriage-paid-to ("CPT") basis, with export sales at a Free-on-Board ("FOB") basis.

- Transportation costs and final sales prices have been incorporated by SRK in the SRK Adjusted Models. Mine gate prices were derived using the final sales price minus the transportation charge. SUEK owns many of its logistic facilities including various ports and rail cars, and whilst transportation is mainly undertaken by SUEK's logistics department, the transportation charges presented are based on market prices.

Table ES 18: Historical and long-term sales prices

Market	Units	2016	2017	2018	Long-Term
Hard coal domestic (1)	(USD/t)	26	30	30	30
Hard coal export (2)	(USD/t)	55	77	88	71
Coking coal(3)	(USD/t)	79	112	120	105
Brown coal domestic (1),(4)	(USD/t)	13	15	15	15

(1) Hard coal domestic and brown coal domestic prices are on a CPT basis.
(2) Hard coal export price is on an FOB basis
(3) Minor sales, weighted average of domestic (CPT) and export (FOB).
(4) Historical export sales (7-8% of total) at elevated prices have been excluded herein, no future export sales projected.

- The SRK Adjusted Models incorporate for each asset an allocation of generic Head Office and Regional Office expenses. Each operation's percentage allocation of the SUEK Head Office, and their respective Regional Office (if applicable) are based on their contribution to total coal sales revenue.
- A royalty is payable by all SUEK subsidiaries mining coal, payable on RoM tonnage actually mined and prior to any washing. The rates have been set for 2019 for each operation specifically and vary year on year with changes in actual sales prices achieved. For the brown coal operations, the rate for 2019 is on average RUB 15/t, with minimal variation between the assets, whilst for the hard coal operations, the rate varies from RUB18 to 37/t, with the exception of Apsatsky, which is charged at RUB 62/t.
- A standard flat 20% corporate income tax rate is applicable to all companies operating in Russia and has hence been applied in each model.
- Operating costs provided in Table ES 21 and Table ES 22 are broken down into:
    - Mine Gate costs on a per tonne sold basis, which include all cash production costs including mining and washing, up to the nearest rail shipment station (indicative of coal production cost on an FCA basis); excluding any Head or Regional Office or closure costs; and
    - Unit transportation costs split between domestic and export, on a per tonne sold into the respective market basis. The unit transportation cost is estimated under the assumption that all domestic sales are on a CPT basis, and all seaborn export sales on an FOB basis.
- Head and Regional Office cost allocations and closure costs are taken into account in the economic assessment but are not presented on an asset by asset basis.
- Capital expenditure includes replacement and new equipment, licence purchases where needed, wash plant expansion/construction, and an allowance for other works. Any capital expenditure related to the logistics department of SUEK, concerning ports and the rail network, is not allocated herein and are assumed captured in the market transport charges as presented.
- Operations that are no longer operational have been excluded from the historical data presented per region in the tables below.

The coal production volumes per region (3 years historical, 5 years annual plan and 2024 to 2038 total) are presented in Table ES 19. These differ from the coal sales numbers as presented in Table ES 20, as a result of coal washing yields and stockpile movements. Mine gate unit operating costs per region, which include transport up to the nearest rail loading facility, are presented in Table ES 21, but the unit operating costs do not include the costs of transport to the point of sale, which are presented in Table ES 22. SRK notes that the operating expenditures specifically exclude the average annual head office and other operating expenditures. Capital expenditures by region are presented in Table ES 23. Operating costs and capital expenditures presented below exclude the closure costs per mine.

Table ES 19: RoM Coal Production by Region

Region	Units	2016	2017	2018	2019	2020	2021	2022	2023	2024-2038
Kemerovo	(kt)	37,299	40,304	40,353	37,730	42,099	45,900	46,701	46,802	675,004
Khakassia	(kt)	11,423	12,581	12,917	14,000	15,000	15,500	16,000	16,000	230,729
Buryatia	(kt)	14,023	13,637	14,292	14,000	15,500	15,500	15,500	15,500	224,308
Khabarovsk	(kt)	5,474	6,546	6,116	6,362	9,000	10,000	11,000	12,000	162,200
Krasnoyarsk	(kt)	27,076	27,578	29,358	31,676	31,300	35,200	36,700	37,900	629,400
Primorye	(kt)	2,477	3,540	3,178	3,401	3,600	4,000	4,000	4,000	51,000
Zabaikalye	(kt)	4,426	5,162	5,979	5,740	6,100	6,800	7,300	7,799	140,999
Total	**(kt)**	**102,198**	**109,349**	**112,192**	**112,908**	**122,599**	**132,901**	**137,201**	**140,001**	**2,113,640**

Table ES 20: Coal Sales by Region

Region	Units	2016	2017	2018	2019	2020	2021	2022	2023	2024-2038
Kemerovo	**(kt)**	**28,239**	**32,529**	**31,861**	**33,708**	**37,884**	**41,782**	**42,566**	**42,725**	**593,716**
domestic	(kt)	5,972	6,414	6,099	5,637	7,423	7,624	7,800	8,061	93,396
export	(kt)	22,267	26,115	25,761	28,071	30,461	34,158	34,765	34,664	500,320
Khakassia	**(kt)**	**9,029**	**10,114**	**10,727**	**11,843**	**12,614**	**12,925**	**12,702**	**12,696**	**183,658**
domestic	(kt)	4,672	5,041	5,887	5,483	7,803	8,119	6,819	5,607	81,385
export	(kt)	4,357	5,073	4,840	6,359	4,810	4,806	5,883	7,089	102,273
Buryatia	**(kt)**	**10,802**	**10,863**	**11,057**	**7,772**	**11,613**	**11,729**	**11,834**	**11,774**	**168,482**
domestic	(kt)	1,003	2,196	2,460	1,430	1,080	1,078	1,311	986	15,653
export	(kt)	9,798	8,667	8,597	6,341	10,533	10,651	10,523	10,788	152,829
Khabarovsk	**(kt)**	**4,266**	**4,378**	**4,534**	**5,030**	**6,958**	**7,639**	**8,288**	**8,958**	**116,135**
domestic	(kt)	1,614	1,234	836	741	2,057	2,507	2,618	2,761	34,457
export	(kt)	2,652	3,144	3,698	4,289	4,901	5,132	5,669	6,197	81,679
Krasnoyarsk	**(kt)**	**28,169**	**28,846**	**32,124**	**31,578**	**31,202**	**35,102**	**36,602**	**37,802**	**627,930**
domestic	(kt)	25,892	26,009	28,648	31,578	31,202	35,102	36,602	37,802	627,930
export	(kt)	2,277	2,837	3,476	0	0	0	0	0	0
Primorye	**(kt)**	**2,353**	**3,054**	**2,936**	**3,328**	**3,522**	**3,922**	**3,922**	**3,922**	**51,000**
domestic	(kt)	2,353	3,054	2,861	3,073	3,261	3,661	3,661	3,661	51,000
export	(kt)	0	0	75	255	261	261	261	261	0
Zabaikalye	**(kt)**	**4,247**	**5,141**	**5,957**	**5,740**	**6,087**	**6,767**	**6,941**	**7,315**	**130,446**
domestic	(kt)	4,173	4,805	5,728	5,477	6,087	6,767	6,941	7,315	124,079
export	(kt)	74	336	229	263	0	0	0	0	6,367
Total	**(kt)**	**84,752**	**91,871**	**96,528**	**98,998**	**109,880**	**119,866**	**122,854**	**125,192**	**1,871,367**
domestic	(kt)	43,327	45,699	49,853	53,420	58,914	64,859	65,752	66,193	1,027,900
export	(kt)	41,425	46,172	46,675	45,578	50,966	55,007	57,102	58,999	843,468

Table ES 21: Unit Operating Costs by Region at Shipment Station / FCA[(1)]

Region	Units	2016	2017	2018	2019	2020	2021	2022	2023	2024-2038
Kemerovo	(USD/t)	15.5	17.5	19.7	17.2	15.7	14.1	14.5	14.3	14.7
Khakassia	(USD/t)	14.4	17.3	18.3	17.5	17.0	16.9	17.4	17.5	12.8
Buryatia	(USD/t)	13.9	17.0	18.2	23.8	16.9	16.6	17.0	16.9	16.0
Khabarovsk	(USD/t)	22.3	30.8	36.3	31.7	24.0	22.1	19.6	18.5	19.9
Krasnoyarsk	(USD/t)	3.9	4.3	4.3	4.1	4.2	3.8	3.7	3.6	3.4
Primorye	(USD/t)	0.0	0.0	46.5	14.0	13.9	12.3	12.3	12.2	11.3
Zabaikalye	(USD/t)	13.0	15.1	15.1	15.1	14.5	15.0	17.1	20.6	24.9

(1) Excluding HQ/Regional HQ, relocation and mine closure costs.

Table ES 22: Unit Transport Costs up to Point of Sale by Region

Region	Units	2016	2017	2018	2019	2020	2021	2022	2023	2024-2038
Kemerovo										
domestic	(USD/t)	3.0	4.5	4.8	5.2	5.1	4.8	4.6	4.5	5.8
export	(USD/t)	26.6	32.9	34.3	39.1	36.4	34.5	34.0	33.6	32.4
Khakassia										
domestic	(USD/t)	9.0	12.8	12.2	13.0	9.1	8.2	8.7	9.5	9.6
export	(USD/t)	27.1	32.6	35.5	48.9	35.5	34.1	33.5	33.4	32.2
Buryatia										
domestic	(USD/t)	5.1	15.2	15.4	15.2	3.4	3.2	3.1	3.1	3.1
export	(USD/t)	24.9	27.4	27.2	30.6	30.3	29.9	29.6	29.4	29.0
Khabarovsk										
domestic	(USD/t)	8.0	8.7	8.6	7.9	9.4	8.6	8.6	8.5	9.7
export	(USD/t)	16.8	18.4	20.9	22.2	22.2	21.2	20.8	20.5	19.1
Krasnoyarsk										
domestic	(USD/t)	3.1	4.2	5.5	5.8	5.4	5.2	4.9	4.8	4.5
export	(USD/t)	28.2	34.3	39.3	0.0	0.0	0.0	0.0	0.0	0.0
Primorye										
domestic	(USD/t)	0.0	0.0	4.3	4.6	4.3	4.0	4.1	4.1	4.0
export	(USD/t)	0.0	0.0	17.9	3.0	3.0	3.0	3.0	3.0	0.0
Zabaikalye										
domestic	(USD/t)	3.3	4.8	4.9	5.0	4.8	6.4	7.5	8.4	9.0
export	(USD/t)	22.3	30.0	34.1	33.3	0.0	0.0	0.0	0.0	28.4

Table ES 23: Capital Expenditure by Region

Region	Units	2016	2017	2018	2019	2020	2021	2022	2023	2024-2038
Kemerovo Region	(USDm)	198.0	243.8	305.9	115.5	127.5	148.5	153.5	183.3	2,278.2
Khakassia	(USDm)	25.7	42.1	69.1	44.2	59.5	45.0	30.7	33.5	475.7
Buryatia	(USDm)	17.6	63.8	107.2	61.8	68.4	37.8	28.5	29.8	248.1
Khabarovsk Region	(USDm)	46.1	62.0	98.6	34.0	24.4	47.0	47.1	46.2	512.4
Krasnoyarsk Region	(USDm)	8.4	12.9	22.6	18.5	9.2	13.0	12.6	10.8	291.0
Primorye Region	(USDm)	8.0	6.1	7.0	3.0	13.6	9.6	4.6	5.9	100.2
Zabaikalye Region	(USDm)	10.9	15.9	28.2	5.6	52.5	114.8	111.4	99.7	416.1
Total	**(USDm)**	**314.7**	**446.6**	**638.5**	**282.6**	**355.0**	**415.8**	**388.3**	**409.2**	**4,321.8**

Excludes capital expenditure on infrastructural (e.g. Vanino port) and other corporate projects.

SRK has tested the economic viability of the various Coal Assets using the SUEK financial model as the basis for its assessment. Whilst some of the assets are considered to be marginal, SRK deems the Coal Reserves as currently stated to be profitable at the long-term prices currently assumed by SUEK. SRK notes that no third-party market assessment has been prepared.

12 RISKS AND OPPORTUNITIES, CONCLUSIONS AND RECOMMENDATIONS

Risks and Opportunities

There are a number of risks to the achievement of SUEK's Mine Plans. Most, however, are outside of SUEK's control and are common to the coal industry as a whole. These include unforeseen changes to both the internal (Russian) and external (export) markets, including those that may be the result of the current move away from coal utilisation in many countries of the world; and a fall in coal prices. Country-specific risks outside of SUEK's control relate primarily to rail infrastructure issues within Russia. SRK is of the opinion that SUEK has planned carefully and well to minimise both the internal and external risks.

SUEK has for the first time for an external Resources and Reserves audit prepared Life of Mine Plans (LoMPs) with associated financial models for the majority of its assets. There is a considerable risk, given that the information prepared by SUEK beyond a 20-year timescale is necessarily less detailed and inevitably likely to be less accurate, that Reserves declared beyond 20 years may not be fully realised. This is reflected in SRK's classification of all Reserves beyond 20 years as Probable Reserves.

In respect of SUEK's underground operations there is a considerable ongoing risk that annual production targets will, as in 2018, fail to be achieved, largely as the result of insufficient development being completed in advance of the scheduled dates for commencing extraction from specific longwall panels. This risk, in SRK's experience, is common to many international underground coal operations and is being addressed with diligence by SUEK.

A few open pit mine plans require success at licence auctions in the near future in order for working to extend into proposed extensions to existing sites. SRK considers it very likely that SUEK will be successful in obtaining new licences for extensions.

There is always a significant risk attached to safe working, for both individuals and to production, in underground coal mines working in areas of high gas concentrations. However, SRK considers that since its last audit in 2011 SUEK has invested a large amount of money, time and effort into extensive training of workers and management staff as well as implementing world class systems for gas management and centralised computer monitoring. SUEK has demonstrated to SRK that the company at a senior level is treating all safety issues as extremely important.

Opportunities exist to further increase output at a number of brown coal open pits should the market demand increase. Most operated at substantially higher outputs during Soviet times.

SUEK's substantial investments in recent years and those planned for the near future in major equipment items and wash plants, in particular, should enable the increased outputs for many hard coal operations to be achieved.

Recommendations

SRK makes, in particular, the following recommendations in respect of SUEK's operations and reporting:

- SUEK should continue to seek to acquire the additional licences required to fulfil the Mine Plans and for the full extraction of remaining Resources and Reserves.
- SRK strongly recommends further analysis of the exploration, mine planning and associated data for proposed site extensions and additional long-term Resources, in line with the requirements of a full and detailed Pre-feasibility study.
- The Mine Plans should be updated annually and used as the basis for future auditing and Resource/Reserve declarations.
- The Company should ensure that technical staff and managers at site and regional level continue to have access to and become familiar with the technical-economic models, thus ensuring a sense of ownership and valued input to decision making.
- During the site visits to washeries in Kuzbass and Urgal SRK did not see any use of continuous density monitoring or automatic density control. These facilities can be very beneficial in the control of dense medium processing circuits. They could be particularly beneficial at Polysaevskaya. SRK has also identified in its report a number of additional technical issues which may improve processing efficiency at some plants.
- The environmental monitoring systems at each of the mines is designed mainly to collect data with respect to parameters which are specified in the environmental permits. From SRK's experience, several important elements could be missed using this approach. It may be possible that significant pollution loads are being inadvertently discharged. Additional testing would help to confirm that significant impacts are not discovered at a late stage in the project leading to unexpected additional costs.
- Some mines have functional internal grievance mechanisms. An external mechanism could also be developed in a similar way and these should be discussed at inter-company meetings to promote better community engagement in all regions.
- At several operations significant investments have been made to install new treatment facilities, but the mine water treatment remains a significant challenge.
- SUEK distinguishes shareholders, local communities, employees, state authorities, NGO's, financial stakeholders and potential investors among key stakeholders. None of the visited assets have stakeholder engagement plans, local community development plans or other plans/procedures that define the stakeholder engagement process and contribution to the social-economic development of the territory. Engagement of local communities is largely limited to OVOS (EIA) procedure through public hearings.
- Most of the operations do not currently have site-specific, comprehensive, regularly updated closure plans. Licences only require a mine closure (liquidation) project to be developed one year prior to closure. This could lead to a lack of integration of rehabilitation requirements into the mining plans. SRK recommends that closure plans are developed earlier and are regularly reviewed and become progressively more detailed as closure approaches.

- There is no unified approach to assessment of closure liabilities across SUEK's operations. This complicates auditing and management of closure liabilities. SRK recommends that an internal standard for closure and rehabilitation liabilities assessment is developed for various types of operations.
- SRK recommends that SUEK continues to build on the positive key strategies and initiatives that have been implemented over the last few years and continues to develop the strong safety culture that is now embedded in the organisation.
- Given the uncertainty around future global coal markets for a variety of developmental, environmental and governmental reasons, SUEK should update its internal marketing analysis with independent third party analysis and forecasting for both the domestic market and the export thermal and coking markets. In particular, independent analysis of SUEK's mines' positions on the global cash cost curves for producers will be beneficial for the 20-year and beyond assessment of viability of the coal reserves.
- SUEK should continue to use its asset financial models to assess Coal Reserves. The models should also be used as the basis for all strategic and medium/long-term planning within the Company; and should be consistent with and reflect the short-term planning undertaken. SRK notes that after the initial 20 year period, the accuracy of the mine plans presented is likely to decrease. However, this is because the plans and models beyond the 20-year period are required principally for long-term strategic planning and to prove the technical and economic viability of extracting Reserves.
- Although technical-economic models were not presented for the smallest operations, SRK advises that these small sites, including the undeveloped Osinovsky licence, should be modelled in the future as they may represent significant closure liabilities and may not be profitable.
- Pavlovsky-2 Open Pit is the only modelled operation to show a negative NPV in SUEK's financial model after a 30 year period, due to increasing strip ratio. SRK recommends that this Mine plan is reviewed in detail once more in 2020. SRK's stated Coal Reserves only include the lower strip ratio areas.

Conclusions

Following this audit and comparing SRK's finding to those of its 2011 audit, SRK concludes as follows:

- The scope of work and the technical and economic information provided by SUEK to complete this CPR were adequate for SRK's purposes. However, SRK considers that some of the assessment work undertaken by SUEK beyond the detailed financial models and mine plans presented for the next 20 years is likely to be less accurate than that for the first 20 years of the Mine Plan.
- SRK has found that SUEK has progressed positively in many areas, particularly safety, investment in new equipment and environmental improvements, since the 2011 audit.
- SUEK has been successful in planning for and obtaining a number of valuable new licences adjacent to or within the area of existing licences.
- SRK has assumed, based on SUEK's adherence to its obligation on current licences and SRK's previous experience in the Russian Federation, that SUEK will be able to renew the existing licences to fulfil the Mine Plans, and beyond, if necessary. Thus, SRK's assessment of Coal Resources and Reserves is not affected by the termination of a licence.

- The acquisition of a licence for a new mine and for an extension in area or depth of an existing licence requires interested parties to participate in an open auction for the assets. SUEK has instigated the commencement of this process for a number of new licences for which there is already extensive exploration data available. To date, SUEK appears to have been totally successful in this auction process. SRK has generally reported Coal Resources for these areas.
- Reserves have not been declared for any sites or extensions to sites for which SUEK does not hold a licence because SRK does not consider the assessment undertaken to be sufficiently detailed to qualify as a currently applicable Pre-Feasibility Study. The exceptions to this are some very local adjustments to licence boundaries which are anticipated to be approved in the near future.
- SUEK has not significantly progressed development of its licence for the small brown coal open pit prospect at Osinovsky in the Primorye Region.
- Overall, the site geology of mines and open pits is well understood and is not generally considered by SRK to be particularly structurally complex. Historical exploration was undertaken to a high standard, which is indicated by the Balance Reserves being approved by the GKZ. Nearly all sites are considered to be well explored, with little additional exploration required.
- The average quality of RoM coal is generally consistent with the exploration and in-situ sampling analysis results examined by SRK. In general, SRK notes that seam quality variations are well understood at all the sites.
- A number of recently acquired licences are awaiting confirmation of the Balance Reserves.
- SRK is of the opinion that for some operations the accuracy of financial modelling beyond 20 years is likely to be considerably less than that for the next 20 years. Also, that, given the complexity and length of some mine plans and the time afforded for the auditing process, SRK considers its conclusions likely to be less accurate beyond 20 years.
- The vast majority of sites have mine plans that extend beyond 20 years and several extend beyond 50 or even 100 years, including both hard and brown coal mines and open pits.
- Since the 2011 audit SUEK won the licence for and has commenced production at the Apsatsky Open Pit, SUEK's first coking coal operation. However, significant investment still needs to be approved by SUEK before the mine plan can be achieved.
- SRK observed that several operations have changed the equipment and technology that is being used thus improving productivity, costs, and general organisation. Improvements have included eliminating in-pit rail transport for overburden removal, increasing the width of longwall panels up to 400 m, the purchase of bolter miners to replace roadheaders, the purchase of larger shovels and dump trucks for some hard coal open pits, and increased washing capacity.
- A significant amount of work on wash plants has been completed since SRK's 2011 audit, installing fine coal recovery systems and effluent plants to increase yield, close water circuits, and reducing the reliance on lagoons.
- Increases in production through improved facilities and better-organised maintenance regimes at Tugnuisky, Chernogorskaya, and the Kirov wash plants have been particularly impressive. The performance at Tugnuisky in 2018 is noteworthy.

- In general, SRK is of the opinion that the wash plants will be able to process the required tonnages to meet the demands of the Mine Plan and the anticipated markets. The wash plants are planned to achieve a yield of between approximately 60 and 90% and are essential to the production of high value hard coals.
- SRK has found that SUEK's Balance Reserve estimates, where they have been used to derive Resources, are broadly consistent with the requirements of the JORC Code. As a result, SRK has modified and translated SUEK's GKZ Balance Reserve statements for reporting Coal Resources in accordance with the JORC Code, without recourse to fundamental recalculation. SRK has also taken into consideration in its declaration information for licences which were obtained prior to 1 January 2019 but for which Balance Reserves have not yet been confirmed; potential licences for which auction or State Balance information was provided by SUEK; and some internal estimates undertaken by SUEK geologists.
- SRK's declaration of Reserves is based primarily on SUEK's RoM quantities as presented in the LoMPs and technical-economic model provided to SRK. For a few sites the financial models provided by SUEK were modified after discussion with SRK. The Pavlovsky-2 Open Pit LoMP initially showed a negative NPV and for this reason was substantially reduced by SUEK, as reflected in SRK's declared Reserve.
- There is a bank of Proved and Probable Reserves available to support all the Mine Plans and on most sites to provide continued working well beyond the next 20 years, subject to renewal of licences, appropriate capital expenditure and continued effective management.
- SRK notes that approximately 77% of SUEK's Coal Resource base has already been "converted" to Coal Reserves and that this indicates a considerable degree of certainty regarding future economic extraction.
- SRK observes that for Berezovsky-1 Open Pit, the total Coal Reserves at the current rate of extraction would last in excess of 300 years, which is well beyond the normal period for most Life of Mine Plans and beyond a reasonable period over which it is suitable to judge mine economics. However, SRK also notes that Berezovsky-1 currently has the capacity and technology to produce up to 25 Mtpa within a very short lead time, assuming there was market demand. This would reduce the mine life to approximately 135 years.
- The focus of environmental management is on compliance with legislation and permits.
- Overall there is insufficient data on the influence of the mining works on the groundwater quality. At several operations (Abakansky, Vostochno-Beisky, Vostochny, and Nikolsky) this may affect local communities who are using the groundwater for domestic purposes.
- Most of the visited assets had not yet registered the SPZ and were only in the process to obtain it: making required measurements, applications and clearances.

- The closure cost estimates prepared in 2019 contain significantly more detail than those previously presented in 2011 and are auditable. They present enough detail to assess closure liabilities of SUEK's operations.
- There is a considerable increase in the estimated closure costs from the previous audit in nearly all regions. This reflects changes in the estimation process more than increased mining activity or coal production.
- SUEK has made considerable advances in respect of Health and Safety issues and SRK considers that its current strategies for organisational competence in Health and Safety management and operational practices are generally in line with present-day international good practice.
- SUEK does not have a history of multiple fatality mining accidents. The concept of personal safety "ownership" is now generally well understood by the work force.
- SUEK has benchmarked itself against its major international competitors in the coal mining sector and, whilst an accurate comparison is difficult, the analysis does provide a reasonable indication of the relative safety performance of SUEK, with the results showing good correlation with SUEK's peers in the international mining industry.
- Given the variety of SUEK's operations, both in terms of production sites and the customer base, sales logistics are complex. SUEK has implemented software for its medium and long-term planning. SRK found the work of SUEK's strategic planning and marketing section to be comprehensive, fully conducive to SUEK's operations, and to contribute significantly to the decision-making process in respect of future mine planning as well as the company's general strategy and marketing.
- SUEK considers itself highly competitive in the export market and well placed to take advantage of increased demand in Asia, based on its well situated ports on the Pacific, its high quality coals and its low overall operating costs.
- SUEK forecasts that over the next 10 years the annual average metallurgical, PCI and SSCC coal demand growth rates will be relatively low, around 1.5% per annum, with demand driven mainly by India. Kirov Mine is expected to continue to export its premium product for the foreseeable future, given its high quality and low cost of production.
- SUEK has stated that the current capacity of many railway stations used by their coal operations is sufficient to fulfil their supply plans to the end of 2029. Some stations will require additional expenditure to fulfil SUEK's Mine Plan. SUEK has implemented a number of initiatives with Russian Railways to eliminate infrastructure constraints by increasing capacity and efficiency on the network, particularly with respect to access to SUEK's Far Eastern port of Daltransugol.
- SRK considers that the production plans contained within the individual Mine Plans are generally achievable for the next 20 years, despite certain of the Coal Assets being subject to specific risks. These are not considered to have a material impact overall, whilst at an operational level these risks are typical for large scale mining operations and SRK believes that they are possible to manage in the normal course of business.

- SRK was not provided with financial models or detailed mine plans for some of SUEK's smaller operations, specifically those of Marekansky Open Pit, Kansky Open Pit, Sereulsky Open Pit and Severnaya Depressia Open Pit (nearly depleted). SUEK does not consider these sites to be material to SUEK's overall business plan and SUEK currently intends to continue production from all of these operations, despite the fact that they are likely to be uneconomic.
- SRK has reviewed the capital expenditures included in the SUEK technical-economic models and deems them appropriate for the projected production over the next 20 years. Beyond 20 years SRK considers the projections to be well founded but less likely to be accurate.
- SRK observes that successful implementation of the mine plan and realisation of the declared Reserves for Apsatsky Open Pit involves a considerable change in the current working method and a substantial input of capex for a number of major items including a wash plant, in-pit crusher, conveyor system and improved rail loading facilities and that a decision on approval for this expenditure is not expected to be made by SUEK until mid-2020.

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JSC SUEK

Consolidated Interim
Condensed Financial Information
and Review Report

for the six months ended 30 June 2021

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REPORT ON REVIEW OF CONSOLIDATED INTERIM CONDENSED FINANCIAL INFORMATION

To the Shareholders of JSC SUEK

Introduction

We have reviewed the accompanying consolidated interim condensed statement of financial position of JSC SUEK (the "Company") and its subsidiaries (the "Group") as at 30 June 2021, and the related consolidated interim condensed statements of profit or loss and other comprehensive income, changes in shareholders' equity and cash flows for the six-month period then ended, and notes to the consolidated interim condensed financial information (the "consolidated interim condensed financial information"). Management is responsible for the preparation and presentation of this consolidated interim condensed financial information in accordance with IAS 34 Interim Financial Reporting. Our responsibility is to express a conclusion on this consolidated interim condensed financial information based on our review.

Scope of review

We conducted our review in accordance with International Standard on Review Engagements *2410 Review of Interim Financial Information Performed by the Independent Auditor of the Entity*. A review of consolidated interim condensed financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the consolidated interim condensed financial information as at 30 June 2021 and for the six-month period then ended is not prepared, in all material respects, in accordance with IAS 34 *Interim Financial Reporting*.

Other information

The consolidated financial statements of JSC SUEK and its subsidiaries for the year ended 31 December 2020 were audited by another auditor who expressed an unmodified opinion on these statements on 29 January 2021.

The consolidated interim condensed financial information of JSC SUEK and its subsidiaries for the half-year ended 30 June 2020 was reviewed by another auditor who issued an unmodified conclusion on this financial information on 10 July 2020.

Andrei Shvetsov
Engagement partner

14 July 2021

The Entity: JSC «SUEK»

Certificate of state registration № 097.096, issued by the Moscow Registration Chamber on 14.03.2000.

Primary State Registration Number: 1027700151380

Certificate of registration in the Unified State Register №1027700151380, of 23.08.2002 issued by the department of the Russian Ministry of Taxation in Moscow.

Address: 115054, Moscow, Dubininskaya st. 53, bld. 7.

Audit Firm: AO "Deloitte & Touche CIS"

Certificate of state registration № 018.482, issued by the Moscow Registration Chamber on 30.10.1992.

Primary State Registration Number: 1027700425444

Certificate of registration in the Unified State Register № 77 004840299 of 13.11.2002, issued by Moscow Interdistrict Inspectorate of the Russian Ministry of Taxation № 39.

Member of Self-regulatory organization of auditors Association "Sodruzhestvo", ORNZ 12006020384.

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JSC SUEK

Consolidated interim condensed statement of profit or loss and other comprehensive income for the six months ended 30 June 2021

Millions of US Dollars

	Notes	Six months ended 30 June 2021	2020
Revenue	4	**4,202**	**3,327**
Cost of sales	5	(2,136)	(1,831)
Distribution costs	6	(1,081)	(879)
General and administrative expenses		(97)	(92)
Other (expenses)/income, net		(6)	21
Operating profit		**882**	**546**
Finance costs, net		(131)	(181)
Foreign exchange gain/(loss)		44	(196)
Profit before tax		**795**	**169**
Income tax expense		(182)	(37)
Net profit for the period		**613**	**132**
Net profit attributable to:			
Ordinary shareholders of the parent		603	129
Non-controlling interests		10	3
Net profit for the period		**613**	**132**
Basic and diluted earnings per share (in US Dollars)			
Ordinary shares 236,060 (in thousands)		2.55	0.55
Other comprehensive income/(loss)			
Items which may be reclassified to profit or loss in the future:			
Transfer of changes in fair value of cash flow hedges to profit or loss, net of deferred tax	8	83	(10)
Effective portion of changes in fair value of cash flow hedges, net of deferred tax	8	(186)	(251)
Items which may not be reclassified to profit or loss in the future:			
Translation difference		52	(277)
Total other comprehensive loss for the period		**(51)**	**(538)**
Total other comprehensive loss attributable to:			
Ordinary shareholders of the parent		(52)	(516)
Non-controlling interests		1	(22)
Total other comprehensive loss for the period		**(51)**	**(538)**
Total comprehensive income/(loss) attributable to:			
Ordinary shareholders of the parent		550	(387)
Non-controlling interests		12	(19)
Total comprehensive income/(loss) for the period		**562**	**(406)**

Stepan Solzhenitsyn
Chief Executive Officer

Andrei Vanyushin
Chief Financial Officer

14 July 2021

The accompanying notes on pages 7 to 14 are an integral part of this consolidated interim condensed financial information.

Consolidated interim condensed statement of financial position as at 30 June 2021

Millions of US Dollars

	Notes	30 June 2021	31 December 2020
ASSETS			
Non-current assets		**13,995**	**14,109**
Property, plant and equipment		13,072	13,068
Right-of-use assets		424	591
Deferred tax assets		317	246
Goodwill		78	78
Derivative financial assets	8	15	21
Other assets		89	105
Current assets		**2,089**	**1,925**
Trade accounts and other receivables		925	822
Inventories		782	704
Prepaid and recoverable taxes		175	183
Derivative financial assets	8	55	33
Cash and cash equivalents		152	183
Total assets		**16,084**	**16,034**
EQUITY AND LIABILITIES			
Equity		**5,607**	**5,054**
Share capital		—	—
Share premium		104	104
Revaluation reserve		5,182	5,267
Hedging reserve		(443)	(340)
Translation reserve		(2,059)	(2,110)
Retained earnings		2,712	2,016
Attributable to ordinary shareholders of the parent		**5,496**	**4,937**
Non-controlling interests		**111**	**117**
Non-current liabilities		**7,171**	**7,900**
Long-term borrowings	7	4,669	5,270
Deferred tax liabilities		1,533	1,510
Derivative financial liabilities	8	329	314
Long-term lease liabilities		302	470
Other liabilities		338	336
Current liabilities		**3,306**	**3,080**
Short-term borrowings	7	1,685	1,732
Trade accounts and other payables		1,067	915
Derivative financial liabilities	8	236	102
Taxes payable		166	184
Short-term lease liabilities		152	147
Total shareholders' equity and liabilities		**16,084**	**16,034**

The accompanying notes on pages 7 to 14 are an integral part of this consolidated interim condensed financial information.

JSC SUEK

Consolidated interim condensed statement of cash flows for the six months ended 30 June 2021

Millions of US Dollars

	Notes	Six months ended 30 June	
		2021	2020
Profit before tax		**795**	**169**
Adjustments to profit before tax:			
Depreciation and amortisation		555	519
Finance costs, net		131	181
Foreign exchange (gain)/loss		(44)	196
Bad debt expense		6	1
Other, net		5	(5)
Changes in working capital items:			
(Increase)/decrease in trade accounts and other receivables		(107)	159
Increase in inventories		(43)	(30)
Increase/(decrease) in trade accounts and other payables		115	(221)
(Decrease)/increase in taxes payable (other than income tax)		(21)	11
(Increase)/decrease in prepaid and recoverable taxes (other than income tax)		(3)	27
Net cash inflow from operations		**1,389**	**1,007**
Income tax paid		(142)	(57)
Net cash inflow from operating activities		**1,247**	**950**
Investing activities			
Purchase of property, plant and equipment		(391)	(506)
Loans issued, net		1	(2)
Interest received		1	4
Business combination	12	—	(156)
Other non-current investments, net		1	—
Net cash outflow used in investing activities		**(388)**	**(660)**
Financing activities			
Proceeds from long-term borrowings		115	1,838
Proceeds from/(repayments of) short-term borrowings, net		76	(62)
Repayments of long-term borrowings		(894)	(1,479)
Payment of lease liabilities		(103)	(132)
Interest and commissions paid		(84)	(134)
Dividends paid to non-controlling interests		(9)	(5)
Payment for purchase of leased railcars		—	(196)
Net cash outflow used in financing activities		**(899)**	**(170)**
Foreign exchange effect on cash and cash equivalents		9	(12)
Net decrease in cash and cash equivalents		**(31)**	**108**
Cash and cash equivalents at the beginning of the period		183	176
Cash and cash equivalents at the end of the period		**152**	**284**

The accompanying notes on pages 7 to 14 are an integral part of this consolidated interim condensed financial information.

JSC SUEK

Consolidated interim condensed statement of changes in shareholders' equity for the six months ended 30 June 2021

Millions of US Dollars

	Share capital	Share premium	Revaluation reserve	Hedging reserve	Translation reserve	Retained earnings	Attributable to ordinary shareholders of the parent	Non-controlling interests	Total
Balance at 1 January 2020	**—**	**104**	**4,866**	**117**	**(1,684)**	**1,923**	**5,326**	**175**	**5,501**
Net profit for the period	—	—	—	—	—	129	**129**	3	**132**
Other comprehensive loss	—	—	—	(261)	(255)	—	**(516)**	(22)	**(538)**
Transfer to retained earnings	—	—	(71)	—	—	69	**(2)**	2	**—**
Total comprehensive loss for the period	**—**	**—**	**(71)**	**(261)**	**(255)**	**198**	**(389)**	**(17)**	**(406)**
Dividends to shareholder	—	—	—	—	—	(109)	**(109)**	—	**(109)**
Dividends to non-controlling interests	—	—	—	—	—	—	**—**	(5)	**(5)**
Total transactions with owners	**—**	**—**	**—**	**—**	**—**	**(109)**	**(109)**	**(5)**	**(114)**
Balance at 30 June 2020	**—**	**104**	**4,795**	**(144)**	**(1,939)**	**2,012**	**4,828**	**153**	**4,981**
Balance at 1 January 2021	**—**	**104**	**5,267**	**(340)**	**(2,110)**	**2,016**	**4,937**	**117**	**5,054**
Net profit for the period	—	—	—	—	—	603	**603**	10	**613**
Other comprehensive loss	—	—	—	(103)	51	—	**(52)**	1	**(51)**
Transfer to retained earnings	—	—	(85)	—	—	84	**(1)**	1	**—**
Total comprehensive income for the period	**—**	**—**	**(85)**	**(103)**	**51**	**687**	**550**	**12**	**562**
Acquisition of non-controlling interests	—	—	—	—	—	9	**9**	(9)	**—**
Dividends to non-controlling interests	—	—	—	—	—	—	**—**	(9)	**(9)**
Total transactions with owners	**—**	**—**	**—**	**—**	**—**	**9**	**9**	**(18)**	**(9)**
Balance at 30 June 2021	**—**	**104**	**5,182**	**(443)**	**(2,059)**	**2,712**	**5,496**	**111**	**5,607**

The accompanying notes on pages 7 to 14 are an integral part of this consolidated interim condensed financial information.

1. GENERAL INFORMATION

Organisation and principal activities. Joint Stock Company ("JSC") "Siberian Coal Energy Company" ("SUEK" or the "Company") was founded on 1 December 1999. The Company and its subsidiaries are collectively referred to as the Group. The address of registered office is Dubininskaya st. 53, bld. 7, Moscow, Russian Federation. The principal activities of the Group are the extraction and sale of coal and generation and sales of electricity, heat and capacity.

AIM Capital SE, registered in the Republic of Cyprus, is the immediate parent company of SUEK with 92.2% interest in the Company's share capital.

A company that holds business interests beneficially for Mr. Andrey Melnichenko indirectly owns 100% of AIM Capital SE.

2. BASIS OF PRESENTATION

The International Financial Reporting Standards ("IFRS") consolidated interim condensed financial information ("consolidated interim condensed financial information") of the Group has been prepared in accordance with International Accounting Standard 34 – "*Interim Financial Reporting*".

The accounting policies and judgements applied by the Group are consistent with those disclosed in the audited consolidated financial statements for the year ended 31 December 2020.

This consolidated interim condensed financial information does not contain all the information required for presentation in a complete set of IFRS financial statements and therefore should be read in conjunction with SUEK's consolidated annual financial statements for the year ended 31 December 2020.

The following RUB/USD exchange rates were applied at 30 June and during the periods then ended:

	2021	2020
Period end (year end for 2020)	72.37	73.88
Average rate for 6 months ended 30 June	74.28	69.37

The consolidated interim condensed financial information of the Group has been prepared on the historical cost basis, except for:

- mining assets carried at fair value; and
- derivative financial instruments which are stated at fair value.

The fair value of assets and liabilities is determined with reference to various market information and other valuation methods as considered appropriate. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in valuation techniques, as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.
Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
Level 3: Inputs for the asset or liability that are not based on observable market data.

Financial instruments carried at amortised cost. At 30 June 2021, the fair values of financial instruments carried at amortised cost, which are mainly loans and receivables, did not materially differ from the carrying values.

Financial instruments carried at fair value. Fair values of derivative financial assets and liabilities were determined using inputs from observable market data, which correspond to Level 2 of the hierarchy of fair values.

Mining assets carried at fair value. The fair value of mining assets was determined using discounted cash flow method corresponding to Level 3 of the hierarchy of fair values.

Seasonality of business. The business and operating results of the Group are substantially dependent on domestic and international demand. Coal and energy markets are cyclical and exhibit fluctuations in supply and demand from year to year and are subject to numerous factors, including, but not limited to:

- Russian and global economic conditions;
- regional and global supply and demand for domestic and foreign coal and expectations regarding future supply and demand;
- fluctuations in industries with high demand for coal, such as power generation companies and metallurgical plants;
- unseasonably warm or cool temperatures or other climatic conditions;
- availability and price of alternative fuels and power.

3. SEGMENTAL INFORMATION

The Group evaluates performance and makes investment and strategic decisions based on a review of the profitability of the Group as a whole, and based on operating segments. An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses and whose operating results are regularly reviewed by management.

Operating segments identified by management are coal, logistics, energy and corporate segments. The coal segment includes coal extraction, coal washing, sales and distribution of coal, petroleum coke and other commodities in the Russian Federation and abroad; the logistics segment includes railroad transportation and transshipment in ports; the energy segment includes generation and sales of electricity, heat and capacity and the corporate segment includes operations of holding companies.

Operating segment information for the Group at 30 June 2021 and for the the six months then ended is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Segment revenue and profitability						
Segment external revenues	2,513	279	1,407	3	—	4,202
Russian Federation	217	209	1,407	3	—	1,836
Pacific region	1,562	48	—	—	—	1,610
Atlantic region	734	22	—	—	—	756
Inter-segment revenues	423	896	35	29	(1,383)	—
Segment expenses	(2,592)	(958)	(1,099)	(54)	1,383	(3,320)
Operating profit/(loss)	**344**	**217**	**343**	**(22)**	**—**	**882**
Depreciation and amortisation	(311)	(102)	(137)	(5)	—	(555)
Interest expense and interest on lease	(59)	(31)	(27)	(97)	106	(108)
Interest income	3	2	1	104	(109)	1
Profit before tax	295	186	314	—	—	795
Income tax expense	(72)	(43)	(67)	—	—	(182)
Net profit for the period	**223**	**143**	**247**	**—**	**—**	**613**
Capital expenditures incurred during the period	201	49	133	3	—	386
Additions of right-of-use assets	2	24	1	—	—	27
Segment assets and liabilities						
Total segment assets	**13,526**	**2,040**	**3,497**	**2,074**	**(5,053)**	**16,084**
Total segment liabilities	**5,018**	**1,371**	**1,867**	**7,274**	**(5,053)**	**10,477**

Operating segment information for the Group for the six months ended 30 June 2020 is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Segment revenue and profitability						
Segment external revenues	2,038	94	1,195	—	—	**3,327**
Russian Federation	246	94	1,195	—	—	**1,535**
Pacific region	1,264	—	—	—	—	**1,264**
Atlantic region	528	—	—	—	—	**528**
Inter-segment revenues	281	876	34	24	(1,215)	**—**
Segment expenses	(2,338)	(721)	(897)	(40)	1,215	**(2,781)**
Operating (loss)/profit	**(19)**	**249**	**332**	**(16)**	**—**	**546**
Depreciation and amortisation	(288)	(110)	(118)	(3)	—	**(519)**
Interest expense and interest on lease	(71)	(44)	(50)	(103)	103	**(165)**
Interest income	1	3	1	102	(103)	**4**
(Loss)/profit before tax	(89)	235	281	(258)	—	**169**
Income tax benefit/(expense)	9	(47)	(51)	52	—	**(37)**
Net (loss)/profit for the period	**(80)**	**188**	**230**	**(206)**	**—**	**132**
Capital expenditures incurred during the period	423	15	57	1	—	**496**
Segment assets and liabilities						
Total segment assets	**12,988**	**2,440**	**3,349**	**1,642**	**(4,856)**	**15,563**
Total segment liabilities	**4,783**	**1,156**	**2,114**	**7,385**	**(4,856)**	**10,582**

Operating segment assets and liabilities of the Group at 31 December 2020 is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Total segment assets	**13,291**	**2,565**	**3,410**	**1,748**	**(4,980)**	**16,034**
Total segment liabilities	**4,962**	**1,224**	**2,119**	**7,655**	**(4,980)**	**10,980**

4. REVENUE

	Six months ended 30 June	
	2021	2020
Coal	2,330	1,930
Electricity	469	379
Capacity	457	425
Heat	451	370
Logistics services	279	101
Petroleum coke and other commodities	162	63
Other	54	59
Total	**4,202**	**3,327**

5. COST OF SALES

	Six months ended 30 June	
	2021	**2020**
Coal and other commodities purchased from third parties	641	442
Depreciation and amortisation	454	412
Labour	398	386
Purchased fuel	160	125
Consumables and spares	156	143
Purchased power	106	83
Repairs and maintenance services	54	59
Property and other taxes	28	29
Personnel transportation services	17	19
Fire and rescue brigade expenses	17	17
Transfer of heat	14	15
Tax on mining	14	14
Transportation services	12	15
Other	65	72
Total	**2,136**	**1,831**

Proceeds from the sale of electricity and purchased power are presented after deduction of cost of electricity generated by the Group and consumed for own process needs in the amount of 48 million USD for the period ended 30 June 2021 (for the period ended 30 June 2020 – 57 million USD).

6. DISTRIBUTION COSTS

	Six months ended 30 June	
	2021	**2020**
Railway services	602	531
Freight	242	147
Depreciation and amortization	101	107
Stevedoring from third parties	73	53
Labour	26	22
Repair and maintenance services	19	7
Other	18	12
Total	**1,081**	**879**

7. BORROWINGS

	Effective interest rate	30 June 2021	31 December 2020
Long-term borrowings			
Variable rate borrowings		**3,664**	**4,115**
Unsecured USD-denominated borrowings	6M LIBOR + 0.9% to 1M LIBOR + 2.5%	2,098	2,545
Unsecured RUB-denominated borrowings	CBR + 0.3% to CBR + 1.85%	1,298	1,286
Unsecured EUR-denominated borrowings	6M EURIBOR + 0.37% to 6M EURIBOR + 2.25%	268	284
Fixed rate borrowings		**2,572**	**2,843**
Unsecured RUB-denominated bonds	6.7% to 8.3%	1,341	1,314
Unsecured USD-denominated borrowings	2.99% to 4%	1,104	1,404
Unsecured RUB-denominated borrowings	0.05% to 3.67%	127	125
Subtotal		**6,236**	**6,958**
Less: Current portion of long-term borrowings		1,567	1,688
Total long-term borrowings		**4,669**	**5,270**
Short-term borrowings			
Variable rate borrowings		**6**	**—**
Other borrowings		6	—
Fixed rate borrowings		**112**	**44**
Unsecured USD-denominated borrowings	1.15% to 1.4%	110	—
Unsecured RUB-denominated borrowings		—	41
Other borrowings		2	3
Subtotal		**118**	**44**
Current portion of long-term borrowings		1,567	1,688
Total short-term borrowings		**1,685**	**1,732**

The central treasury department of the Group maintains flexibility in funding by ensuring the availability of credit line facilities. The unused portion of these lines at 30 June 2021 totalled 2,395 million USD (31 December 2020 – 2,499 million USD).

The Group's long-term borrowings have restrictive covenants including, but not limited to, the requirement to maintain minimum ratios associated with:

- consolidated net indebtedness to earnings before interest, tax, depreciation and amortisation ("EBITDA"); and
- EBITDA to consolidated interest expense.

The covenants are calculated based on the IFRS financial statements of the Group on a semi-annual basis. As at 30 June 2021 the Group was in compliance with all such covenants.

8. DERIVATIVE FINANCIAL INSTRUMENTS

	30 June 2021		31 December 2020	
	Derivative assets	Derivative liabilities	Derivative assets	Derivative liabilities
Coal contracts – cash flow hedges	15	231	2	86
Cross-currency swaps – cash flow hedges	32	334	22	328
Cross-currency forward contracts – cash flow hedge	23	—	27	1
Other derivatives	—	—	3	1
Total	**70**	**565**	**54**	**416**

Derivative financial instruments were valued using observable inputs, which correspond to Level 2 of the hierarchy of the fair value measurements. Details of the effective portion of changes in fair value of cash flow hedges were as follows:

	Six months ended 30 June			
	2021		2020	
	Loss recognised in comprehensive income	Loss recycled from comprehensive income to the profit or loss	Loss recognised in comprehensive income	Gain recycled from comprehensive income to the profit or loss
Effective portion of changes in fair value of cash flow hedges	(232)	90	(282)	(11)
Deferred tax	46	(7)	31	1
Total	**(186)**	**83**	**(251)**	**(10)**

9. RELATED PARTY TRANSACTIONS

Related parties are considered to include the ultimate beneficiary, affiliates and entities under common ownership and control of the same principal ultimate beneficiary. The Company and its subsidiaries, in the ordinary course of their business, enter into various sales, purchases and service transactions with related parties.Transactions with related parties not dealt with elsewhere in the consolidated interim condensed financial information are as follows:

	Six months ended 30 June	
	2021	2020
Sales of logistics services to EuroChem group	195	10
Other sales to EuroChem group	6	4
Other energy sales	4	30
Purchases of goods and services from EuroChem group	89	10
Purchases of goods and services from other companies	41	4
Coal sales to DEC group, which was an associate of a company with the same principal ultimate beneficiary till June 2020	—	44
Remuneration of the Board of Directors and the Management Board members	6	5

The outstanding balances with related parties are as follows:

	30 June 2021	31 December 2020
Trade accounts and other receivables from EuroChem group	22	13
Other receivables	3	5
Payables to EuroChem group for the acquisition of subsidiaries	294	282
Trade accounts and other payables from EuroChem group	58	28
Lease liabilities from EuroChem group	19	—
Loans received	5	—
Other payables	3	—

10. COMMITMENTS

As at 30 June 2021, the Group had contractual commitments for capital expenditures of 1,110 million USD (31 December 2020 – 885 million USD).

11. BUSINESS ENVIRONMENT

In 2021 the oil price, stock market indices and coal prices have increased to before pandemic level.

Management closely monitors the situation caused by COVID-19 (coronavirus) and takes necessary measures to ensure continuity of a business. The Group has not experienced significant shutdowns in operations or disruptions to supply chains due to coronavirus, except for some delays in materials delivery from contractors. The Group's primary focus is to safeguard its employees, customers and communities it serves. The Group incurred expenses mainly connected with personal protective equipment for on-site staff responsible for maintaining business processes and personnel costs on implementation and support of an action programme to reduce COVID-19 exposure. The Group follows official advice in all markets, where it operates, and continues to focus on managing operations in a fast-moving environment.

The consolidated financial statements reflect management’s assessment of the impact of the business environment on the operations and the financial position of the Group. The future business environment may differ from management’s assessment.

12. BUSINESS COMBINATION

Acquisition of Krasnoyarskaya GRES-2. In March 2020, the Group acquired generating and other assets of Krasnoyarskaya GRES-2 for 156 million USD from a third party. The core activity of the acquired business is generation and sales of energy.

JSC SUEK

Consolidated annual financial statements

for the year ended 31 December 2020

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Independent Auditors' Report

To the Shareholders of JSC SUEK

Opinion

We have audited the consolidated financial statements of JSC SUEK (the "Company") and its subsidiaries (the "Group"), which comprise the consolidated statement of financial position as at 31 December 2020, the consolidated statements of profit or loss, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2020, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the independence requirements that are relevant to our audit of the consolidated financial statements in the Russian Federation and with the International Ethics Standards Board for Accountants International Code of Ethics for Professional Accountants (including International Independence Standards) (*IESBA Code*), and we have fulfilled our other ethical responsibilities in accordance with the requirements in the Russian Federation and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Audited entity: JSC SUEK

Registration number in the Unified State Register of Legal Entities No. 1027700151380.

Moscow, Russia

Independent auditor: JSC "KPMG", a company incorporated under the Laws of the Russian Federation, a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee.

Registration number in the Unified State Register of Legal Entities No. 1027700125628.

Member of the Self-regulatory Organization of Auditors Association "Sodruzhestvo" (SRO AAS). Principal registration number of the entry in the Register of Auditors and Audit Organizations: No. 12006020351.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

The engagement partner on the audit resulting in this independent auditors' report is:

Andrey Kim

JSC "KPMG"

Moscow, Russia

29 January 2021

JSC SUEK

Consolidated statement of profit or loss for the year ended 31 December 2020

Millions of US Dollars

	Notes	2020	2019
Revenue	6	**6,683**	**7,638**
Cost of sales	7	(3,846)	(4,301)
Distribution costs	8	(1,762)	(1,978)
General and administrative expenses	9	(185)	(229)
Other income/(expenses), net		2	(15)
Operating profit		**892**	**1,115**
Finance costs, net	10	(337)	(420)
Foreign exchange (loss)/gain		(308)	200
Profit before tax		**247**	**895**
Income tax expense	27	(53)	(146)
Net profit for the year		**194**	**749**
Net profit attributable to:			
Ordinary shareholders of the parent		185	742
Non-controlling interests		9	7
Net profit for the year		**194**	**749**
Basic and diluted earnings per share (in US Dollars)	20	0.78	3.14

Stepan Solzhenitsyn
Chief Executive Officer

Andrey Vanyushin
Chief Financial Officer

29 January 2021

The comparative consolidated statement of profit or loss for the year ended 31 December 2019 has been restated for the effect of the acquisition under common control described in note 33.

The accompanying notes on pages 9 to 48 are an integral part of these consolidated financial statements.

JSC SUEK

Consolidated statement of comprehensive income for the year ended 31 December 2020

Millions of US Dollars

	Notes	2020	2019
Net profit for the year		**194**	**749**
Other comprehensive (loss)/income			
Items which may be reclassified to profit or loss in the future:			
Transfer of changes in fair value of cash flow hedges to profit or loss, net of deferred tax	16	31	(220)
Effective portion of changes in fair value of cash flow hedges, net of deferred tax	16	(488)	311
Total items which may be reclassified to profit or loss in the future		**(457)**	**91**
Items which may not be reclassified to profit or loss in the future:			
Translation difference		(354)	154
Revaluation of intra-group debt denominated in foreign currency	3.2	(43)	(1)
Revaluation surplus/(deficit)	4	648	(810)
Tax effect of revaluation	4	(130)	162
Actuarial gains/(losses)		8	(7)
Total items which may not be reclassified to profit or loss in the future		**129**	**(502)**
Total other comprehensive loss for the year		**(328)**	**(411)**
Total other comprehensive loss attributable to:			
Ordinary shareholders of the parent		(263)	(401)
Non-controlling interests		(65)	(10)
Total other comprehensive loss for the year		**(328)**	**(411)**
Total comprehensive (loss)/income attributable to:			
Ordinary shareholders of the parent		(81)	336
Non-controlling interests		(53)	2
Total comprehensive (loss)/income for the year		**(134)**	**338**

The comparative consolidated statement of comprehensive income for the year ended 31 December 2019 has been restated for the effect of the acquisition under common control described in note 33.

The accompanying notes on pages 9 to 48 are an integral part of these consolidated financial statements.

JSC SUEK

Consolidated statement of financial position as at 31 December 2020

Millions of US Dollars

	Notes	2020	2019
ASSETS			
Non-current assets		**14,109**	**14,354**
Property, plant and equipment	11	13,068	12,310
Right-of-use assets	12	591	1,647
Deferred tax assets	27	246	132
Goodwill		78	78
Derivative financial assets	16	21	87
Other assets	13	105	100
Current assets		**1,925**	**2,245**
Trade accounts and other receivables	14	822	981
Inventories	15	704	767
Prepaid and recoverable taxes	17	183	265
Derivative financial assets	16	33	55
Cash and cash equivalents	18	183	177
Total assets		**16,034**	**16,599**
EQUITY AND LIABILITIES			
Equity		**5,054**	**5,603**
Share capital	19	—	—
Share premium		104	104
Revaluation reserve		5,267	4,866
Hedging reserve		(340)	117
Translation reserve		(2,110)	(1,747)
Retained earnings		2,016	2,088
Attributable to ordinary shareholders of the parent		**4,937**	**5,428**
Non-controlling interests		**117**	**175**
Non-current liabilities		**7,900**	**7,795**
Long-term borrowings	21	5,270	4,939
Long-term lease liabilities	22	470	999
Deferred tax liabilities	27	1,510	1,481
Derivative financial liabilities	16	314	5
Other liabilities	24	336	371
Current liabilities		**3,080**	**3,201**
Short-term borrowings	21	1,732	1,799
Short-term lease liabilities	22	147	225
Trade accounts and other payables	25	915	1,003
Derivative financial liabilities	16	102	7
Taxes payable	26	184	167
Total shareholders' equity and liabilities		**16,034**	**16,599**

The comparative consolidated statement of financial position as at 31 December 2019 has been restated for the effect of the acquisition under common control described in note 33.

The accompanying notes on pages 9 to 48 are an integral part of these consolidated financial statements.

JSC SUEK

Consolidated statement of cash flows for the year ended 31 December 2020

Millions of US Dollars

	Notes	2020	2019
Profit before tax		**247**	**895**
Adjustments to profit before tax:			
Depreciation and amortisation	7, 8	1,081	1,053
Bad debt expense		19	7
Finance costs, net	10	337	420
Foreign exchange loss/(gain)		308	(200)
Other, net		6	10
Changes in working capital items:			
Increase in trade accounts and other receivables		(263)	(17)
(Increase)/decrease in inventories		(7)	3
Decrease/(increase) in prepaid and recoverable taxes (other than income tax)		22	(60)
Increase in trade accounts and other payables		8	231
Increase/(decrease) in taxes payable (other than income tax)		49	(28)
Net cash flow from operations		**1,807**	**2,314**
Income tax paid		(138)	(189)
Net cash flow from operating activities		**1,669**	**2,125**
Investing activities			
Purchase of property, plant and equipment		(965)	(1,329)
Business combinations	33	(262)	(259)
Acquisition of subsidiaries		(9)	—
Interest received		7	15
Loans issued, net		3	(8)
Other non-current investments, net		3	(12)
Payments for the acquisition of SGC group		—	(1,941)
Net cash flow used in investing activities		**(1,223)**	**(3,534)**
Financing activities			
Proceeds from long-term borrowings		3,067	3,424
Repayments of long-term borrowings		(2,407)	(1,295)
(Repayments of)/proceeds from short-term borrowings, net		(102)	5
Payment for purchase of leased railcars	12	(363)	—
Interest and commissions paid		(264)	(301)
Payment of lease liabilities	22	(224)	(313)
Dividends paid to shareholders		(103)	—
Other transactions	33	(20)	(62)
Dividends paid to non-controlling interests		(5)	(12)
Acquisition of non-controlling interests		—	(17)
Net cash flow (used in)/from financing activities	**23**	**(421)**	**1,429**
Foreign exchange effect on cash and cash equivalents		(19)	(10)
Net increase in cash and cash equivalents		**6**	**10**
Cash and cash equivalents at the beginning of the year	18	177	167
Cash and cash equivalents at the end of the year	18	**183**	**177**

The comparative consolidated statement of cash flows for the year ended 31 December 2019 has been restated for the effect of the acquisition under common control described in note 33.

The accompanying notes on pages 9 to 48 are an integral part of these consolidated financial statements.

JSC SUEK

Consolidated statement of changes in shareholders' equity for the year ended 31 December 2020

Millions of US Dollars, unless otherwise stated

	Share capital	Share premium	Revaluation reserve	Hedging reserve	Translation reserve	Retained earnings	Attributable to ordinary shareholders of the parent	Non-controlling interests	Total
Balance at 1 January 2019 (as previously reported)	**—**	**104**	**5,665**	**26**	**(1,812)**	**1,063**	**5,046**	**189**	**5,235**
Acquisition of Tuapse Bulk Terminal and Murmansk Bulk Terminal (see note 33)	—	—	—	—	(76)	184	**108**	—	**108**
Balance at 1 January 2019 (as adjusted)	**—**	**104**	**5,665**	**26**	**(1,888)**	**1,247**	**5,154**	**189**	**5,343**
Net profit for the year	—	—	—	—	—	742	**742**	7	**749**
Other comprehensive loss	—	—	(626)	91	141	(7)	**(401)**	(10)	**(411)**
Transfer to retained earnings	—	—	(173)	—	—	168	**(5)**	5	**—**
Total comprehensive income for the year	**—**	**—**	**(799)**	**91**	**141**	**903**	**336**	**2**	**338**
Business combination	—	—	—	—	—	—	**—**	13	**13**
Acquisition of non-controlling interests	—	—	—	—	—	—	**—**	(17)	**(17)**
Other transactions (see note 33)	—	—	—	—	—	(62)	**(62)**	—	**(62)**
Dividends to non-controlling interests	—	—	—	—	—	—	**—**	(12)	**(12)**
Total transactions with owners	**—**	**—**	**—**	**—**	**—**	**(62)**	**(62)**	**(16)**	**(78)**
Balance at 31 December 2019	**—**	**104**	**4,866**	**117**	**(1,747)**	**2,088**	**5,428**	**175**	**5,603**
Balance at 1 January 2020	**—**	**104**	**4,866**	**117**	**(1,747)**	**2,088**	**5,428**	**175**	**5,603**
Net profit for the year	—	—	—	—	—	185	**185**	9	**194**
Other comprehensive loss	—	—	549	(457)	(363)	8	**(263)**	(65)	**(328)**
Transfer to retained earnings	—	—	(148)	—	—	145	**(3)**	3	**—**
Total comprehensive loss for the year	**—**	**—**	**401**	**(457)**	**(363)**	**338**	**(81)**	**(53)**	**(134)**
Acquisition of subsidiaries under common control (see note 33)	—	—	—	—	—	(287)	**(287)**	—	**(287)**
Dividends to shareholders	—	—	—	—	—	(103)	**(103)**	—	**(103)**
Other transactions (see note 33)	—	—	—	—	—	(20)	**(20)**	—	**(20)**
Dividends to non-controlling interests	—	—	—	—	—	—	**—**	(5)	**(5)**
Total transactions with owners	**—**	**—**	**—**	**—**	**—**	**(410)**	**(410)**	**(5)**	**(415)**
Balance at 31 December 2020	**—**	**104**	**5,267**	**(340)**	**(2,110)**	**2,016**	**4,937**	**117**	**5,054**

The comparative consolidated statement of changes in shareholders' equity for the year ended 31 December 2019 has been restated for the effect of the acquisition under common control described in note 33.

The accompanying notes on pages 9 to 48 are an integral part of these consolidated financial statements.

1. GENERAL INFORMATION

Organisation and principal activities. Joint Stock Company ("JSC") "Siberian Coal Energy Company" ("SUEK" or the "Company") was founded on 1 December 1999. The Company and its subsidiaries are collectively referred to as the Group. The address of registered office is Dubininskaya st. 53, bld. 7, Moscow, Russian Federation. The principal activities of the Group are the extraction and sales of coal, generation and sales of electricity, heat and capacity and railroad transportation and transshipment in ports.

AIM Capital SE, registered in the Republic of Cyprus, is the immediate parent company of SUEK with 92.2% interest in the Company's share capital.

A company that holds business interests beneficially for Mr. Andrey Melnichenko indirectly owns 100% of AIM Capital SE.

2. BASIS OF PRESENTATION

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

The consolidated financial statements of the Group have been prepared on the historical cost basis, except for:

- mining assets carried at fair value; and
- derivative financial instruments which are stated at fair value.

Functional currency. The functional currency of subsidiaries of the Group is the currency of the primary economic environment where these entities operate. The functional currency of foreign trading subsidiaries and predominantly export-oriented Russian subsidiaries is US Dollar ("USD"). The functional currency of the Company and Russian subsidiaries that are not predominantly export-oriented is the Russian Rouble ("RUB").

Presentation currency. The presentation currency is the USD. The translation of the consolidated financial statements into the presentation currency was performed in accordance with the requirements of IAS 21 "*The Effects of Changes in Foreign Exchange Rates*".

The following RUB/USD exchange rates were applied at 31 December and during the years then ended:

	2020	2019
Year end	73.88	61.91
Average rate	72.15	64.74

Adoption of new and revised standards and interpretations

A number of new standards are effective for annual periods beginning after 1 January 2020 and earlier application is permitted; however, the Group has not early adopted the new or amended standards in preparing these consolidated financial statements.

A number of amendments to the existing standards are effective from 1 January 2020 but they do not have a material effect on the Group's financial statements.

The following amended standards and interpretations are not expected to have a significant impact on the Group's consolidated financial statements:

- amendments to references to Conceptual Framework in IFRS standards;
- definition of a business (Amendments to IFRS 3);
- definition of material (Amendments to IAS 1 and IAS 8); and
- interest rate benchmark reform (Amendments to IFRS 9, IAS 39 and IFRS 7).

3. SIGNIFICANT ACCOUNTING POLICIES

3.1. Basis of consolidation

Subsidiaries. Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The accounting policies of subsidiaries have been changed when necessary to align them with the policies adopted by the Group.

The acquisition of subsidiaries from third parties is accounted for using the purchase method of accounting. The identifiable assets, liabilities and contingent liabilities of a subsidiary are measured at their fair values as at the date of acquisition. Non-controlling (minority) interest is measured at its proportionate interest in the identifiable assets and liabilities of the acquiree. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so causes the non-controlling interests to have a deficit balance.

Intra-group balances and transactions, and any unrealised gains arising from intra-group transactions, are eliminated in preparing the consolidated financial statements.

Changes in ownership interests by the Group in a subsidiary, while maintaining control, are recognised as an equity transaction.

Upon a loss of control, the Group derecognises the assets and liabilities of the subsidiary, any non-controlling interests and the other components of equity related to the subsidiary. Any surplus or deficit arising on the loss of control is recognised in profit or loss. If the Group retains any interest in the former subsidiary, then such interest is measured at fair value at the date that control is lost. Subsequently it is accounted for as an equity-accounted investee or as an available-for-sale financial asset depending on the level of influence retained.

Business combination under common control. Business combinations arising from transfers of interests in entities that are under the control of the shareholder that controls the Group are accounted for as if the acquisition had occurred at the beginning of the earliest comparative period presented or, if later, at the date that common control was established; for this purpose comparatives are restated. The assets and liabilities acquired are recognised at the carrying amounts recorded previously in the predecessor's consolidated financial statements. The components of equity of the acquired entities are added to the same components within Group equity except that any share capital of the acquired entities is recognised as part of additional paid-in capital. Difference between the purchase consideration and carrying value of net assets acquired is recognised directly in equity.

3.2. Foreign currency transactions

Transactions in foreign currencies are recorded at the exchange rate at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are converted to the respective functional currency at the exchange rate ruling at the balance sheet date. Exchange differences arising from changes in exchange rates are recognised in profit or loss, except that exchange differences arising from the revaluation of the intra-group debt accounted for as a part of net investments in foreign entities are recognised in other comprehensive income in the consolidated financial statements.

The translation of the financial statements from functional currency into presentation currency is performed in accordance with the requirements of IAS 21 "*The Effects of Changes in Foreign Exchange Rates*" as follows:

- all assets and liabilities, both monetary and non-monetary, are translated at closing exchange rates at the dates of each consolidated statement of financial position presented;
- all income and expenses in the consolidated statement of profit or loss are translated at the average exchange rates for the years presented;
- resulting exchange differences are included in equity and presented separately; and
- in the consolidated statement of cash flows, cash balances at the beginning and end of each year presented are translated at exchange rates at the respective dates. All cash flows are translated at the annual average exchange rates for the years presented. Resulting exchange differences are presented as foreign exchange effect on cash and cash equivalents.

3.3. Property, plant and equipment

Basis of carrying value of property, plant and equipment.

Mining assets. Mining assets include mineral rights with capitalised mine development costs and certain types of operating equipment, such as equipment which represents an integral part of a particular mine or a particular open-pit, or such items of mining equipment whose use on an alternative mine or open-pit is impracticable or not economically feasible. The remaining part of tangible fixed assets besides listed above is defined as operating tangible fixed assets.

Mining assets are carried at fair value since the date of the creation of this new class of property, plant and equipment. Mineral rights were classified as property, plant and equipment and carried at fair value starting from 1 January 2013.

The fair value is determined by discounting future cash flows which can be obtained from operations of the mines based on the life-of-mine plans and deducting the fair value of the operating tangible fixed assets.

Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the mining assets and the net amount is restated to the revalued amount of the asset. Revaluations are performed on an annual basis.

A revaluation increase is recognised in other comprehensive income and accumulated in equity except to the extent it reverses a previous revaluation decrease recognised in profit or loss, in which case it is recognised in profit or loss. A revaluation decrease is recognised in profit or loss except to the extent that it reverses a revaluation increase recognised directly in equity, in which case it is recognised directly in equity.

At the year end a portion of the revaluation reserve, which is equal to the difference between depreciation based on the revalued carrying amount of the mining assets and depreciation based on the asset's historical cost, is transferred from the revaluation reserve to retained earnings.

The mineral rights of new greenfields are carried at historical value until detailed technical and financial plans for the assets are finalised.

Property, plant and equipment, other than mining assets. Property, plant and equipment, other than mining assets, is stated at cost less accumulated depreciation and impairment losses. The cost of self-constructed assets includes the cost of materials, direct labour and an appropriate proportion of production overheads, and the corresponding capitalised borrowing costs.

Where an item of property, plant and equipment, other than mining assets, comprises major components having different useful lives, they are accounted for as separate items of property, plant and equipment. Expenditure incurred to replace a component of an item of property, plant and equipment, other than mining assets, that is accounted for separately, is capitalised to the carrying amount of the component that has been replaced being written off.

Renewals, improvements and major capital maintenance costs are capitalised and the assets replaced are retired. Regular repair and maintenance costs are expensed as incurred. Gains and losses arising from the retirement of property, plant and equipment are included in profit and loss as incurred.

Depreciation. Mining assets are depreciated using the unit-of-production method, based on the estimated proven and probable coal reserves to which they relate, or are written off if the mine is abandoned or where there is an impairment in value. The impairment loss is recognised in profit or loss for the year to the extent it exceeds the previous revaluation surplus in equity. Estimated proven and probable coal reserves determined in accordance with internationally recognised standards for reporting coal reserves reflect the economically recoverable coal reserves which can be legally recovered in the future from coal deposits.

Tangible assets, other than mining assets, are depreciated using the straight-line method based on estimated useful lives. For each item the estimated useful life has due regard to both its own physical life limitations and, if applicable, the present assessment of the economically recoverable reserves of the mine property at which the item is located, and to possible future variations in those assessments. Estimates of remaining useful lives are made on a regular basis for all tangible assets, with annual reassessments for major items.

The estimated useful lives of property, plant and equipment, including mining assets, are as follows:

- mining assets — average of 57 years
- generating assets — 4 – 65 years
- machinery, equipment, transport and other — 2 – 37 years
- buildings, structures and utilities — 6 – 60 years
- railcars — 7 – 32 years

3.4. Capital construction-in-progress

Capital construction-in-progress comprises costs directly related to mine development, construction of buildings, infrastructure, processing plant, machinery and equipment. Amortisation or depreciation of these assets commences when the assets are put in the location and condition necessary for them to be capable of operating in the manner intended by management. Capital construction-in-progress is reviewed regularly to determine whether its carrying value is recoverable.

3.5. Impairment

The Group reviews the carrying amounts of its tangible and intangible assets regularly to determine whether there are indicators of impairment. If any such indicators exist, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit (CGU) to which the asset belongs.

A recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

If the recoverable amount of an asset or CGU is estimated to be less than the carrying amount, the carrying amount is reduced to the recoverable amount and the impairment losses are recognised in profit or loss for the year. Impairment losses are allocated first to reduce the carrying amount of any goodwill allocated to CGU, and then to reduce the carrying amounts of the other assets in CGU on a pro-rata basis.

An impairment loss in respect of goodwill is not reversed. For other assets, an impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

3.6. Research and exploration expenditure

Pre-exploration costs are recognised in profit or loss as incurred.

Exploration and evaluation costs (including geophysical, topographical, geological and similar types of expenditure) are capitalised as exploration and evaluation assets on a project-by-project basis pending determination of the technical feasibility and commercial viability of the project. The technical feasibility and commercial viability of extracting coal is considered to be determinable when proven coal reserves are determined to exist. Expenditure deemed to be unsuccessful is recognised immediately in profit or loss.

3.7. Inventories

Coal. Coal is measured at the lower of production cost or net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated selling expenses. Production costs include on-mine and processing costs, as well as transportation costs to the point of sale.

Consumable stores and materials. The cost of inventories is based on the weighted average principle and includes expenditure incurred in acquiring the inventories and bringing them to their existing location and condition.

3.8. Financial instruments

Non-derivative financial instruments. Non-derivative financial instruments comprise investments in equity and debt securities, trade and other receivables, cash and cash equivalents, loans and borrowings, and trade and other payables.

The Group recognises a financial asset or a financial liability in its consolidated statement of financial position when it becomes party to the contractual provisions of the instrument. At initial recognition, the Group measures a financial asset or a financial liability at its fair value plus or minus, in the case of a financial asset or a financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or the financial liability.

Financial assets at amortised cost. Financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at fair value through profit or loss ("FVTPL"):

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The financial assets are measured at amortised cost using the effective interest method, less any impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.

Financial assets at fair value through other comprehensive income ("FVOCI"). Financial assets are classified and measured at fair value through other comprehensive income if they meet both of the following conditions and are not designated as at FVTPL:

- they are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- their contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognised in profit or loss. Other net gains and losses are recognised in other comprehensive income. On derecognition, gains and losses accumulated in other comprehensive income are reclassified to profit or loss.

Financial assets at fair value through profit or loss. Any financial assets that are not held in one of the two business models mentioned above are measured at fair value through profit or loss. This includes all derivative financial assets.

These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in profit or loss.

If the Group changes its business model for managing financial assets it must reclassify all affected financial assets.

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset, or it retains the contractual rights to receive the cash flows of the financial asset, but assumes a contractual obligation to pay the cash flows to one or more recipients in an arrangement.

Cash and cash equivalents. Cash and cash equivalents comprise cash balances and call deposits with original maturities of three months or less. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the consolidated statement of cash flows.

Financial liabilities. All financial liabilities are measured at amortised cost, except for financial liabilities at fair value through profit or loss. Such liabilities include derivatives (other than derivatives that are financial guarantee contracts or are designated and effective hedging instruments), other liabilities held for trading, and liabilities that the Group designates to be measured at fair value through profit or loss. After initial recognition, the Group cannot reclassify any financial liability.

The Group derecognises a financial liability (or a part of a financial liability) when the obligation specified in the contract is discharged or cancelled or expires.

Impairment of financial assets. The Group assesses on a forward looking basis the expected credit losses ("ECL") associated with its financial assets carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk. This will require considerable judgement over how changes in economic factors affect ECLs, which will be determined on a probability-weighted basis. The impairment model applies to the financial instruments that are not measured at FVTPL.

Loss allowance is recognised at an amount equal to either 12-month ECLs or lifetime ECLs. Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument, whereas 12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the reporting date.

The Group measures loss allowances at an amount equal to lifetime ECLs, except in the following cases, for which the amount recognised will be 12-month ECLs:

- debt securities that are determined to have low credit risk at the reporting date;
- other financial instruments (other than lease and trade receivables) for which credit risk has not increased significantly since initial recognition.

For loans, the Group measures ECL on an individual basis, or on a collective basis for portfolios that share similar economic risk characteristics.

An impairment loss in respect of the financial assets is calculated as present value of the difference between the contractual cash flows that are due to the Group under the contract, and the cash flows that the Group expects to receive. For trade receivables, the Group applies a simplified approach permitted by the standard, which requires expected lifetime losses to be recognised from initial recognition of the receivables. To measure the expected credit losses, trade receivables and contract assets are grouped based on shared credit risk characteristics and the days past due. In assessing the impairment, the Group uses historical trends of the probability of default, timing of recoveries and the amount of loss incurred. When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of the assets. For debt securities at FVOCI, the loss allowance is recognised in other comprehensive income, instead of reducing the carrying amount of the asset. Impairment losses on financial assets are presented under 'other expenses' in the operating profit or loss, similar to the presentation under IAS 39, and not presented separately in the consolidated statement of profit or loss due to materiality considerations.

Derivative financial instruments. The Group may enter into a variety of derivative financial instruments to manage its exposure to commodity price risk, foreign currency risk, interest rate risk and risk of changes in the price of freight.

Derivatives are initially recognised at fair value; any directly attributable transaction costs are recognised in profit or loss as they are incurred. The subsequent changes are recognised in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

The Group designates certain derivatives as hedges of a highly probable forecast transaction (cash flow hedge). When a derivative is designated as a cash flow hedging instrument, the effective portion of changes in the fair value of the derivative is recognised in other comprehensive income. Any ineffective portion of changes in the fair value of the derivative is recognised immediately in profit or loss. The amount accumulated in equity is retained in other comprehensive income and reclassified to profit or loss (to revenue or foreign exchange gain/loss depending on a hedged item) in the same period in which the hedged item affects profit or loss.

When a hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, or the designation is revoked, then hedge accounting is discontinued prospectively. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was recognised in equity is reclassified to profit or loss.

3.9. Provisions

Provisions are recognised when the Group has legal or constructive obligations, as a result of a past event, for which it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be reliably estimated.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability.

3.10. Employee benefit obligations

Remuneration to employees in respect of services rendered during a reporting year is recognised as an expense in that reporting year.

Defined contribution plan. The Group contributes to the Pension Fund of the Russian Federation, a defined contribution pension plan. The only obligation of the Group is to make the specified contributions in the year in which they arise and these contributions are expensed as incurred.

Defined benefit plans. In accordance with current legislation and internal documentation the Group operates defined benefit plans whereby field workers of its coal-producing subsidiaries are entitled to a lump sum payment. The amount of benefits depends on age, years of service, compensation and other factors.

The liability recognised in the consolidated statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date. Actuarial gains and losses are recognised directly in other comprehensive income.

The defined benefit obligation is calculated annually by the Group. The Projected Unit Credit Method is used to determine the present value of defined benefit obligations and the related current service cost. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of government bonds that are denominated in the currency in which the benefits will be paid and that have terms to maturity approximating the terms of the related pension liability.

3.11. Income tax

Income tax expense comprises current and deferred taxation.

Current tax is the tax payable on the taxable income for the year, using tax rates enacted at the balance sheet date, and includes any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of the assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the temporary differences on the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss. In addition, deferred tax is not recognised for temporary differences arising on the initial recognition of goodwill and temporary differences associated with investments in subsidiaries and associates, except where the Group is able to control the timing of the reversal of the temporary difference, and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax assets and liabilities, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

In accordance with the tax legislation of the Russian Federation, tax losses and current tax assets of a company in the Group may not be set off against taxable profits and current tax liabilities of other Group companies. In addition, the tax base is determined separately for each of the Group's main activities and, therefore, tax losses and taxable profits related to different activities cannot be offset.

3.12. Revenue recognition

Revenue comprises the sales value of coal, energy, heat, capacity and other goods and services supplied to customers during the period, excluding value-added tax.

Revenue is recognised when the Group fulfils the obligation to perform by transferring the promised goods and services to a customer. An asset is transferred when the buyer receives control of such an asset. Revenue is recognised in the amount of reimbursement that the Group expects to receive in return for the transfer of the promised goods or services to the customer.

Revenue from the sale of coal and other goods is recognised at the time of delivery. Revenue from the sale of electricity and heat is recognised at the time the electricity and heat are supplied to consumers. The ordinary conditions for settlements with customers imply payment upon delivery.

As a practical expedient, the Group does not adjust the promised amount of consideration for the effects of a significant financing component, if the term of settlement is up to one year from the date when the Group transfers a promised goods or services to a customer and the customer pays for that goods or services within one year or less.

Energy sales are carried out on both regulated and unregulated energy markets. Regulated market revenue is based on the application of authorised tariffs as approved by the Federal Antimonopoly Service and Regional Energy Commission of the Russian Federation. Revenue is recognised on a monthly basis upon the delivery of the electricity, heat and capacity. Capacity is a special good/service which gives a customer the right to demand generating company (the Group) to maintain its generation assets in a state of readiness to enable the electricity production for the customer.

Electricity volumes produced, not covered by the regulated contracts are traded at unregulated prices on the basis of free bilateral contracts or on a day-ahead market while capacity is supplied based on competitive capacity selection under the contracts for sales of capacity. Non-regulated bilateral contracts for supply of capacity may be also concluded.

The amounts of revenue and expenses of self-produced and consumed electricity volume are shown net for presentation purposes based on selling prices on a day-ahead market. Management believes that such presentation provides more relevant and meaningful information about the operation of the Group.

Revenue from the sale of railroad and transhipment service is recognised when the Group fulfils the obligation of transhipment. The ordinary conditions for settlements with customers imply payment upon delivery.

3.13. Dividends declared

Dividends and related taxation thereon are recognised as a liability in the year in which they have been declared and become legally payable.

Retained earnings legally distributable by the Group are based on the amounts available for distribution in accordance with the applicable legislation and as reflected in the statutory financial statements of the individual Group entities. These amounts may differ significantly from the amounts recognised in the Group's consolidated IFRS financial statements.

3.14. Development expenditure

Development costs are capitalised when shaft sinking is done to prepare a certain part of a deposit for mining and used throughout the life of a mine. Development costs are capitalised in case longwalls are being prepared for extraction and amortised during the mining of the longwall.

3.15. Overburden removal expenditure

In open-pit coal mining operations, it is necessary to remove the overburden and other waste in order to access the economically recoverable coal.

Stripping costs incurred during the pre-production phase of the open-pit mine are capitalised as the cost of the development of the mining property and amortised over the life of the mine.

Due to the specifics of the geology of the Group's mining assets, the period required to gain access to a coal seam is short, and the stripping ratio (volume of overburden removed over the volume of coal extracted) is relatively constant over the periods. Therefore, stripping costs incurred during the production phase of the open-pit mine are recognised in the profit or loss as incurred.

3.16. Environmental obligation

Environmental obligation includes provision for decommissioning and site restoration costs.

Environmental provision is recognised when the Group has a present legal or constructive obligation as a result of past events that existed at the balance sheet date:

- to dismantle and remove its items of property, plant and equipment (decommissioning); and
- to restore site damage after the commencement of coal production to bring the land into a condition suitable for its further use (site restoration).

Estimated future costs are provided for at the present value of estimated future expenditures expected to be incurred to settle the obligation, using estimated cash flows, based on current prices adjusted for the inflation.

The increase in the provision through unwinding of the obligation, due to the passage of time, is recognised as a finance cost in profit or loss.

Changes in the obligation, reassessed regularly, related to new circumstances or changes in law or technology, or in the estimated amount of the obligation, or in the pre-tax discount rates, are recognised as an increase or decrease of the cost of the relevant asset to the extent of the carrying amount of the asset; the excess is recognised immediately in profit or loss.

Gains from the expected disposal of mining assets at the end of the life of the mine are not taken into account when determining the provision.

3.17. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use, are added to the cost of those assets, until the assets are substantially ready for their intended use. All other borrowing costs are recognised in profit or loss for the year in which they are incurred.

3.18. Goodwill

Goodwill arises on acquisitions and is recognised as an asset initially measured at cost, being the excess of the cost of the business combination over the Group's share of the net fair value of acquiree's identifiable assets, liabilities and contingent liabilities recognised at the date of acquisition. If the Group's share of the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities, after reassessment, exceeds the cost of the business combination, the excess is recognised immediately in profit or loss.

Goodwill is measured at cost less accumulated impairment losses. In respect of equity-accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment. Transaction costs incurred in a business combination are expensed.

The Group elected not to restate past business combinations at the date of adoption of IFRS.

3.19. Lease

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any repayments of lease made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of right-of-use assets are determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the payments of lease discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate. The weighted-average rate applied is 7.6% (8.03% in 2019).

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Group is reasonably certain to exercise, payments of lease in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future payments of lease arising from a change in an index or rate. If there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or if the Group changes its assessment of whether it will exercise a purchase, extension or termination option.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

If the terms of the asset's lease agreement provide for a purchase option and the Group is reasonably certain that it exercises this option, the Group depreciates the right-of-use asset from the commencement date till the end of the useful life of the underlying asset. Depreciation will be calculated based on the useful life of assets under lease.

The Group has elected not to recognise right-of-use assets and lease liabilities for short-term leases of assets that have a lease term of 12 months or less and leases of low-value assets (with a value of USD 5,000 or less upon purchase). The Group recognises the payments of lease associated with these leases as an expense on a straight-line basis over the lease term.

4. CRITICAL ACCOUNTING JUDGEMENTS AND ESTIMATES

In the process of applying the Group's accounting policies management has made the following principal judgements and estimates that have a significant effect on the amounts recognised in the consolidated financial statements. Actual results may differ from these estimates.

Coal reserve estimates. Coal reserve estimates are used as the basis for future cash flows, which enter into the valuation of mining rights, the determination of provision for environmental obligations, calculations of amortisation and depreciation of mining assets, the unwinding of discount on environmental obligations and the related deferred taxes.

The coal reserve estimates represent the quantity of coal expected to be mined, processed and sold at prices at least sufficient to recover the estimated total costs, the carrying value of the investment and anticipated additional expenditures ("proven and probable coal reserves" in international mining terminology). The estimates are based on several assumptions about the physical existence of coal reserves, future mining and recovery factors, production costs and coal prices and have been calculated using the assessment of available exploration and other data. The Group undertakes revisions of the coal reserve estimates, which are confirmed by independent consulting mining engineers, as appropriate.

Although management's long-term mine plans exceed the remaining useful life of some of the mining licenses of the Group, the Group has a legal right to apply for the extension of the licenses for its existing mining resources and therefore management is confident that the licenses will be extended provided that it is the same coal resource within the original mining license and that certain other conditions are met. Extensions to new seams or adjacent areas are often subject to open auctions. Delay or failure in securing relevant government approvals or licences, as well as any adverse change in government policies, may cause a significant adjustment to development and acquisition plans, which may have a material adverse effect on the Group's financial position and performance.

Valuation of mining assets. Mining assets for coal extraction are stated at their fair value based on reports prepared by internal specialists of the Group at each year end.

Since there is no active market for mining assets, the fair value is determined by discounting future cash flows, which can be obtained from the operations of the mines based on the life-of-mine plans, and deducting the fair value of the operating tangible fixed assets. The Group did not identify any material intangible assets which should be deducted in arriving at the fair value of the mining assets.

Since the operating tangible fixed assets are carried at historical cost, for the purposes of regular revaluation of mining assets their fair value is determined either based on market prices for similar items of tangible fixed assets recently acquired or constructed by the Group or, in absence of such items, by applying a price index for the relevant year of acquisition of mining equipment to the residual value of items.

At 31 December 2020 the fair value of mining assets was determined based on the following key assumptions:

- the cash flows were projected based on actual operating results and life-of-mine models constructed for each cash-generating mining unit and based on an assessment of proven and probable reserves using projected volumes of coal and the available capacity of the transport infrastructure in the foreseeable period and thereafter;
- export coal sales volumes were estimated to grow at an average of 2% for the foreseeable forecasted period 2021-2031;
- export coal prices for Asian markets are estimated to grow by 9% in 2021 in comparison to 2020 and to grow at an average of 1% for 2022-2025. Export coal prices for European markets are estimated to grow by 7% in 2021 in comparison to 2020 and to grow at an average of 2% for 2022-2025. Forecast for 2021-2025 is based on the forward rates and consensus forecast of investment banks, forecast after 2025 is estimated to be in line with long-term USD inflation;
- domestic coal sales volumes were estimated to grow at an average of 2% for the foreseeable forecasted period 2021-2031;
- domestic coal prices were estimated to grow at an average of 3.5% in 2021 and to grow in line with RUB inflation thereafter;
- regulated railroad tariffs for 2021 were estimated to grow at an average of 3.7% and to grow in line with RUB inflation less than 0.1% thereafter;
- the RUB/USD exchange rate was estimated in 2021 at the level of 75.8 RUB/USD. For 2021-2025 the estimate was based on the RUB/USD forward rate and a consensus forecast of investment banks and was indexed by the ratio between the expected RUB inflation of the corresponding year and the long-term USD inflation thereafter;
- cash flow forecasts were discounted to their present value at the nominal weighted average cost of capital of 12.3% in RUB for brown coal mining units and at the nominal weighted average cost of capital of 9.2% in USD for hard coal mining units.

At 31 December 2020 the total effect of the revaluation of the mining assets was an increase of 648 million USD (31 December 2019 – a decrease of 810 million USD); the after-tax effect on equity was an increase of 518 million USD (31 December 2019 – a decrease of 648 million USD).

Example changes in key assumptions applied to the first forecasted year would have the following effect on the fair value of the mining assets:

	(Decrease)/increase of the fair value
Increase in weighted average cost of capital by 1 percentage point	(935)
Increase in export coal prices of 1%	371
Increase in RUB/USD exchange rate of 1%	228
Increase in export coal sales volumes of 1%	201
Increase in regulated railroad tariffs growth of 1%	(107)
Increase in domestic coal prices of 1%	121
Increase in domestic coal sales volumes of 1%	82

Determination of recoverable amount of property, plant and equipment of the Coal segment (other than mining assets). The recoverable amount of the property, plant and equipment of the coal segment (other than mining assets) as at 31 December 2020 was determined either based on market prices for similar items of machinery and equipment recently acquired by the Group or, if no such purchases occured, by applying a price index for the relevant year of acquisition for mining equipment to the residual value of items. As a result of the testing no impairment loss was recognised.

5. SEGMENTAL INFORMATION

The Group evaluates performance and makes investment and strategic decisions based on a review of the profitability of the Group as a whole, and based on operating segments. An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses and whose operating results are regularly reviewed by management.

Operating segments identified by management are coal, logistics, energy and corporate segments. The coal segment includes coal extraction and washing, sales and distribution in the Russian Federation and abroad; the logistics segment includes railroad transportation and transshipment in ports; the energy segment includes generation and sales of electricity, heat and capacity and the corporate segment includes operations of holding companies. Non-current assets of the Group are mostly located in the Russian Federation.

Operating segment information for the Group at 31 December 2020 and for the year then ended is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Segment revenue and profitability						
Segment external revenues	4,057	252	2,374	—	—	6,683
Russian Federation	488	252	2,374	—	—	3,114
Pacific region	2,377	—	—	—	—	2,377
Atlantic region	1,192	—	—	—	—	1,192
Inter-segment revenues	760	1,666	65	48	(2,539)	—
Segment expenses	(4,779)	(1,542)	(1,917)	(92)	2,539	(5,791)
Operating profit/(loss)	**38**	**376**	**522**	**(44)**	—	**892**
Depreciation and amortisation	(637)	(207)	(228)	(9)	—	(1,081)
Interest expense and interest on lease	(136)	(76)	(83)	(227)	218	(304)
Interest income	5	6	1	214	(218)	8
(Loss)/profit before tax	(183)	387	438	(395)	—	247
Income tax benefit/(expense)	33	(77)	(88)	79	—	(53)
Net (loss)/profit for the year	**(150)**	**310**	**350**	**(316)**	—	**194**
Capital expenditures incurred during the year	723	64	227	12	—	1,026
Additions of right-of-use assets	8	1	11	—	—	20
Segment assets and liabilities						
Total segment assets	**13,291**	**2,565**	**3,410**	**1,748**	**(4,980)**	**16,034**
Total segment liabilities	**4,962**	**1,224**	**2,119**	**7,655**	**(4,980)**	**10,980**

Operating segment information for the Group at 31 December 2019 and for the year then ended is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Segment revenue and profitability						
Segment external revenues	5,140	309	2,189	—	—	7,638
Russian Federation	614	309	2,189	—	—	3,112
Pacific region	2,712	—	—	—	—	2,712
Atlantic region	1,814	—	—	—	—	1,814
Inter-segment revenues	664	1,903	8	53	(2,628)	—
Segment expenses	(5,650)	(1,676)	(1,714)	(111)	2,628	(6,523)
Operating profit/(loss)	**154**	**536**	**483**	**(58)**	**—**	**1,115**
Depreciation and amortisation	(597)	(271)	(178)	(7)	—	(1,053)
Interest expense and interest on lease	(157)	(95)	(121)	(239)	206	(406)
Interest income	5	10	4	210	(206)	23
(Loss)/profit before tax	(88)	493	363	127	—	895
Income tax benefit/(expense)	51	(101)	(71)	(25)	—	(146)
Net (loss)/profit for the year	**(37)**	**392**	**292**	**102**	**—**	**749**
Capital expenditures incurred during the year	972	94	158	12	—	1,236
Additions of right-of-use assets	13	932	4	—	—	949
Segment assets and liabilities						
Total segment assets	**13,271**	**2,722**	**3,688**	**1,210**	**(4,292)**	**16,599**
Total segment liabilities	**5,013**	**1,434**	**2,493**	**6,348**	**(4,292)**	**10,996**

6. REVENUE

	2020	2019
Coal	3,799	4,877
Electric capacity	832	732
Electricity	813	693
Heat	647	707
Railroad transportation and transhipment in ports	231	309
Petroleum coke	77	153
Other	284	167
Total	**6,683**	**7,638**

7. COST OF SALES

	2020	2019
Depreciation and amortisation	887	794
Coal and petroleum coke purchased from third parties	779	1,090
Labour	752	854
Consumables and spares	354	457
Purchased fuel	330	279
Purchased energy	187	197
Repairs and maintenance services	144	164
Property and other taxes	58	54
Transportation services	44	73
Fire and rescue brigade expenses	36	36
Personnel transportation services	35	37
Tax on mining	29	41
Transfer of heat	21	28
Drilling and blasting services	16	22
Other	174	175
Total	**3,846**	**4,301**

Proceeds from the sale of electricity and purchased energy are presented after deduction of cost of electricity generated by the Group and consumed for own process needs in the amount of 83 million USD for the year ended 31 December 2020 (for the year ended 31 December 2019 – 96 million USD).

8. DISTRIBUTION COSTS

	2020	2019
Railway services	1,034	1,172
Freight	310	289
Depreciation and amortization	194	259
Stevedoring from third parties	112	138
Labour	42	44
Repair and maintenance services	38	44
Consumables and spares	16	9
Property and other taxes	2	2
Other	14	21
Total	**1,762**	**1,978**

9. GENERAL AND ADMINISTRATIVE EXPENSES

	2020	2019
Salaries	127	140
Consulting, legal, audit and other professional services	31	38
Charitable donations	14	26
Other	13	25
Total	**185**	**229**

10. FINANCE COSTS, NET

Interest expense	241	317
Interest on lease	63	89
Bank commissions and charges	26	24
Unwinding of discount on provisions	15	13
Interest income	(8)	(23)
Total	**337**	**420**

11. PROPERTY, PLANT AND EQUIPMENT

	Mining assets	Generating assets	Machinery, equipment, transport and other	Buildings, structures and utilities	Railcars	Construction-in-progress	Total
Cost							
Balance at 1 January 2019 (as previously reported)	**7,991**	**2,356**	**2,676**	**1,513**	**316**	**607**	**15,459**
Acquisition of Tuapse Bulk Terminal and Murmansk Bulk Terminal	—	—	29	76	—	9	**114**
Balance at 1 January 2019 (as adjusted)	**7,991**	**2,356**	**2,705**	**1,589**	**316**	**616**	**15,573**
Revaluation of mining assets	(810)	—	—	—	—	—	**(810)**
Business combination	28	314	15	36	—	40	**433**
Additions	55	—	6	57	—	1,118	**1,236**
Transfers	108	52	599	138	41	(938)	**—**
Disposals	(5)	(8)	(77)	(15)	—	(17)	**(122)**
Translation difference	207	305	112	85	23	30	**762**
Balance at 31 December 2019	**7,574**	**3,019**	**3,360**	**1,890**	**380**	**849**	**17,072**
Revaluation of mining assets	648	—	—	—	—	—	**648**
Business combination (see note 33)	—	181	5	17	2	17	**222**
Additions	42	—	23	27	—	934	**1,026**
Transfers	81	86	451	160	14	(792)	—
Reclassification from right-of-use assets	—	—	—	7	808	—	**815**
Disposals	—	(2)	(57)	(8)	(12)	(9)	**(88)**
Translation difference	(314)	(512)	(165)	(164)	(106)	(61)	**(1,322)**
Balance at 31 December 2020	**8,031**	**2,772**	**3,617**	**1,929**	**1,086**	**938**	**18,373**
Accumulated depreciation and amortisation							
Balance at 1 January 2019 (as previously reported)	**1,025**	**627**	**1,513**	**542**	**28**	—	**3,735**
Acquisition of Tuapse Bulk Terminal and Murmansk Bulk Terminal	—	—	18	20	—	—	**38**
Balance at 1 January 2019 (as adjusted	**1,025**	**627**	**1,531**	**562**	**28**	**—**	**3,773**
Depreciation and amortisation	305	108	297	86	38	—	**834**
Disposals	(5)	—	(46)	(2)	—	—	**(53)**
Translation difference	44	81	56	24	3	—	**208**
Balance at 31 December 2019	**1,369**	**816**	**1,838**	**670**	**69**	**—**	**4,762**
Depreciation and amortisation	272	158	377	107	20	—	**934**
Disposals	—	(1)	(56)	(7)	(5)	—	**(69)**
Reclassification from right-of-use assets	—	—	—	—	30	—	**30**
Translation difference	(73)	(136)	(83)	(58)	(2)	—	**(352)**
Balance at 31 December 2020	**1,568**	**837**	**2,076**	**712**	**112**	**—**	**5,305**
Net book value at 31 December 2019	**6,205**	**2,203**	**1,522**	**1,220**	**311**	**849**	**12,310**
Net book value at 31 December 2020	**6,463**	**1,935**	**1,541**	**1,217**	**974**	**938**	**13,068**

Group assets include advances issued for capital expenditures of 45 million USD (31 December 2019 – 64 million USD).

If mining assets had been carried at the historical cost, the net book value of property, plant and equipment at 31 December 2020 would have been 7,366 million USD (31 December 2019 – 6,854 million USD).

12. RIGHT-OF-USE ASSETS

	Generating assets	Buildings, structures and utilities	Machinery, equipment, transport and other	Railcars	Total
Cost					
Balance at 1 January 2019	**79**	**117**	**11**	**591**	**798**
Additions	4	11	2	932	**949**
Modifications	(5)	13	(1)	(1)	**6**
Disposals	—	—	—	(38)	**(38)**
Translation difference	10	14	1	111	**136**
Balance at 31 December 2019	**88**	**155**	**13**	**1,595**	**1,851**
Additions	11	5	3	1	**20**
Modifications	11	24	1	36	**72**
Reclassification to property, plant and equipment	—	(7)	—	(808)	**(815)**
Disposals	(9)	(6)	(10)	(1)	**(26)**
Translation difference	(14)	(24)	(2)	(190)	**(230)**
Balance at 31 December 2020	**87**	**147**	**5**	**633**	**872**
Accumulated depreciation					
Balance at 1 January 2019	**—**	**4**	**—**	**—**	**4**
Depreciation	10	11	7	192	**220**
Modifications	—	—	—	(4)	**(4)**
Disposals	—	—	—	(25)	**(25)**
Translation difference	1	(1)	1	8	**9**
Balance at 31 December 2019	**11**	**14**	**8**	**171**	**204**
Depreciation	11	9	3	145	**168**
Modifications	—	—	—	(8)	**(8)**
Reclassification to property, plant and equipment	—	—	—	(30)	**(30)**
Disposals	(1)	(1)	(9)	(1)	**(12)**
Translation difference	(2)	(2)	(1)	(36)	**(41)**
Balance at 31 December 2020	**19**	**20**	**1**	**241**	**281**
Net book value at 1 January 2020	**77**	**141**	**5**	**1,424**	**1,647**
Net book value at 31 December 2020	**68**	**127**	**4**	**392**	**591**

In 2020 the Group purchased railcars from lease for a consideration of 363 million USD. The net book value of the railcars was reclassified from right-of-use assets to property, plant and equipment in the amount of 778 million USD.

13. OTHER ASSETS

	2020	2019
Contract assets under concession agreements	52	49
Other assets	53	51
Total	**105**	**100**

14. TRADE ACCOUNTS AND OTHER RECEIVABLES

Trade accounts receivable	833	1,001
Advances issued	133	121
Other receivables	32	57
Subtotal	**998**	**1,179**
Less: Allowance for doubtful debts	176	198
Total	**822**	**981**

15. INVENTORIES

Coal stock	288	356
Consumable stores and materials	454	456
Less: Allowance for obsolescence	38	45
Net consumable stores and materials	416	411
Total	**704**	**767**

16. DERIVATIVE FINANCIAL INSTRUMENTS

	2020		2019	
	Derivative assets	**Derivative liabilities**	**Derivative assets**	**Derivative liabilities**
Coal contracts – cash flow hedges	2	86	37	7
Cross-currency swaps – cash flow hedges	22	328	104	5
Cross-currency forward contracts – cash flow hedge	27	1	—	—
Other derivatives	3	1	1	—
Total	**54**	**416**	**142**	**12**

Derivative financial instruments were valued using observable inputs, which correspond to Level 2 of the hierarchy of the fair value measurements (see note 31). Details of the effective portion of changes in fair value of cash flow hedges were as follows:

	2020		2019	
	Loss recognised in comprehensive income	Loss recycled from comprehensive income to the profit or loss	Gain recognised in comprehensive income	Gain recycled from comprehensive income to the profit or loss
Effective portion of changes in fair value of cash flow hedges	(558)	40	344	(241)
Deferred tax	70	(9)	(33)	21
Total	**(488)**	**31**	**311**	**(220)**

Coal contracts. The Group uses coal forwards to hedge the coal price index used in index price coal sales and purchase contracts. Details of the coal forwards designated as cash flow hedges were as follows:

	2020		2019	
	Volume (million tonne)	Derivative	Volume (million tonne)	Derivative
Derivative assets				
0 – 3 months	0.5	1	1.0	9
3 – 6 months	0.1	1	0.7	11
6 – 9 months	0.1	—	0.7	9
9 – 12 months	—	—	0.9	8
Total	**0.7**	**2**	**3.3**	**37**
Derivative liabilities				
0 – 3 months	3.6	23	0.2	2
3 – 6 months	2.4	27	0.1	2
6 – 9 months	1.9	16	0.1	2
9 – 12 months	2.3	20	0.1	1
Total	**10.2**	**86**	**0.5**	**7**

At 31 December 2020 the average coal sales price under the hedge coal forward contracts was 64 USD per ton (31 December 2019 – 70 USD per ton).

Cross-currency swaps. The Group entered into cross-currency swap contracts to manage exposure of fluctuations in foreign currency exchange rates.

At 31 December 2020 the outstanding principle amount of hedge is 3,185 million USD. Details of the cross-currency swaps designated as cash flow hedges were as follows:

	2020		2019	
	Volume (million USD)	Derivative	Volume (million USD)	Derivative
Derivative assets				
2021	13	1	177	17
2022	256	11	676	62
2023	258	10	392	25
Total	**527**	**22**	**1,245**	**104**
Derivative liabilities				
2021	194	14	—	—
2022	937	73	—	—
2023	831	127	662	5
2024	220	35	—	—
2025	476	79	—	—
Total	**2,658**	**328**	**662**	**5**

17. PREPAID AND RECOVERABLE TAXES

	2020	2019
Value-added tax recoverable	145	195
Income tax receivable	36	65
Prepaid other taxes	2	5
Total	**183**	**265**

18. CASH AND CASH EQUIVALENTS

		2020	2019
Current accounts	— foreign currency	117	56
	— RUB	17	83
Deposits	— RUB	33	24
	— foreign currency	16	9
Other cash equivalents	— foreign currency	—	5
Total		**183**	**177**

19. SHARE CAPITAL AND RESERVES

	Number of shares, in thousands	
	2020	**2019**
Authorised share capital		
Ordinary shares	236,060	236,060
Issued share capital		
Ordinary shares	236,060	236,060

Ordinary shares of the Company have a par value of 0.005 RUB. All issued shares were fully paid.

20. EARNINGS PER SHARE

Basic earnings per share are calculated based on the weighted average number of ordinary shares outstanding during the year. Basic and diluted earnings per share are the same, as there is no dilution effect.

	2020	**2019**
Profit for the year attributable to ordinary shareholders of the parent	185	742
Weighted average number of ordinary shares in issue (in thousands)	236,060	236,060
Basic and diluted earnings per share (in USD)	**0.78**	**3.14**

21. BORROWINGS

	Effective interest rate	2020	2019
Long-term borrowings			
Variable rate borrowings		**4,115**	**2,952**
Unsecured USD-denominated borrowings	6M LIBOR + 0.9% to 1M LIBOR + 3%	2,545	2,780
Unsecured RUB-denominated borrowings	CBR + 0.3% to CBR + 1.85%	1,286	—
Unsecured EUR-denominated borrowings	6M EURIBOR + 0.37% to 6M EURIBOR + 2.25%	284	172
Fixed rate borrowings		**2,843**	**3,631**
Unsecured USD-denominated borrowings	2.99% to 4%	1,404	1,814
Unsecured RUB-denominated bonds	6.7% to 8.3%	1,314	840
Unsecured RUB-denominated borrowings	0.05% to 4%	125	977
Subtotal		**6,958**	**6,583**
Less: Current portion of long-term borrowings		1,688	1,644
Total long-term borrowings		**5,270**	**4,939**
Short-term borrowings			
Fixed rate borrowings		**44**	**155**
Unsecured RUB-denominated borrowings	1.8%	41	—
Unsecured USD-denominated borrowings		—	150
Other borrowings		3	5
Subtotal		**44**	**155**
Current portion of long-term borrowings		1,688	1,644
Total short-term borrowings		**1,732**	**1,799**

The Group's long-term borrowings have restrictive covenants including, but not limited to, the requirement to maintain minimum ratios associated with:

- consolidated net indebtedness to earnings before interest, tax, depreciation and amortisation ("EBITDA"); and
- EBITDA to consolidated interest expense.

The covenants are calculated based on the IFRS financial statements of the Group on a semi-annual basis. As at 31 December 2020 the Group was in compliance with all such covenants.

22. LEASE LIABILITIES

	2020	2019
Opening balance	**1,224**	**813**
Additions	20	521
Modifications	74	11
Interest on lease	63	89
Payment of lease liabilities	(224)	(313)
Payment for purchase of leased railcars	(363)	—
Disposals	(14)	(16)
Translation difference	(163)	119
Closing balance	**617**	**1,224**

The remaining amount of lease liabilities related to railcars reclassified from right-of-use assets to property, plant and equipment amounted to 10 million USD.

23. CHANGES IN LIABILITIES ARISING FROM FINANCIAL ACTIVITIES

The table below provides information of changes in liabilities arising from financing activities, including changes arising from cash flows and non-cash changes:

	Long-term borrowings	Short-term borrowings	Lease liabilities	Dividends paid to shareholders	Other	Total
Balance as at 1 January 2019	**4,291**	**62**	**813**	**—**	**—**	**5,166**
Cash flows	1,828	5	(313)	—	(91)	**1,429**
Foreign exchange loss	144	67	119	—	—	**330**
Interest expenses and interest on lease	296	21	89	—	—	**406**
Change in lease obligations	—	—	516	—	—	**516**
Bank commissions	24	—	—	—	—	**24**
Other payables	—	—	—	—	91	**91**
Balance as at 31 December 2019	**6,583**	**155**	**1,224**	**—**	**—**	**7,962**
Balance as at 1 January 2020	**6,583**	**155**	**1,224**	**—**	**—**	**7,962**
Cash flows	396	(102)	(587)	(103)	(25)	**(421)**
Foreign exchange gain	(278)	(19)	(163)	—	—	**(460)**
Interest expenses and interest on lease	231	10	63	—	—	**304**
Change in lease obligations	—	—	80	—	—	**80**
Bank commissions	26	—	—	—	—	**26**
Other payables	—	—	—	103	25	**128**
Balance as at 31 December 2020	**6,958**	**44**	**617**	**—**	**—**	**7,619**

24. OTHER LONG-TERM LIABILITIES

	2020	2019
Provision for environmental obligation	159	175
Provision for defined benefit obligation	44	64
Other long-term liabilities	133	132
Total	**336**	**371**

Provision for environmental obligation. The extent and cost of future site restoration programmes are inherently difficult to estimate and depend on the estimated lives of the assets, the scale of any possible disturbance and contamination as well as the timing and extent of corrective actions. The following is a summary of the key assumptions on which the discounted carrying amounts of the obligations are based:

	2020	2019
Discount rate	7%	7%
Inflation rate	4%	4%

Provision for defined benefit obligation. Actuarial assumptions used for the calculation of the defined benefit obligation were as follows:

	2020	2019
Discount rate	6%	7%
Inflation rate	4%	4%
Future increases in salaries	4%	4%

25. TRADE ACCOUNTS AND OTHER PAYABLES

Trade accounts payable and accruals	325	519
Payables for the acquisition of subsidiaries (see note 33)	282	65
Advances from customers	93	198
Accrual for vacation payments	62	72
Wages and salaries	42	66
Other creditors	111	83
Total	**915**	**1,003**

26. TAXES PAYABLE

Value-added tax	104	72
Income tax	35	47
Social security contributions	26	28
Other	19	20
Total	**184**	**167**

27. TAXATION

	2020	2019
Current income tax expense	138	220
Deferred income tax benefit	(85)	(74)
Income tax expense	**53**	**146**

The reconciliation of theoretical income tax, calculated at the rate effective in the Russian Federation, where the Company is domiciled, to the amount of actual income tax expense recorded in the consolidated statement of profit or loss and other comprehensive income is as follows:

	2020	2019
Profit before tax	**247**	**895**
Theoretical income tax expense at 20%	49	179
Impact of specific tax rates in Switzerland	(5)	(38)
Impact of specific tax rates in Russian Federation	(1)	(2)
Impact of tax rate change in Switzerland	—	(22)
Tax effect of non-deductible expenses	10	29
Total income tax expense	**53**	**146**

The tax effects of temporary differences that give rise to deferred taxation are presented below:

2020	Opening balance	Recognised in equity	Recognised in profit or loss	Reclassification of railcars	Effect of translation to presentation currency	Closing balance
Deferred tax assets	**531**	**46**	**164**	**(73)**	**(68)**	**600**
Tax losses carried forward	191	—	177	—	(20)	348
Lease liabilities (see note 12)	231	—	(9)	(73)	(36)	113
Derivative financial liabilities	—	46	—	—	—	46
Environmental and other provisions	39	—	(4)	—	(3)	32
Prepaid expenses and accruals	14	—	(4)	—	(1)	9
Employee benefit obligations	17	—	(2)	—	(2)	13
Trade accounts and other receivables	11	—	3	—	(1)	13
Inventory	5	—	1	—	(2)	4
Other	23	—	2	—	(3)	22
Deferred tax liabilities	**(1,880)**	**(101)**	**(79)**	**73**	123	**(1,864)**
Property, plant and equipment	(1,627)	(116)	(88)	—	89	(1,742)
Right-of-use assets (see note 12)	(231)	—	5	73	33	(120)
Derivative financial assets	(15)	15	—	—	—	—
Other	(7)	—	4	—	1	(2)
Net deferred tax liabilities	**(1,349)**	**(55)**	**85**	**—**	**55**	**(1,264)**

2019	Opening balance	Effect of IFRS 16	Recognised in equity	Recognised in profit or loss	Effect of translation to presentation currency	Closing balance
Deferred tax assets	**247**	**159**	**9**	**81**	**35**	**531**
Lease liabilities	—	159	—	62	10	231
Tax losses carried forward	193	—	6	(24)	16	191
Prepaid expenses and accruals	13	—	2	—	(1)	14
Environmental and other provisions	19	—	1	17	2	39
Employee benefit obligations	14	—	—	2	1	17
Trade accounts and other receivables	8	—	—	2	1	11
Inventory	—	—	—	—	5	5
Other	—	—	—	22	1	23
Deferred tax liabilities	**(1,778)**	**(159)**	**149**	**(7)**	**(85)**	**(1,880)**
Property, plant and equipment	(1,761)	—	161	37	(64)	(1,627)
Right-of-use assets	—	(159)	—	(62)	(10)	(231)
Derivative financial assets	(3)	—	(12)	—	—	(15)
Inventory	(7)	—	—	10	(3)	—
Other	(7)	—	—	8	(8)	(7)
Net deferred tax liabilities	**(1,531)**	**—**	**158**	**74**	**(50)**	**(1,349)**

Unrecognised temporary differences, related to investments in subsidiaries where the Group is able to control the timing of the reversal and distribution of dividends, including distribution on a tax-free basis when certain conditions are met, and it is probable that the temporary difference will not be reversed in the foreseeable future, amounted to 3,843 million USD (31 December 2019 – 3,229 million USD).

Management believes that sufficient taxable profits will be available, against which the unused tax losses can be utilised by the Group in the unlimited future period.

For presentation purposes certain deferred tax assets and liabilities are offset in accordance with the accounting policy.

	2020	2019
Deferred tax assets	246	132
Deferred tax liabilities	(1,510)	(1,481)
Net deferred tax liabilities	**(1,264)**	**(1,349)**

28. RELATED PARTY TRANSACTIONS

Related parties are considered to include the ultimate beneficiary, affiliates and entities under common ownership and control of the same principal ultimate beneficiary. The Company and its subsidiaries, in the ordinary course of their business, enter into various sales, purchases and service transactions with related parties.

Transactions with related parties not dealt with elsewhere in the consolidated financial statements are as follows:

	2020	2019
Transshipment in the ports from EuroChem group	77	73
Coal sales to DEC group, which was an associate of a company with the same principal ultimate beneficiary till June 2020	44	134
Other energy sales	64	61
Other sales to EuroChem group	67	19
Purchases of goods and services from EuroChem group	68	21
Purchases of goods and services from other companies	34	9
Other expenses	2	4
Remuneration of the Board of Directors and the Management members	12	16

The outstanding balances with related parties are as follows:

Trade accounts and other receivables from EuroChem group	13	3
Other receivables	5	14
Payables to EuroChem group for the acquisition of subsidiaries (see note 33)	282	—
Trade accounts and other payables to EuroChem group	28	12

29. COMMITMENTS

Capital commitments. The following key capital expenditures were approved:

	2020	2019
Contracted	885	1,028
Not yet contracted	1,466	284
Total	**2,351**	**1,312**

30. CONTINGENCIES

Insurance. The insurance industry in the Russian Federation is in the process of development, and some forms of insurance protection common in developed markets are not yet generally available at commercially acceptable terms. The Group has limited coverage for its mining, processing, transportation and energy generating facilities for business interruption or for third-party liabilities in respect of property or environmental damage arising from accidents on the Group's property or relating to the Group's operations. Management understands that until the Group obtains adequate insurance coverage there is a risk that the loss or destruction of certain operating assets could have a material adverse effect on the Group's operations and financial position.

Litigation. The Group has a number of small claims and litigations relating to regular business activities and small fiscal claims. Management believes that none of these claims, individually or in aggregate, will have a material adverse impact on the Group.

Taxation contingencies in the Russian Federation. Russian tax, currency and customs legislation is subject to varying interpretations, and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transactions and activities of the Group may be challenged by the relevant regional and federal authorities. Recent events within the Russian Federation suggest that the tax authorities are taking a more assertive position in their interpretation of the legislation and assessments and, as a result, it is possible that transactions and activities that have not been challenged in the past may be challenged. It is therefore possible that significant additional taxes, penalties and interest may be assessed. Fiscal periods remain open to review by the authorities in respect of taxes for three calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods.

Management believes that it has paid or accrued all taxes that are applicable. Where uncertainty exists, the Group has accrued tax liabilities based on management's best estimate of the probable outflow of resources embodying economic benefits which will be required to settle such liabilities.

Management believes that it has provided adequately for all tax liabilities based on its interpretation of the tax legislation. However, the relevant authorities may have differing interpretations, and the effect could be significant.

Environmental matters. The Group is subject to extensive federal, state and local environmental controls and regulations in the regions in which it operates. The Group's operations involve disturbance of land, discharge of materials and contaminants into the environment and other environmental concerns.

The Group's management believes that it is in compliance with all current existing health, safety and environmental laws and regulations in the regions in which it operates. However, changes in environmental regulations are currently under consideration in the Russian Federation. The Group is continually evaluating its obligations relating to new and changing legislation. The Group is unable to predict the timing or extent to which environmental laws and regulations may change. Such change, if it occurs, may require the Group to modernise technology and incur future additional material costs to meet more stringent standards.

The Russian Federation risk. The Group's operations are primarily located in the Russian Federation. Consequently, the Group is exposed to the economic and financial markets of the Russian Federation which display characteristics of an emerging market. The legal, tax and regulatory frameworks continue to develop, but are subject to varying interpretations and frequent changes which together with other legal and fiscal impediments contribute to the challenges faced by entities operating in the Russian Federation.

Starting in 2014, the United States of America, the European Union and some other countries have imposed and expanded economic sanctions against a number of Russian individuals and legal entities. The imposition of the sanctions has led to increased economic uncertainty, including more volatile equity markets, a depreciation of the Russian Rouble, a reduction in both local and foreign direct investment inflows and a significant tightening in the availability of credit. This change in the environment did not have a significant effect on the Group's operations, however, the longer-term effects of the imposed and possible additional sanctions are difficult to determine. The Group implemented relevant compliance policy, continuously monitors economic sanctions and analyses their effect on the Group's financial position and operation results.

The consolidated financial statements reflect management's assessment of the impact of the Russian business environment on the operations and the financial position of the Group. The future business environment may differ from management's assessment.

Business environment. On 11 March 2020, the World Health Organization declared a new coronavirus infection (COVID-19) a pandemic. The global markets began to experience significant volatility. Together with other factors, this have resulted in a sharp decrease in the oil price, stock market indices and coal prices, as well as a depreciation of the Russian rouble. Responding to the potentially serious threat the COVID-19 presents to public health, the Russian and other countries government authorities have taken extensive measures to contain the outbreak, including imposing restrictions on the cross-borders movement of people, entry restrictions for foreigners and instructing business community to transfer employees to working from home. The scope and duration of these events against the backdrop of the second wave of COVID-19 remain uncertain and may have further significant influence on the economy and companies operating in this environment.

The management of the Group is taking necessary precautions to protect the safety and well-being of employees against the spread of COVID-19. The Group has developed plans for mitigating the impact on its business and has reviewed the economic environment; the demand for the Group's products; its supply chain; its available bank facilities; and the possible effects on its cash flow and liquidity position, including consideration of debt covenants.

Taking into account the above-mentioned measures and the Group's current operational and financial performance along with other currently available public information, management does not anticipate significant adverse impact of the COVID-19 outbreak on the Group's financial position and operating results. However, it may be difficult to predict the impact of the COVID-19 in the medium and long term perspective. Management closely monitors the development of the situation and takes necessary measures to mitigate negative effects of the COVID-19 pandemic.

The consolidated financial statements reflect management's assessment of the impact of the business environment on the operations and the financial position of the Group. The future business environment may differ from management's assessment.

31. FAIR VALUE MEASUREMENT

The fair value of assets and liabilities is determined with reference to various market information and other valuation methods as considered appropriate. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in valuation techniques, as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.
Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
Level 3: Inputs for the asset or liability that are not based on observable market data.

Financial instruments carried at amortised cost. At 31 December 2020, the fair values of financial instruments carried at amortised cost, which are mainly loans, payables and receivables, did not materially differ from the carrying values. For payables and receivables this is based on their short-term nature, and loans fair values were calculated based on the present value of future cash flows (including interest) discounted at market interest rate.

Financial instruments carried at fair value. Fair values of derivative financial assets and liabilities were determined using inputs from observable market data, which correspond to Level 2 of the hierarchy of fair values.

Mining assets carried at fair value. The fair value of mining assets was determined using discounted cash flow method corresponding to Level 3 of the hierarchy of fair values (see note 4).

32. FINANCIAL RISK MANAGEMENT

In the normal course of its operations, the Group is exposed to market (including foreign currency and interest rate), credit and liquidity risks. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group uses derivative financial instruments to hedge certain risk exposures.

Risk management is carried out through regular meetings of a risk management committee of operational management and by the central treasury department. The Board of Directors approves principles for overall risk management. In addition, operational management have developed policies covering specific areas, such as foreign currency risk, interest rate risk and the use of derivative and non-derivative financial instruments.

32.1. Market risk

Market risk is the risk that changes in market prices, such as coal prices, foreign exchange rates and interest rates will negatively impact the Group's results or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on risk. Market risk management includes the analysis of foreign currency and interest rate risks.

Interest rate risk

Interest rate risk is the risk that changes in interest rates will adversely impact the financial results of the Group. The total net unhedged liability which exposes the Group to interest rate risk amounts to 4,115 million USD (31 December 2019 – 2,952 million USD).

The Group's interest rate risk arises primarily from long-term borrowings. The Group's borrowings at variable interest rates are primarily denominated in USD. Borrowings at variable interest rates expose the Group to a cash flow interest rate risk. The Group monitors the risk and, if necessary, manages its exposure by entering into variable-to-fixed interest rate swaps. Such interest rate swaps have the economic effect of converting borrowings from variable interest rates to fixed interest rates.

An increase or decrease in the floating interest rate by 1 percentage point, provided that the amount of outstanding balance remained constant for the whole year, would have decreased or increased profit for the year by 41 million USD (2019 – 30 million USD).

Foreign currency risk

Foreign currency risk is the risk that the financial results of the Group will be adversely impacted by changes in exchange rates to which the Group is exposed.

A significant portion of the Group's revenues are denominated in USD, whereas the majority of the Group's expenditures are denominated in RUB. Accordingly, operating profits may be adversely impacted by the appreciation of the RUB against the USD. The risk of negative fluctuations in the USD/RUB exchange rate for future revenue streams is naturally hedged by the USD borrowings.

The Group had the following monetary assets and liabilities denominated in currencies other than the functional currency of the respective Group entity:

	2020			2019		
	RUB	**USD**	**EUR**	**RUB**	**USD**	**EUR**
Balances with third and related parties	**(469)**	**(1,206)**	**(380)**	**(203)**	**(1,787)**	**(312)**
Prepaid and recoverable taxes	25	—	—	137	—	—
Cash and cash equivalents	4	13	6	49	7	—
Trade accounts receivable	42	6	—	45	—	1
Other receivables	2	(2)	—	23	—	—
Borrowings	(13)	(1,221)	(304)	—	(1,772)	(185)
Other long-term liabilities	(203)	—	—	(245)	—	(6)
Trade accounts payable and Accruals	(66)	(2)	(26)	(142)	(22)	(76)
Other creditors	(193)	—	(56)	(1)	—	(46)
Taxes payable	(21)	—	—	(25)	—	—
Accrual for vacation payments	(30)	—	—	(24)	—	—
Wages and salaries	(16)	—	—	(20)	—	—
Intra-group balances	**(1,117)**	**(1,008)**	**2**	**(696)**	**(202)**	**4**
Intra-group receivables	220	9	195	254	12	160
Intra-group borrowings	(1,041)	(971)	(193)	(450)	(206)	(156)
Intra-group payables	(296)	(46)	—	(500)	(8)	—
Total net liabilities	**(1,586)**	**(2,214)**	**(378)**	**(899)**	**(1,989)**	**(308)**

A 10% devaluation of functional currencies against foreign currencies at the reporting date would have the following effect on the profit or loss for the year and the equity including effect on derivatives:

	2020			
	RUB	**USD**	**Other**	**Total**
(Increase)/decrease in equity	(115)	161	30	76
(Increase)/decrease in profit or loss for the year	(39)	90	30	81

32.2. Credit risk

Credit risk is the risk that a counterparty may default or not meet its obligations to the Group on a timely basis, leading to a financial loss to the Group. The Group minimises its exposure to this risk by ensuring that credit risk is spread across a number of counterparties. Trade receivables comprise international companies and large Russian companies, and credit is only extended to these customers after rigid credit approval procedures. The maximum exposure to credit risk is represented by the carrying amount of each financial asset in the consolidated statement of financial position.

At 31 December 2020 4% of total trade receivables were due from the Group's largest customer and 22% of the total trade receivables were due from the Group's next 19 largest customers (31 December 2019 – 8% and 26%, respectively).

The table below analyses the Group's trade receivables into relevant groupings based on ageing.

	2020		2019	
	Gross	Allowance for doubtful debts	Gross	Allowance for doubtful debts
Not past due	559	—	725	—
Past due for less than 12 months	150	36	153	62
Past due for more than one year	124	124	123	123
Total	**833**	**160**	**1,001**	**185**

The movement in the allowance for doubtful debts in respect of trade receivables during the year was as follows:

	2020	2019
Opening balance	**185**	**168**
Additional doubtful debts	69	99
Bad debt recovered	(51)	(95)
Bad debt written-off	(13)	(7)
Effect of translation to presentation currency	(30)	20
Closing balance	**160**	**185**

Analysis of credit quality of cash and cash equivalents, including bank deposits, based on credit ratings of independent agencies "Standard & Poor's", "Fitch Ratings" and others is listed in the table below:

	2020	2019
From A- to AAA	28	48
From BBB- to BBB+	113	85
From BB- to BB+	28	30
Other	14	14
Total	**183**	**177**

32.3. Liquidity risk

Liquidity risk is the risk that the Group will not be able to settle all liabilities as they fall due.

Recently global and Russian capital markets have experienced significant volatility, including a lack of available sources of financing and significant fluctuation of the Russian Rouble against the USD and the Euro. Despite stabilisation measures undertaken by various governments, markets remain volatile.

Prudent liquidity risk management includes maintaining sufficient cash, the availability of funding from an adequate amount of committed credit facilities and the ability to close out market positions. The Group expects that cash generated from operations will be the major source of the Group's liquidity in 2021 and will be sufficient to cover the capital expenditures programme of the Group. In addition, management believes that the Company will be able to attract additional sources of financing in order to refinance existing short-term facilities.

The central treasury department of the Group maintains flexibility in funding by ensuring the availability of credit line facilities. The unused portion of these lines at 31 December 2020 totalled 2,499 million USD (31 December 2019 – 2,889 million USD).

The table below analyses the Group's financial liabilities and net-settled derivative financial liabilities into relevant maturity groupings based on the contractual undiscounted cash flows to maturity, including interest payments.

	Carrying amount	Contractual cash flows	Due in the first year	Due in the second year	Due thereafter
Balance at 31 December 2020					
Long-term borrowings	6,958	7,493	1,885	1,707	3,901
Short-term borrowings	44	44	44	—	—
Lease liabilities	617	997	179	167	651
Net-settled derivative liabilities	416	416	102	73	241
Trade accounts payable and accruals	325	325	325	—	—
Other creditors	393	393	393	—	—
Total	**8,753**	**9,668**	**2,928**	**1,947**	**4,793**
Balance at 31 December 2019					
Long-term borrowings	6,583	6,947	1,903	2,087	2,957
Short-term borrowings	155	155	155	—	—
Lease liabilities	1,224	1,808	297	273	1,238
Trade accounts payable and accruals	519	519	519	—	—
Net-settled derivative liabilities	12	12	12	—	—
Other creditors	148	148	148	—	—
Total	**8,641**	**9,589**	**3,034**	**2,360**	**4,195**

32.4. Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns to equity holders and benefits for other stakeholders.

The Group defines capital as shareholders' equity. In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to equity holders, return capital to equity holders or issue new shares. This strategy remains unchanged from prior years.

33. INVESTMENTS IN SIGNIFICANT SUBSIDIARIES

Subsidiaries by country of incorporation	Principal activity	2020	2019
Russian Federation			
Murmansk			
JSC "Murmanskiy Morskoi Torgovyi Port"	Port facilities	100%	100%
LLC "Murmansk Bulk Terminal"	Port facilities	100%	—
Moscow Region			
JSC "National Transportation Company"	Transportation services	100%	—
Krasnodarskiy krai			
LLC "Tuapse Bulk Terminal"	Port facilities	100%	—
Altai			
JSC "Barnaul Generation"	Energy generation	100%	100%
JSC "Byiskenergo"	Energy generation	100%	100%
Novosibirsk			
JSC "SIBECO"	Energy generation	100%	100%
Kemerovo			
JSC "SUEK-Kuzbass"	Hard coal extraction	100%	100%
JSC "Kuzbassenergo"	Energy generation	99.9%	99.9%
JSC "Kemerovo Generation"	Energy generation	100%	100%
Krasnoyarsk			
JSC "SUEK-Krasnoyarsk"	Brown coal extraction	100%	100%
JSC "Razrez Berezovskiy"	Brown coal extraction	100%	100%
JSC "Razrez Nazarovskiy"	Brown coal extraction	100%	100%
JSC "Yenisei Territorial Generating Company (TGC-13)"	Energy generation	99.9%	99.9%
JSC "Nazarovo GRES"	Energy generation	100%	100%
Khakasia			
LLC "SUEK-Khakasia"	Hard coal extraction	100%	100%
LLC "Vostochno-Beyskiy razrez"	Hard coal extraction	50%	50%
Buryatia			
JSC "Razrez Tugnuiskiy"	Hard coal extraction	100%	100%
Zabaikalye			
JSC "Razrez Kharanorskiy"	Brown coal extraction	100%	100%
Khabarovsk			
JSC "Urgalugol"	Hard coal extraction	100%	100%
JSC "Daltransugol"	Port facilities	100%	100%
Primorye			
LLC "Primorskugol"	Brown coal extraction	100%	100%
LLC "Stevedoring Company "Maly port"	Port facilities	49.9%	49.9%
LLC "Primorskaya GRES"	Energy generation	100%	—
Switzerland			
SUEK AG	Export sales of coal	100%	100%
Republic of Cyprus			
SUEK LTD	Debt holding company	100%	100%

Business combinations

Acquisition of Krasnoyarskaya GRES-2. In March 2020, the Group acquired generating and other assets of Krasnoyarskaya GRES-2 for 156 million USD from a third party. The core activity of the acquired business is generation and sales of energy. Along with the acquired assets, the Group obtained control over all processes of generation and sales, acquired rights and obligations under key contracts were transferred to the Group. The Group recognizes the acquisition of the assets of Krasnoyarskaya GRES-2 as a business combination since assets represent a unified complex for generation of electricity and the Group also acquired all key processes, altogether representing the attributes of the business. The fair value amounts of the acquired assets, mainly presented by property, plant and equipment, and assumed liabilities at the date of acquisition were estimated at 158 million USD and 2 million USD, respectively. Before the Group completed the process of obtaining permits and licenses required to operate Krasnoyarskaya GRES-2, the acquired assets were leased back to the seller. Under the terms of the lease, the Group has control over business processes and financial results, thus, at the time of the transitional period, the Group consolidates Krasnoyarskaya GRES-2. In October 2020, the Group obtained permits and licenses required to operate Krasnoyarskaya GRES-2 and the lease back agreement has ended. The effect of the consolidation of the acquired assets on the consolidated revenue is 50 million USD for the year ended 31 December 2020. The effect on the consolidated profit or loss for the year ended 31 December 2020 is not significant.

Acquisition of Reftinskaya GRES. In October 2019, the Group acquired generating and other assets of Reftinskaya GRES for 345 million USD, including a contingent consideration described below, from a third party. In 2019 and in 2020 the Group paid for the acquisition 259 million USD and 57 million USD, respectively. As at 31 December 2019, the Group also recognised a contingent consideration at fair value of 24 million USD and allocated it to the generating assets. In 2020 the Group reassessed the fair value of the contingent consideration to the amount of 15 million USD, the change in the fair value was recognised in other income. The last contingent payment is in 2024. In 2020 the Group finalised purchase price allocation for this business combination, as a result, the carrying amounts of the acquired assets, mainly presented by property, plant and equipment, and assumed liabilities at the date of acquisition were estimated at 353 million USD and 8 million USD, respectively.

Acquisition of subsidiaries under common control

Acquisition of Primorskaya GRES. In November 2020, the Group acquired from a related company 100% of LLC “Primorskaya GRES” for 49 million USD. The principal activity of the acquired company is generation and sales of energy. Since the acquisition of the LLC “Primorskaya GRES” represents a transaction under common control the consolidated financial statements of the Group were retrospectively restated to reflect the effect of the acquisition as if it had occurred on 5 June 2020, at the date when common control was established.
As LLC “Primorskaya GRES” did not prepare IFRS financial statements, the independent appraisal of assets and liabilities was performed on the date of acquisition of control by the related company. The difference between the transaction price and the net assets of the company was recorded in retained earnings in the amount of 5 million USD. The carrying amount of assets, mainly presented by property, plant and equipment, and liabilities of LLC “Primorskaya GRES” at the date of acquisition were estimated by the related party at 73 million USD and 13 million USD, respectively, and at 63 million USD and 14 million USD as at 31 December 2020. Other transactions in equity and consolidated cash flow statement include additional contribution to capital made by the prior owner in the amount of 8 million USD. The effect of the consolidation of LLC “Primorskaya GRES” on the consolidated revenue is 85 million USD for the year ended 31 December 2020. The effect of the transaction on the consolidated profit or loss for the year ended 31 December 2020 is not significant.

Acquisition of Tuapse Bulk Terminal and Murmansk Bulk Terminal. In December 2020, the Group acquired LLC "Tuapse Bulk Terminal" and LLC "Murmansk Bulk Terminal" for 114 million USD and 168 million USD, respectively, from EuroChem group to strengthen position on the logistics market. Since the acquisition of companies represents a transaction under common control the consolidated financial statements of the Group were retrospectively restated to reflect the effect of the acquisition as if it had occurred on 1 January 2019, at the beginning of the earliest comparative period presented. The transaction was accounted for using predecessor IFRS accounting at the carrying amount of the assets and liabilities. Other transactions in equity and consolidated cash flow statement include dividends paid to the previous shareholder in the amount of 28 million USD in 2020 (62 million USD in 2019).

The carrying amount of assets and liabilities of acquired subsidiaries is presented below:

	At the acquisition date	2019
Property, plant and equipment	64	78
Right-of-use assets	12	16
Other assets	4	2
Trade accounts and other receivables	17	24
Inventories	1	1
Cash and cash equivalents	11	—
Long-term lease liabilities	(12)	(15)
Deferred tax liabilities	(5)	(5)
Trade accounts and other payables	(4)	(4)
Taxes payable	(1)	(1)
Net assets	**87**	**96**

Non-controlling interests. Information of LLC "Vostochno-Beyskiy razrez" that has significant non-controlling interests is as follows:

	2020	2019
Non-current assets	154	285
Current assets	44	55
Non-current liabilities	(29)	(55)
Current liabilities	(6)	(15)
Net assets	**163**	**270**
Accumulated non-controlling interests	**82**	**135**
Revenue	131	139
Net profit/(loss) for the year	3	(2)
Profit/(loss) allocated to non-controlling interests	2	(1)
Revaluation of mining assets	(31)	(22)
Cash flows from operating activities	21	11
Cash flows used in investment activities	(16)	(11)
Cash flows used in financing activities	(6)	(13)
Dividends to non-controlling interests	3	6

34. EVENTS SUBSEQUENT TO THE BALANCE SHEET DATE

In January 2021, SUEK LTD redomiciled from the Republic of Cyprus to the Russian Federation.

JSC SUEK

Consolidated annual financial statements

for the year ended 31 December 2019

KPMG

Independent Auditors' Report

To the Shareholders of JSC SUEK

Opinion

We have audited the consolidated financial statements of JSC SUEK (the "Company") and its subsidiaries (the "Group"), which comprise the consolidated statement of financial position as at 31 December 2019, the consolidated statements of profit or loss, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2019, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the independence requirements that are relevant to our audit of the consolidated financial statements in the Russian Federation and with the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants* (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with the requirements in the Russian Federation and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Audited entity: JSC SUEK

Registration No. in the Unified State Register of Legal Entities: 1027700151380

Moscow, Russia

Independent auditor: JSC "KPMG", a company incorporated under the Laws of the Russian Federation, a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity

Registration No. in the Unified State Register of Legal Entities: 1027700125628

Member of the Self-regulated organization of auditors "Russian Union of auditors" (Association). The Principal Registration Number of the Entry in the Register of Auditors and Audit Organisations: No. 11603053203

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

The engagement partner on the audit resulting in this independent auditors' report is:

Andrey Kim

JSC "KPMG"

Moscow, Russia

29 January 2020

JSC SUEK

Consolidated statement of profit or loss for the year ended 31 December 2019

Millions of US Dollars

	Notes	2019	2018
Revenue	6	**7,547**	**8,296**
Cost of sales	7	(4,275)	(4,110)
Distribution costs	8	(1,978)	(2,047)
General and administrative expenses	9	(229)	(239)
Other expenses, net		(3)	(28)
Operating profit		**1,062**	**1,872**
Finance costs, net	10	(422)	(311)
Foreign exchange gain/(loss)		200	(83)
Profit before tax		**840**	**1,478**
Income tax expense	27	(134)	(314)
Net profit for the year		**706**	**1,164**
Net profit attributable to:			
Ordinary shareholders of the parent		699	1,144
Non-controlling interests		7	20
Net profit for the year		**706**	**1,164**
Basic and diluted earnings per share (in US Dollars)	20	2.96	4.88

Vladimir Rashevsky
Chief Executive Officer

Nikolay Pilipenko
Chief Financial Officer

29 January 2020

The accompanying notes on pages 9 to 47 are an integral part of these consolidated financial statements.

JSC SUEK

Consolidated statement of comprehensive income for the year ended 31 December 2019

Millions of US Dollars

	Notes	2019	2018
Net profit for the year		**706**	**1,164**
Other comprehensive income			
Items which may be reclassified to profit or loss in the future:			
Translation difference		141	(460)
Revaluation of intra-group debt denominated in foreign currency	3.2	(1)	(1)
Transfer of changes in fair value of cash flow hedges to profit or loss, net of deferred tax	16	(220)	104
Effective portion of changes in fair value of cash flow hedges, net of deferred tax	16	311	(16)
Total items which may be reclassified to profit or loss in the future		**231**	**(373)**
Items which may not be reclassified to profit or loss in the future:			
Revaluation (deficit)/surplus	4	(810)	1,322
Tax effect of revaluation	4	162	(264)
Actuarial (losses)/gains		(7)	10
Total items which may not be reclassified to profit or loss in the future		**(655)**	**1,068**
Total other comprehensive (loss)/income for the year		**(424)**	**695**
Total other comprehensive (loss)/income attributable to:			
Ordinary shareholders of the parent		(414)	718
Non-controlling interests		(10)	(23)
Total other comprehensive (loss)/income for the year		**(424)**	**695**
Total comprehensive income attributable to:			
Ordinary shareholders of the parent		280	1,858
Non-controlling interests		2	1
Total comprehensive income for the year		**282**	**1,859**

The accompanying notes on pages 9 to 47 are an integral part of these consolidated financial statements.

JSC SUEK

Consolidated statement of financial position as at 31 December 2019

Millions of US Dollars

	Notes	2019	2018
ASSETS			
Non-current assets		**14,165**	**12,044**
Property, plant and equipment	11	12,226	11,724
Right-of-use assets	12	1,631	—
Deferred tax assets	27	132	136
Goodwill		78	78
Other assets	13	98	106
Current assets		**2,306**	**1,995**
Trade accounts and other receivables	14	957	882
Inventories	15	766	735
Prepaid and recoverable taxes	17	265	175
Derivative financial assets	16	142	37
Cash and cash equivalents	18	176	166
Total assets		**16,471**	**14,039**
EQUITY AND LIABILITIES			
Equity		**5,501**	**5,235**
Share capital	19	—	—
Share premium		104	104
Revaluation reserve		4,866	5,665
Hedging reserve		117	26
Translation reserve		(1,684)	(1,812)
Retained earnings		1,923	1,063
Attributable to ordinary shareholders of the parent		**5,326**	**5,046**
Non-controlling interests		**175**	**189**
Non-current liabilities		**7,770**	**7,083**
Long-term borrowings	21	4,939	3,272
Long-term lease liabilities	22	984	—
Deferred tax liabilities	27	1,476	1,663
Other liabilities	24	371	2,148
Current liabilities		**3,200**	**1,721**
Short-term borrowings	21	1,799	1,081
Short-term lease liabilities	22	225	—
Trade accounts and other payables	25	998	506
Derivative financial liabilities	16	12	4
Taxes payable	26	166	130
Total shareholders' equity and liabilities		**16,471**	**14,039**

The accompanying notes on pages 9 to 47 are an integral part of these consolidated financial statements.

JSC SUEK

Consolidated statement of cash flows for the year ended 31 December 2019

Millions of US Dollars

	Notes	2019	2018
Profit before tax		**840**	**1,478**
Adjustments to profit before tax:			
Depreciation and amortisation	7, 8	1,053	669
Bad debt expense		7	30
Finance costs, net	10	422	311
Foreign exchange (gain)/loss		(200)	83
Other, net		4	(9)
Changes in working capital items:			
Increase in trade accounts and other receivables		(36)	(61)
Decrease/(increase) in inventories		3	(144)
Increase in prepaid and recoverable taxes (other than income tax)		(60)	(25)
Increase/(decrease) in trade accounts and other payables		232	(156)
(Decrease)/increase in taxes payable (other than income tax)		(28)	13
Net cash inflow from operations		**2,237**	**2,189**
Income tax paid		(178)	(288)
Net cash inflow from operating activities		**2,059**	**1,901**
Investing activities			
Purchase of property, plant and equipment	11, 12	(1,321)	(903)
Payments for the acquisition of SGC group	33	(1,941)	—
Business combination	33	(259)	(496)
Loans issued, net		(8)	37
Interest received		11	28
Other non-current investments, net		(12)	3
Net cash outflow used in investing activities		**(3,530)**	**(1,331)**
Financing activities			
Proceeds from long-term borrowings		3,424	2,402
Repayments of long-term borrowings		(1,295)	(2,641)
Proceeds from/(repayments of) short-term borrowings, net		5	(134)
Payments of lease liabilities	22	(311)	—
Interest and commissions paid		(301)	(313)
Acquisition of non-controlling interests		(17)	(164)
Dividends paid to non-controlling interests		(12)	(8)
Settlement of cross-currency interest rate swap		—	(30)
Net cash inflow from/(outflow used in) financing activities	**23**	**1,493**	**(888)**
Foreign exchange effect on cash and cash equivalents		(12)	8
Net increase/(decrease) in cash and cash equivalents		**10**	**(310)**
Cash and cash equivalents at the beginning of the year	18	166	476
Cash and cash equivalents at the end of the year	18	**176**	**166**

The accompanying notes on pages 9 to 47 are an integral part of these consolidated financial statements.

	Share capital	Share premium	Revaluation reserve	Hedging reserve	Translation reserve	Retained earnings	Attributable to ordinary shareholders of the parent	Non-controlling interests	Total
Balance at 1 January 2018	**—**	**—**	**4,774**	**(62)**	**(1,402)**	**1,704**	**5,014**	**201**	**5,215**
Net profit for the year	—	—	—	—	—	1,144	**1,144**	20	**1,164**
Other comprehensive income	—	—	1,030	88	(410)	10	**718**	(23)	**695**
Transfer to retained earnings	—	—	(139)	—	—	135	**(4)**	4	**—**
Total comprehensive income for the year	**—**	**—**	**891**	**88**	**(410)**	**1,289**	**1,858**	**1**	**1,859**
Transactions with owners:									
Issue of shares	—	104	—	—	—	—	**104**	—	**104**
Acquisition of SGC group	—	—	—	—	—	(1,916)	**(1,916)**	—	**(1,916)**
Business combination	—	—	—	—	—	—	**—**	145	**145**
Acquisition of non-controlling interests	—	—	—	—	—	(14)	**(14)**	(150)	**(164)**
Dividends to non-controlling interests	—	—	—	—	—	—	**—**	(8)	**(8)**
Total transactions with owners	**—**	**104**	**—**	**—**	**—**	**(1,930)**	**(1,826)**	**(13)**	**(1,839)**
Balance at 31 December 2018	**—**	**104**	**5,665**	**26**	**(1,812)**	**1,063**	**5,046**	**189**	**5,235**
Balance at 1 January 2019	**—**	**104**	**5,665**	**26**	**(1,812)**	**1,063**	**5,046**	**189**	**5,235**
Net profit for the year	—	—	—	—	—	699	**699**	7	**706**
Other comprehensive loss	—	—	(626)	91	128	(7)	**(414)**	(10)	**(424)**
Transfer to retained earnings	—	—	(173)	—	—	168	**(5)**	5	**—**
Total comprehensive income for the year	**—**	**—**	**(799)**	**91**	**128**	**860**	**280**	**2**	**282**
Business combination	—	—	—	—	—	—	**—**	13	**13**
Acquisition of non-controlling interests	—	—	—	—	—	—	**—**	(17)	**(17)**
Dividends to non-controlling interests	—	—	—	—	—	—	**—**	(12)	**(12)**
Total transactions with	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**(16)**	**(16)**
Balance at 31 December 2019	**—**	**104**	**4,866**	**117**	**(1,684)**	**1,923**	**5,326**	**175**	**5,501**

The accompanying notes on pages 9 to 47 are an integral part of these consolidated financial statements.

1. GENERAL INFORMATION

Organisation and principal activities. Joint Stock Company ("JSC") "Siberian Coal Energy Company" ("SUEK" or the "Company") was founded on 1 December 1999. The Company and its subsidiaries are collectively referred to as the Group. The address of registered office is Dubininskaya st. 53, bld. 7, Moscow, Russian Federation. The principal activities of the Group are the extraction and sales of coal and generation and sales of electricity, heat and capacity.

AIM Capital SE, registered in the Republic of Cyprus, is the immediate parent company of SUEK with 92.2% interest in the Company's share capital.

A company that holds business interests beneficially for Mr. Andrey Melnichenko indirectly owns 100% of AIM Capital SE.

2. BASIS OF PRESENTATION

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

The consolidated financial statements of the Group have been prepared on the historical cost basis, except for:

- mining assets carried at fair value; and
- derivative financial instruments which are stated at fair value.

Functional currency. The functional currency of subsidiaries of the Group is the currency of the primary economic environment where these entities operate. The functional currency of foreign trading subsidiaries and predominantly export-oriented Russian subsidiaries is US Dollar ("USD"). The functional currency of the Company and Russian subsidiaries that are not predominantly export-oriented is the Russian Rouble ("RUB").

Presentation currency. The presentation currency is the USD. The translation of the consolidated financial statements into the presentation currency was performed in accordance with the requirements of IAS 21 "*The Effects of Changes in Foreign Exchange Rates*".

The following RUB/USD exchange rates were applied at 31 December and during the years then ended:

	2019	2018
Year end	61.91	69.47
Average rate	64.74	62.71

Adoption of a new standard

The Group has applied *IFRS 16 "Leases"* from 1 January 2019 using the modified retrospective approach as of 1 January 2019 and therefore the comparative information has not been restated and continues to be reported under IAS 17 and IFRIC 4.

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any repayments of lease made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of right-of-use assets are determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the payments of lease discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate. The weighted-average rate applied is 8.03%.

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Group is reasonably certain to exercise, payments of lease in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future payments of lease arising from a change in an index or rate. If there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or if the Group changes its assessment of whether it will exercise a purchase, extension or termination option.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

If the terms of the asset's lease agreement provide for a purchase option and the Group is reasonably certain that it exercises this option, the Group depreciates the right-of-use asset from the commencement date till the end of the useful life of the underlying asset. Depreciation will be calculated based on the useful life of assets under lease.

The Group has elected not to recognise right-of-use assets and lease liabilities for short-term leases of assets that have a lease term of 12 months or less and leases of low-value assets (with a value of USD 5,000 or less upon purchase). The Group recognises the payments of lease associated with these leases as an expense on a straight-line basis over the lease term.

A number of other new standards and amendments to the existing standards are effective from 1 January 2019 but they do not have a material effect on the Group's financial statements, except for those described above.

A number of new standards are effective for annual periods beginning after 1 January 2019 and earlier application is permitted; however, the Group has not early adopted the new or amended standards in preparing these consolidated financial statements.

The following amended standards and interpretations are not expected to have a significant impact on the Group's consolidated financial statements:

- amendments to references to conceptual framework in IFRS standards;
- definition of a business (amendments to IFRS 3);
- definition of material (amendments to IAS 1 and IAS 8); and
- IFRS 17 "*Insurance Contracts*".

3. SIGNIFICANT ACCOUNTING POLICIES

The accounting policies and judgements applied by the Group are consistent with those disclosed in the audited consolidated financial statements for the year ended 31 December 2018, except for the adoption of *IFRS 16 "Leases"* described above.

3.1. Basis of consolidation

Subsidiaries. Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The accounting policies of subsidiaries have been changed when necessary to align them with the policies adopted by the Group.

The acquisition of subsidiaries from third parties is accounted for using the purchase method of accounting. The identifiable assets, liabilities and contingent liabilities of a subsidiary are measured at their fair values as at the date of acquisition. Non-controlling (minority) interest is measured at its proportionate interest in the identifiable assets and liabilities of the acquiree. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so causes the non-controlling interests to have a deficit balance.

Intra-group balances and transactions, and any unrealised gains arising from intra-group transactions, are eliminated in preparing the consolidated financial statements.

Changes in ownership interests by the Group in a subsidiary, while maintaining control, are recognised as an equity transaction.

Upon a loss of control, the Group derecognises the assets and liabilities of the subsidiary, any non-controlling interests and the other components of equity related to the subsidiary. Any surplus or deficit arising on the loss of control is recognised in profit or loss. If the Group retains any interest in the former subsidiary, then such interest is measured at fair value at the date that control is lost. Subsequently it is accounted for as an equity-accounted investee or as an available-for-sale financial asset depending on the level of influence retained.

Business combination under common control. Business combinations arising from transfers of interests in entities that are under the control of the shareholder that controls the Group are accounted for as if the acquisition had occurred at the beginning of the earliest comparative period presented or, if later, at the date that common control was established; for this purpose comparatives are restated. The assets and liabilities acquired are recognised at the carrying amounts recorded previously in the predecessor's consolidated financial statements. The components of equity of the acquired entities are added to the same components within Group equity except that any share capital of the acquired entities is recognised as part of additional paid-in capital. Difference between the purchase consideration and carrying value of net assets acquired is recognised directly in equity.

3.2. Foreign currency transactions

Transactions in foreign currencies are recorded at the exchange rate at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are converted to the respective functional currency at the exchange rate ruling at the balance sheet date. Exchange differences arising from changes in exchange rates are recognised in profit or loss, except that exchange differences arising from the revaluation of the intra-group debt accounted for as a part of net investments in foreign entities are recognised in other comprehensive income in the consolidated financial statements.

The translation of the financial statements from functional currency into presentation currency is performed in accordance with the requirements of IAS 21 "*The Effects of Changes in Foreign Exchange Rates*" as follows:

- all assets and liabilities, both monetary and non-monetary, are translated at closing exchange rates at the dates of each consolidated statement of financial position presented;
- all income and expenses in the consolidated statement of profit or loss are translated at the average exchange rates for the years presented;
- resulting exchange differences are included in equity and presented separately; and
- in the consolidated statement of cash flows, cash balances at the beginning and end of each year presented are translated at exchange rates at the respective dates. All cash flows are translated at the annual average exchange rates for the years presented. Resulting exchange differences are presented as foreign exchange effect on cash and cash equivalents.

3.3. Property, plant and equipment

Basis of carrying value of property, plant and equipment.

Mining assets. Mining assets include mineral rights with capitalised mine development costs and certain types of operating equipment, such as equipment which represents an integral part of a particular mine or a particular open-pit, or such items of mining equipment whose use on an alternative mine or open-pit is impracticable or not economically feasible. The remaining part of tangible fixed assets besides listed above is defined as operating tangible fixed assets.

Mining assets are carried at fair value since the date of the creation of this new class of property, plant and equipment. Mineral rights were classified as property, plant and equipment and carried at fair value starting from 1 January 2013.

The fair value is determined by discounting future cash flows which can be obtained from operations of the mines based on the life-of-mine plans and deducting the fair value of the operating tangible fixed assets.

Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the mining assets and the net amount is restated to the revalued amount of the asset. Revaluations are performed on an annual basis.

A revaluation increase is recognised in other comprehensive income and accumulated in equity except to the extent it reverses a previous revaluation decrease recognised in profit or loss, in which case it is recognised in profit or loss. A revaluation decrease is recognised in profit or loss except to the extent that it reverses a revaluation increase recognised directly in equity, in which case it is recognised directly in equity.

At the year end a portion of the revaluation reserve, which is equal to the difference between depreciation based on the revalued carrying amount of the mining assets and depreciation based on the asset's historical cost, is transferred from the revaluation reserve to retained earnings.

The mineral rights of new greenfields are carried at historical value until detailed technical and financial plans for the assets are finalised.

Property, plant and equipment, other than mining assets. Property, plant and equipment, other than mining assets, is stated at cost less accumulated depreciation and impairment losses. The cost of self-constructed assets includes the cost of materials, direct labour and an appropriate proportion of production overheads, and the corresponding capitalised borrowing costs. Where an item of property, plant and equipment, other than mining assets, comprises major components having different useful lives, they are accounted for as separate items of property, plant and equipment.

Starting from 2019 railcars wheel pairs are also accounted for as separate items of property, plant and equipment.

Expenditure incurred to replace a component of an item of property, plant and equipment, other than mining assets, that is accounted for separately, is capitalised to the carrying amount of the component that has been replaced being written off. Subsequent expenditure is capitalised if future economic benefits arise from the expenditure. All other expenditure, including repairs and maintenance, is recognised in profit or loss as an expense as incurred.

Generating assets and railcars. In 2019, the Group has changed its accounting policy and established two new categories of property, plant and equipment – Generating assets and Railcars. Generating assets include buildings, machinery, equipment and utilities which are used in generation of energy. Management believes that the new accounting policy presents more fairly the consolidated financial position of the Group by recognising the whole value of the energy resource base, which is the Energy segment's core asset in its consolidated statement of financial position.

Depreciation. Mining assets are depreciated using the unit-of-production method, based on the estimated proven and probable coal reserves to which they relate, or are written off if the mine is abandoned or where there is an impairment in value. The impairment loss is recognised in profit or loss for the year to the extent it exceeds the previous revaluation surplus in equity. Estimated proven and probable coal reserves determined in accordance with internationally recognised standards for reporting coal reserves reflect the economically recoverable coal reserves which can be legally recovered in the future from coal deposits.

Tangible assets, other than mining assets, are depreciated using the straight-line method based on estimated useful lives. For each item the estimated useful life has due regard to both its own physical life limitations and, if applicable, the present assessment of the economically recoverable reserves of the mine property at which the item is located, and to possible future variations in those assessments. Estimates of remaining useful lives are made on a regular basis for all tangible assets, with annual reassessments for major items.

The estimated useful lives of property, plant and equipment, including mining assets, are as follows:

• mining assets	average of 64 years
• generating assets	4 – 53 years
• machinery, equipment, transport and other	2 – 37 years
• buildings, structures and utilities	6 – 60 years
• railcars	7 – 32 years

3.4. Capital construction-in-progress

Capital construction-in-progress comprises costs directly related to mine development, construction of buildings, infrastructure, processing plant, machinery and equipment. Amortisation or depreciation of these assets commences when the assets are put in the location and condition necessary for them to be capable of operating in the manner intended by management. Capital construction-in-progress is reviewed regularly to determine whether its carrying value is recoverable.

3.5. Impairment

The Group reviews the carrying amounts of its tangible and intangible assets regularly to determine whether there are indicators of impairment. If any such indicators exist, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit (CGU) to which the asset belongs.

A recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

If the recoverable amount of an asset or CGU is estimated to be less than the carrying amount, the carrying amount is reduced to the recoverable amount and the impairment losses are recognised in profit or loss for the year. Impairment losses are allocated first to reduce the carrying amount of any goodwill allocated to CGU, and then to reduce the carrying amounts of the other assets in CGU on a pro-rata basis.

An impairment loss in respect of goodwill is not reversed. For other assets, an impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

3.6. Research and exploration expenditure

Pre-exploration costs are recognised in profit or loss as incurred.

Exploration and evaluation costs (including geophysical, topographical, geological and similar types of expenditure) are capitalised as exploration and evaluation assets on a project-by-project basis pending determination of the technical feasibility and commercial viability of the project. The technical feasibility and commercial viability of extracting coal is considered to be determinable when proven coal reserves are determined to exist. Expenditure deemed to be unsuccessful is recognised immediately in profit or loss.

3.7. Inventories

Coal. Coal is measured at the lower of production cost or net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated selling expenses. Production costs include on-mine and processing costs, as well as transportation costs to the point of sale.

Consumable stores and materials. The cost of inventories is based on the weighted average principle and includes expenditure incurred in acquiring the inventories and bringing them to their existing location and condition.

3.8. Financial instruments

Non-derivative financial instruments. Non-derivative financial instruments comprise investments in equity and debt securities, trade and other receivables, cash and cash equivalents, loans and borrowings, and trade and other payables.

The Group recognises a financial asset or a financial liability in its statement of financial position when it becomes party to the contractual provisions of the instrument. At initial recognition, the Group measures a financial asset or a financial liability at its fair value plus or minus, in the case of a financial asset or a financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or the financial liability.

Financial assets at amortised cost. Financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at fair value through profit or loss ("FVTPL"):

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The financial assets are measured at amortised cost using the effective interest method, less any impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.

Financial assets at fair value through other comprehensive income ("FVOCI"). Financial assets are classified and measured at fair value through other comprehensive income if they meet both of the following conditions and are not designated as at FVTPL:

- they are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- their contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognised in profit or loss. Other net gains and losses are recognised in other comprehensive income. On derecognition, gains and losses accumulated in other comprehensive income are reclassified to profit or loss.

Financial assets at fair value through profit or loss. Any financial assets that are not held in one of the two business models mentioned above are measured at fair value through profit or loss. This includes all derivative financial assets.

These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in profit or loss.

If the Group changes its business model for managing financial assets it must reclassify all affected financial assets.

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset, or it retains the contractual rights to receive the cash flows of the financial asset, but assumes a contractual obligation to pay the cash flows to one or more recipients in an arrangement.

Cash and cash equivalents. Cash and cash equivalents comprise cash balances and call deposits with original maturities of three months or less. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the statement of cash flows.

Financial liabilities. All financial liabilities are measured at amortised cost, except for financial liabilities at fair value through profit or loss. Such liabilities include derivatives (other than derivatives that are financial guarantee contracts or are designated and effective hedging instruments), other liabilities held for trading, and liabilities that the Group designates to be measured at fair value through profit or loss. After initial recognition, the Group cannot reclassify any financial liability.

The Group derecognises a financial liability (or a part of a financial liability) when the obligation specified in the contract is discharged or cancelled or expires.

Impairment of financial assets. The Group assesses on a forward looking basis the expected credit losses ("ECL") associated with its financial assets carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk. This will require considerable judgement over how changes in economic factors affect ECLs, which will be determined on a probability-weighted basis. The impairment model applies to the financial instruments that are not measured at FVTPL.

Loss allowance is recognised at an amount equal to either 12-month ECLs or lifetime ECLs. Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument, whereas 12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the reporting date.

The Group measures loss allowances at an amount equal to lifetime ECLs, except in the following cases, for which the amount recognised will be 12-month ECLs:

- debt securities that are determined to have low credit risk at the reporting date;
- other financial instruments (other than lease receivables) for which credit risk has not increased significantly since initial recognition.

For loans, the Group measures ECL on an individual basis, or on a collective basis for portfolios that share similar economic risk characteristics.

An impairment loss in respect of the financial assets is calculated as present value of the difference between the contractual cash flows that are due to the Group under the contract, and the cash flows that the Group expects to receive. For trade receivables, the Group applies a simplified approach permitted by the standard, which requires expected lifetime losses to be recognised from initial recognition of the receivables. To measure the expected credit losses, trade receivables and contract assets are grouped based on shared credit risk characteristics and the days past due. In assessing the impairment, the Group uses historical trends of the probability of default, timing of recoveries and the amount of loss incurred. When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of the assets. For debt securities at FVOCI, the loss allowance is recognised in other comprehensive income, instead of reducing the carrying amount of the asset. Impairment losses on financial assets are presented under 'other expenses' in the operating profit or loss, similar to the presentation under IAS 39, and not presented separately in the statement of profit or loss and other comprehensive income due to materiality considerations.

Derivative financial instruments. The Group may enter into a variety of derivative financial instruments to manage its exposure to commodity price risk, foreign currency risk, interest rate risk and risk of changes in the price of freight.

Derivatives are initially recognised at fair value; any directly attributable transaction costs are recognised in profit or loss as they are incurred. The subsequent changes are recognised in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

The Group designates certain derivatives as hedges of a highly probable forecast transaction (cash flow hedge). When a derivative is designated as a cash flow hedging instrument, the effective portion of changes in the fair value of the derivative is recognised in other comprehensive income. Any ineffective portion of changes in the fair value of the derivative is recognised immediately in profit or loss. The amount accumulated in equity is retained in other comprehensive income and reclassified to profit or loss (to revenue or foreign exchange gain/loss depending on a hedged item) in the same period in which the hedged item affects profit or loss.

When a hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, or the designation is revoked, then hedge accounting is discontinued prospectively. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was recognised in equity is reclassified to profit or loss.

3.9. Provisions

Provisions are recognised when the Group has legal or constructive obligations, as a result of a past event, for which it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be reliably estimated.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability.

3.10. Employee benefit obligations

Remuneration to employees in respect of services rendered during a reporting year is recognised as an expense in that reporting year.

Defined contribution plan. The Group contributes to the Pension Fund of the Russian Federation, a defined contribution pension plan. The only obligation of the Group is to make the specified contributions in the year in which they arise and these contributions are expensed as incurred.

Defined benefit plans. In accordance with current legislation and internal documentation the Group operates defined benefit plans whereby field workers of its coal-producing subsidiaries are entitled to a lump sum payment. The amount of benefits depends on age, years of service, compensation and other factors.

The liability recognised in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date. Actuarial gains and losses are recognised directly in other comprehensive income.

The defined benefit obligation is calculated annually by the Group. The Projected Unit Credit Method is used to determine the present value of defined benefit obligations and the related current service cost. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of government bonds that are denominated in the currency in which the benefits will be paid and that have terms to maturity approximating the terms of the related pension liability.

3.11. Income tax

Income tax expense comprises current and deferred taxation.

Current tax is the tax payable on the taxable income for the year, using tax rates enacted at the balance sheet date, and includes any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of the assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the temporary differences on the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss. In addition, deferred tax is not recognised for temporary differences arising on the initial recognition of goodwill and temporary differences associated with investments in subsidiaries and associates, except where the Group is able to control the timing of the reversal of the temporary difference, and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax assets and liabilities, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

In accordance with the tax legislation of the Russian Federation, tax losses and current tax assets of a company in the Group may not be set off against taxable profits and current tax liabilities of other Group companies. In addition, the tax base is determined separately for each of the Group's main activities and, therefore, tax losses and taxable profits related to different activities cannot be offset.

3.12. Revenue recognition

Revenue comprises the sales value of coal, energy and other goods and services supplied to customers during the period, excluding value-added tax. The sales of goods are recognised when control of the products has transferred to the customer. Revenue from providing services is recognised in the accounting period in which the services are rendered.

Energy sales are carried out on both regulated and unregulated energy markets. Regulated market revenue is based on the application of authorised tariffs as approved by the Federal Antimonopoly Service and Regional Energy Commission of Russian Federation. Revenue is recognised on a monthly basis upon the delivery of the electricity and heat.

The amounts of revenue and expenses of self-produced and consumed electricity volume are shown net for presentation purposes based on selling prices on a day-ahead market. Management believes that such presentation provides more relevant and meaningful information about the operation of the Group.

3.13. Dividends declared

Dividends and related taxation thereon are recognised as a liability in the year in which they have been declared and become legally payable.

Retained earnings legally distributable by the Group are based on the amounts available for distribution in accordance with the applicable legislation and as reflected in the statutory financial statements of the individual Group entities. These amounts may differ significantly from the amounts recognised in the Group's consolidated IFRS financial statements.

3.14. Development expenditure

Development costs are capitalised when shaft sinking is done to prepare a certain part of a deposit for mining and used throughout the life of a mine. Development costs are expensed in case longwalls are being prepared for extraction.

3.15. Overburden removal expenditure

In open-pit coal mining operations, it is necessary to remove the overburden and other waste in order to access the economically recoverable coal.

Stripping costs incurred during the pre-production phase of the open-pit mine are capitalised as the cost of the development of the mining property and amortised over the life of the mine.

Due to the specifics of the geology of the Group's mining assets, the period required to gain access to a coal seam is short, and the stripping ratio (volume of overburden removed over the volume of coal extracted) is relatively constant over the periods. Therefore, stripping costs incurred during the production phase of the open-pit mine are recognised in the profit or loss as incurred.

3.16. Environmental obligation

Environmental obligation includes provision for decommissioning and site restoration costs.

Environmental provision is recognised when the Group has a present legal or constructive obligation as a result of past events that existed at the balance sheet date:

- to dismantle and remove its items of property, plant and equipment (decommissioning); and
- to restore site damage after the commencement of coal production to bring the land into a condition suitable for its further use (site restoration).

Estimated future costs are provided for at the present value of estimated future expenditures expected to be incurred to settle the obligation, using estimated cash flows, based on current prices adjusted for the inflation.

The increase in the provision through unwinding of the obligation, due to the passage of time, is recognised as a finance cost in profit or loss.

Changes in the obligation, reassessed regularly, related to new circumstances or changes in law or technology, or in the estimated amount of the obligation, or in the pre-tax discount rates, are recognised as an increase or decrease of the cost of the relevant asset to the extent of the carrying amount of the asset; the excess is recognised immediately in profit or loss.

Gains from the expected disposal of mining assets at the end of the life of the mine are not taken into account when determining the provision.

3.17. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use, are added to the cost of those assets, until the assets are substantially ready for their intended use. All other borrowing costs are recognised in profit or loss for the year in which they are incurred.

3.18. Goodwill

Goodwill arises on acquisitions and is recognised as an asset initially measured at cost, being the excess of the cost of the business combination over the Group's share of the net fair value of acquiree's identifiable assets, liabilities and contingent liabilities recognised at the date of acquisition. If the Group's share of the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities, after reassessment, exceeds the cost of the business combination, the excess is recognised immediately in profit or loss.

Goodwill is measured at cost less accumulated impairment losses. In respect of equity-accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment. Transaction costs incurred in a business combination are expensed.

The Group elected not to restate past business combinations at the date of adoption of IFRS.

4. CRITICAL ACCOUNTING JUDGEMENTS AND ESTIMATES

In the process of applying the Group's accounting policies management has made the following principal judgements and estimates that have a significant effect on the amounts recognised in the consolidated financial statements. Actual results may differ from these estimates.

Coal reserve estimates. Coal reserve estimates are used as the basis for future cash flows, which enter into the valuation of mining rights, the determination of provision for environmental obligations, calculations of amortisation and depreciation of mining assets, the unwinding of discount on environmental obligations and the related deferred taxes.

The coal reserve estimates represent the quantity of coal expected to be mined, processed and sold at prices at least sufficient to recover the estimated total costs, the carrying value of the investment and anticipated additional expenditures ("proven and probable coal reserves" in international mining terminology). The estimates are based on several assumptions about the physical existence of coal reserves, future mining and recovery factors, production costs and coal prices and have been calculated using the assessment of available exploration and other data. The Group undertakes revisions of the coal reserve estimates, which are confirmed by independent consulting mining engineers, as appropriate.

Although management's long-term mine plans exceed the remaining useful life of some of the mining licenses of the Group, the Group has a legal right to apply for the extension of the licenses for its existing mining resources and therefore management is confident that the licenses will be extended provided that it is the same coal resource within the original mining license and that certain other conditions are met. Extensions to new seams or adjacent areas are often subject to open auctions. Delay or failure in securing relevant government approvals or licences, as well as any adverse change in government policies, may cause a significant adjustment to development and acquisition plans, which may have a material adverse effect on the Group's financial position and performance.

Valuation of mining assets. Mining assets for coal extraction are stated at their fair value based on reports prepared by internal specialists of the Group at each year end.

Since there is no active market for mining assets, the fair value is determined by discounting future cash flows, which can be obtained from the operations of the mines based on the life-of-mine plans, and deducting the fair value of the operating tangible fixed assets. The Group did not identify any material intangible assets which should be deducted in arriving at the fair value of the mining assets.

Since the operating tangible fixed assets are carried at historical cost, for the purposes of regular revaluation of mining assets their fair value is determined either based on market prices for similar items of tangible fixed assets recently acquired or constructed by the Group or, in absence of such items, by applying a price index for the relevant year of acquisition of mining equipment to the residual value of items.

At 31 December 2019 the fair value of mining assets was determined based on the following key assumptions:

- the cash flows were projected based on actual operating results and life-of-mine models constructed for each cash-generating mining unit and based on an assessment of proven and probable reserves using projected volumes of coal and the available capacity of the transport infrastructure in the foreseeable period and thereafter;
- in 2019 the Group performed appraisal of proven and probable reserves as at 1 January 2019. The appraisal was performed by external professional consultants;
- export coal sales volumes were estimated to grow at an average of 2% for the foreseeable forecasted period 2020-2030;
- export coal prices for Asian markets are estimated to fall by 7% in 2020 in comparison to 2019 and to grow at an average of 3% for 2021-2023. Export coal prices for European markets are estimated to stay in 2020 at the level of 2019 and to grow at an average of 6% for 2021-2023. Forecast for 2020-2023 is based on the forward rates and consensus forecast of investment banks, forecast after 2023 is estimated to be in line with long-term USD inflation;
- domestic coal sales volumes were estimated to grow at an average of 1% for the foreseeable forecasted period 2020-2030;
- domestic coal prices were estimated to grow at an average of 5% in 2020 and to grow in line with RUB inflation thereafter;
- regulated railroad tariffs for 2020 were estimated to grow at an average of 3.5% and to grow in line with RUB inflation less than 0.1% thereafter;
- the RUB/USD exchange rate was estimated in 2020 at the level of 65.5 RUB/USD. For 2020-2021 the estimate was based on the RUB/USD forward rate and a consensus forecast of investment banks and was indexed by the ratio between the expected RUB inflation of the corresponding year and the long-term USD inflation thereafter;
- cash flow forecasts were discounted to their present value at the nominal weighted average cost of capital of 12.5% in RUB for brown coal mining units and at the nominal weighted average cost of capital of 9.5% in USD for hard coal mining units.

At 31 December 2019 the total effect of the revaluation of the mining assets was a decrease of 810 million USD (31 December 2018 – an increase of 1,322 million USD); the after-tax effect on equity was a decrease of 648 million USD (31 December 2018 – an increase of 1,058 million USD).

Example changes in key assumptions applied to the first forecasted year would have the following effect on the fair value of the mining assets:

	(Decrease)/increase of the fair value
Increase in weighted average cost of capital by 1 percentage point	(954)
Increase in export coal prices of 1%	400
Increase in RUB/USD exchange rate of 1%	255
Increase in export coal sales volumes of 1%	157
Increase in regulated railroad tariffs growth of 1%	(186)
Increase in domestic coal prices of 1%	134
Increase in domestic coal sales volumes of 1%	62

Determination of recoverable amount of property, plant and equipment of the Coal segment (other than mining assets). The recoverable amount of the property, plant and equipment of the coal segment (other than mining assets) as at 31 December 2019 was determined either based on market prices for similar items of machinery and equipment recently acquired by the Group or, if no such purchases occured, by applying a price index for the relevant year of acquisition for mining equipment to the residual value of items. As a result of the testing no impairment loss was recognised.

5. SEGMENTAL INFORMATION

The Group evaluates performance and makes investment and strategic decisions based on a review of the profitability of the Group as a whole, and based on operating segments. An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses and whose operating results are regularly reviewed by management.

Starting from 1 January 2019 operating segments identified by management are coal, logistics, energy and corporate segments. The coal segment includes coal extraction, coal washing, sales and distribution in the Russian Federation and abroad; the logistics segment includes railroad transportation and transshipment in ports; the energy segment includes generation and sales of electricity, heat and capacity and the corporate segment includes operations of holding companies.

Management believes that the new disclosure structure presents more fairly the operating segment information. Changes were caused by evolutionary approach resulting from acquisition and development of business other than coal. The comparative information for the year ended and as at 31 December 2018 has been restated for the effect of these changes.

Operating segment information for the Group at 31 December 2019 and for the year then ended is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Segment revenue and profitability						
Segment external revenues	5,140	218	2,189	—	—	**7,547**
Russian Federation	614	218	2,189	—	—	**3,021**
Pacific region	2,712	—	—	—	—	**2,712**
Atlantic region	1,814	—	—	—	—	**1,814**
Inter-segment revenues	664	1,903	8	53	(2,628)	**—**
Segment expenses	(5,650)	(1,632)	(1,720)	(111)	2,628	**(6,485)**
Operating profit/(loss)	**154**	**489**	**477**	**(58)**	**—**	**1,062**
Depreciation and amortisation	(597)	(265)	(184)	(7)	—	**(1,053)**
Interest expense and interest on lease	(157)	(94)	(121)	(239)	206	**(405)**
Interest income	5	7	4	210	(206)	**20**
(Loss)/profit before tax	(88)	444	357	127	—	**840**
Income tax benefit/(expense)	51	(89)	(71)	(25)	—	**(134)**
Net (loss)/profit for the year	**(37)**	**355**	**286**	**102**	**—**	**706**
Capital expenditures incurred during the year	972	89	158	12	—	**1,231**
Additions of right-of-use assets	13	932	4	—	—	**949**
Segment assets and liabilities						
Total segment assets	**13,271**	**2,601**	**3,682**	**1,210**	**(4,293)**	**16,471**
Total segment liabilities	**5,013**	**1,409**	**2,493**	**6,348**	**(4,293)**	**10,970**

Operating segment information for the Group at 31 December 2018 and for the year then ended is as follows:

	Coal	Logistics	Energy	Corporate	Inter-segment elimination	Total
Segment revenue and profitability						
Segment external revenues	6,031	135	2,130	—	—	**8,296**
Russian Federation	679	135	2,130	—	—	**2,944**
Pacific region	3,054	—	—	—	—	**3,054**
Atlantic region	2,298	—	—	—	—	**2,298**
Inter-segment revenues	568	1,875	7	54	(2,504)	**—**
Segment expenses	(5,406)	(1,687)	(1,746)	(89)	2,504	**(6,424)**
Operating profit/(loss)	**1,193**	**323**	**391**	**(35)**	**—**	**1,872**
Depreciation and amortisation	(438)	(50)	(177)	(4)	—	**(669)**
Interest expense	(141)	(14)	(135)	(180)	178	**(292)**
Interest income	7	16	7	171	(178)	**23**
Profit/(loss) before tax	1,032	294	259	(107)	—	**1,478**
Income tax (expense)/benefit	(224)	(59)	(52)	21	—	**(314)**
Net profit/(loss) for the year	**808**	**235**	**207**	**(86)**	**—**	**1,164**
Capital expenditures incurred during the year	802	80	101	7	—	**990**
Segment assets and liabilities						
Total segment assets	**12,727**	**952**	**2,786**	**834**	**(3,260)**	**14,039**
Total segment liabilities	**4,244**	**288**	**1,976**	**5,556**	**(3,260)**	**8,804**

6. REVENUE

	2019	2018
Coal	4,877	5,706
Capacity	732	720
Heat	707	734
Electricity	693	588
Petroleum coke	153	250
Other	385	298
Total	**7,547**	**8,296**

7. COST OF SALES

	2019	2018
Coal and petroleum coke purchased from third parties	1,090	1,155
Labour	846	784
Depreciation and amortisation	794	627
Consumables and spares	454	373
Purchased fuel	279	256
Purchased energy	197	223
Repairs and maintenance services	164	137
Transportation services	58	51
Property and other taxes	54	72
Drilling and blasting services	22	44
Tax on mining	41	40
Personnel transportation services	37	33
Fire and rescue brigade expenses	36	32
Transfer of heat	28	27
Special equipment services	15	16
Land rent	6	17
Other	154	223
Total	**4,275**	**4,110**

Proceeds from the sale of electricity and purchased energy are presented after deduction of cost of electricity generated by the Group and consumed for own process needs in the amount of 96 million USD for the year ended 31 December 2019 (for the year ended 31 December 2018 – 87 million USD).

8. DISTRIBUTION COSTS

	2019	2018
Railway services	1,172	1,234
Freight	289	282
Depreciation and amortisation	259	42
Stevedoring from third parties	138	139
Repair and maintenance services	44	50
Labour	44	47
Consumables and spares	9	20
Customs expenses and export duties	8	18
Property and other taxes	2	3
Rent of rail cars	—	193
Other	13	19
Total	**1,978**	**2,047**

	2019	2018
9. GENERAL AND ADMINISTRATIVE EXPENSES		
Salaries	140	131
Consulting, legal, audit and other professional services	38	38
Charitable donations	26	38
Office rent	—	8
Other	25	24
Total	**229**	**239**

10. FINANCE COSTS, NET		
Interest expense	317	292
Interest on lease	88	—
Bank commissions and charges	24	32
Unwinding of discount on provisions	13	10
Interest income	(20)	(23)
Total	**422**	**311**

11. PROPERTY, PLANT AND EQUIPMENT

	Mining assets	Generating assets	Machinery, equipment, transport and other	Buildings, structures and utilities	Railcars	Construction-in-progress	Total
Cost							
Balance at 1 January 2018	**6,636**	**2,162**	**2,422**	**1,680**	**314**	**349**	**13,563**
Revaluation of mining assets	1,322	—	—	—	—	—	**1,322**
Business combination	—	644	6	161	—	33	**844**
Additions	40	19	5	15	—	911	**990**
Transfers	351	20	443	(209)	34	(639)	**—**
Disposals	—	(4)	(60)	(4)	—	(9)	**(77)**
Translation difference	(358)	(485)	(140)	(130)	(32)	(38)	**(1,183)**
Balance at 31 December 2018	**7,991**	**2,356**	**2,676**	**1,513**	**316**	**607**	**15,459**
Revaluation of mining assets	(810)	—	—	—	—	—	**(810)**
Business combination (see note 33)	28	314	15	36	—	40	**433**
Additions	55	—	4	55	—	1,117	**1,231**
Transfers	108	52	599	138	41	(938)	**—**
Disposals	(5)	(8)	(74)	(15)	—	(13)	**(115)**
Translation difference	207	305	108	76	23	29	**748**
Balance at 31 December 2019	**7,574**	**3,019**	**3,328**	**1,803**	**380**	**842**	**16,946**
Accumulated depreciation and amortisation							
Balance at 1 January 2018	**722**	**623**	**1,399**	**658**	**19**	**—**	**3,421**
Depreciation and amortisation (including transfers)	368	125	238	(67)	14	—	**678**
Disposals	—	(3)	(58)	(3)	—	—	**(64)**
Translation difference	(65)	(118)	(66)	(46)	(5)	—	**(300)**
Balance at 31 December 2018	**1,025**	**627**	**1,513**	**542**	**28**	—	**3,735**
Depreciation and amortisation	305	114	295	82	38	—	**834**
Disposals	(5)	—	(45)	(2)	—	—	**(52)**
Translation difference	44	81	54	22	2	—	**203**
Balance at 31 December 2019	**1,369**	**822**	**1,817**	**644**	**68**	**—**	**4,720**
Net book value at 31 December 2018	**6,966**	**1,729**	**1,163**	**971**	**288**	**607**	**11,724**
Net book value at 31 December 2019	**6,205**	**2,197**	**1,511**	**1,159**	**312**	**842**	**12,226**

Group assets include advances issued for capital expenditures of 64 million USD (31 December 2018 – 100 million USD).

If mining assets had been carried at the historical cost, the net book value of property, plant and equipment at 31 December 2019 would have been 6,776 million USD (31 December 2018 – 5,372 million USD).

12. RIGHT-OF-USE ASSETS

	Generating assets	Buildings, structures and utilities	Machinery, equipment, transport and other	Railcars	Total
Cost					
Balance at 1 January 2019	**79**	**85**	**28**	**591**	**783**
Additions	4	11	2	932	**949**
Modifications	(5)	13	(1)	(1)	**6**
Disposals	—	—	—	(38)	**(38)**
Translation difference	10	13	1	111	**135**
Balance at 31 December 2019	**88**	**122**	**30**	**1,595**	**1,835**
Accumulated depreciation					
Balance at 1 January 2019	**—**	**—**	**4**	**—**	**4**
Depreciation	10	10	8	192	**220**
Modifications	—	—	—	(4)	**(4)**
Disposals	—	—	—	(25)	**(25)**
Translation difference	1	—	—	8	**9**
Balance at 31 December 2019	**11**	**10**	**12**	**171**	**204**
Net book value at 1 January 2019	**79**	**85**	**24**	**591**	**779**
Net book value at 31 December 2019	**77**	**112**	**18**	**1,424**	**1,631**

In the first half of 2019, the Group acquired a company which owned railcars in lease for a consideration of 425 million USD from a third party. The Group treated this transaction as an acquisition of assets and recognised railcars in the form of a right-of-use assets of 832 million USD. Lease liabilities related to these railcars are disclosed in note 22. The consideration paid is included in the Property, plant and equipment line in the consolidated statement of cash flows in accordance with its substance.

13. OTHER ASSETS

	2019	2018
Contract assets under concession agreements	49	24
Other assets	49	82
Total	**98**	**106**

14. TRADE ACCOUNTS AND OTHER RECEIVABLES

	2019	2018
Trade accounts receivable	985	859
Advances issued	115	127
Other receivables	55	67
Subtotal	**1,155**	**1,053**
Less: Allowance for doubtful debts	198	171
Total	**957**	**882**

15. INVENTORIES

	2019	2018
Coal stock	356	416
Consumable stores and materials	455	350
Less: Allowance for obsolescence	45	31
Net consumable stores and materials	410	319
Total	**766**	**735**

16. DERIVATIVE FINANCIAL INSTRUMENTS

	2019		2018	
	Derivative assets	**Derivative liabilities**	**Derivative assets**	**Derivative liabilities**
Cross-currency swaps – cash flow hedges	104	5	—	—
Coal contracts – cash flow hedges	37	7	35	4
Other derivatives	1	—	2	—
Total	**142**	**12**	**37**	**4**

Derivative financial instruments were valued using observable inputs, which correspond to Level 2 of the hierarchy of the fair value measurements (see note 31). Details of the effective portion of changes in fair value of cash flow hedges were as follows:

	2019		2018	
	Gain recognised in comprehensive income	Gain recycled from comprehensive income to the profit or loss	Loss recognised in comprehensive income	Loss recycled from comprehensive income to the profit or loss
Effective portion of changes in fair value of cash flow hedges	344	(241)	(17)	114
Deferred tax	(33)	21	1	(10)
Total	**311**	**(220)**	**(16)**	**104**

Cross-currency swaps. In the second half of 2019 the Group entered into cross-currency swap contracts to manage exposure of fluctuations in foreign currency exchange rates.

At 31 December 2019 the outstanding principle amount of hedge is 1,908 million USD. Details of the cross-currency swaps designated as cash flow hedges were as follows:

	2019		2018	
	Volume (million USD)	Derivative	Volume (million USD)	Derivative
Derivative assets				
2021	177	17	—	—
2022	676	62	—	—
2023	392	25	—	—
Total	**1,245**	**104**	**—**	**—**
Derivative liabilities				
2023	662	5	—	—
Total	**662**	**5**	**—**	**—**

Coal contracts. The Group uses coal forwards to hedge the coal price index used in index price coal sales and purchase contracts. Details of the coal forwards designated as cash flow hedges were as follows:

	2019		2018	
	Volume ('000 tonne)	Derivative	Volume ('000 tonne)	Derivative
Derivative assets				
0 – 3 months	1,014	9	2,623	12
3 – 6 months	738	11	2,043	9
6 – 9 months	738	9	1,923	9
9 – 12 months	828	8	1,743	7
Total	**3,318**	**37**	**8,332**	**37**
Derivative liabilities				
0 – 3 months	192	2	210	2
3 – 6 months	112	2	150	1
6 – 9 months	125	2	30	1
9 – 12 months	105	1	30	—
Total	**534**	**7**	**420**	**4**

At 31 December 2019 the average coal sales price under the hedge coal forward contracts was 70 USD per ton (31 December 2018 – 92 USD per ton) and the average coal puchase price under the coal forward contracts was 69 USD per ton (31 December 2018 – 94 USD per ton).

17. PREPAID AND RECOVERABLE TAXES

	2019	2018
Value-added tax recoverable	195	122
Income tax receivable	65	51
Prepaid other taxes	5	2
Total	**265**	**175**

18. CASH AND CASH EQUIVALENTS

Current accounts	— RUB	83	62
	— foreign currency	56	61
Deposits	— RUB	24	19
	— foreign currency	9	9
Other cash equivalents	— foreign currency	4	15
Total		**176**	**166**

19. SHARE CAPITAL AND RESERVES

	Number of shares, in thousands	
	2019	**2018**
Authorised share capital		
Ordinary shares	236,060	236,060
Issued share capital		
Ordinary shares	236,060	236,060

Ordinary shares of the Company have a par value of 0.005 RUB. All issued shares were fully paid.

20. EARNINGS PER SHARE

Basic earnings per share are calculated based on the weighted average number of ordinary shares outstanding during the year. Basic and diluted earnings per share are the same, as there is no dilution effect.

	2019	**2018**
Profit for the year attributable to ordinary shareholders of the parent	699	1,144
Weighted average number of ordinary shares in issue (in thousands)	236,060	234,393
Basic and diluted earnings per share (in USD)	**2.96**	**4.88**

21. BORROWINGS

	Effective interest rate	2019	2018
Long-term borrowings			
Variable rate borrowings		**2,952**	**3,050**
Unsecured USD-denominated borrowings	6M LIBOR + 0.9% to 1M LIBOR + 3%	2,780	2,692
Unsecured EUR-denominated borrowings	6M EURIBOR + 0.38% to 6M EURIBOR + 2.25%	172	141
Unsecured RUB-denominated borrowings		—	217
Fixed rate borrowings		**3,631**	**1,241**
Unsecured USD-denominated borrowings	3.2% to 5.1%	1,814	—
Unsecured RUB-denominated borrowings	0.05% to 8.03%	977	970
Unsecured RUB-denominated bonds	7.4% to 8.3%	840	271
Subtotal		**6,583**	**4,291**
Less: Current portion of long-term borrowings		1,644	1,019
Total long-term borrowings		**4,939**	**3,272**
Short-term borrowings			
Fixed rate borrowings		**155**	**62**
Unsecured USD-denominated borrowings	2.25% to 2.3%	150	—
Undecured RUB-denominated borrowings	7.6% to 7.75%	—	60
Other borrowings		5	2
Subtotal		**155**	**62**
Current portion of long-term borrowings		1,644	1,019
Total short-term borrowings		**1,799**	**1,081**

The Group's long-term borrowings have restrictive covenants including, but not limited to, the requirement to maintain minimum ratios associated with:

- consolidated net indebtedness to earnings before interest, tax, depreciation and amortisation ("EBITDA"); and
- EBITDA to consolidated interest expense.

The covenants are calculated based on the IFRS financial statements of the Group on a semi-annual basis. As at 31 December 2019 the Group was in compliance with all such covenants.

22. LEASE LIABILITIES

	2019	2018
Recognition at the beginning of the period	**799**	**—**
Additions	521	—
Modifications	11	
Interest on lease	88	—
Payments of lease liabilities	(311)	—
Disposals	(16)	—
Translation difference	117	—
Closing balance	**1,209**	**—**

Closing balance of a lease liability of 399 million USD relates to railcars in lease disclosed in Note 12.

23. CHANGES IN LIABILITIES ARISING FROM FINANCIAL ACTIVITIES

The table below provides information of changes in liabilities arising from financing activities, including changes arising from cash flows and non-cash changes:

	Long-term borrowings	Short-term borrowings	Lease liabilities	Acquisition of NCI	Other	Total
Balance as at 1 January 2018	**4,650**	**177**	**—**	**—**	**—**	**4,827**
Cash flows	(550)	(136)	—	(164)	(38)	**(888)**
Foreign exchange (gain)/loss	(297)	(28)	—	—	1	**(324)**
Interest expenses	289	3	—	—	—	**292**
Business combination	167	46	—	—	—	**213**
Bank commissions	32	—	—	—	—	**32**
Other payables	—	—	—	164	37	**201**
Balance as at 31 December 2018	**4,291**	**62**	**—**	**—**	—	**4,353**
Balance as at 1 January 2019	**4,291**	**62**	**799**	**—**	**—**	**5,152**
Cash flows	1,828	5	(311)	(17)	(12)	**1,493**
Foreign exchange loss	144	67	117	—	—	**328**
Interest expenses and interest on lease	296	21	88	—	—	**405**
Change in lease obligations	—	—	516	—	—	**516**
Bank commissions	24	—	—	—	—	**24**
Other payables	—	—	—	17	12	**29**
Balance as at 31 December 2019	**6,583**	**155**	**1,209**	**—**	**—**	**7,947**

24. OTHER LONG-TERM LIABILITIES

	2019	2018
Provision for environmental obligation	175	79
Provision for defined benefit obligation	64	49
Payables for the acquisition of SGC group	—	1,916
Other long-term liabilities	132	104
Total	**371**	**2,148**

Provision for environmental obligation. The extent and cost of future site restoration programmes are inherently difficult to estimate and depend on the estimated lives of the assets, the scale of any possible disturbance and contamination as well as the timing and extent of corrective actions. The following is a summary of the key assumptions on which the discounted carrying amounts of the obligations are based:

	2019	2018
Discount rate	7%	9%
Inflation rate	4%	5%

Provision for defined benefit obligation. Actuarial assumptions used for the calculation of the defined benefit obligation were as follows:

	2019	2018
Discount rate	7%	9%
Inflation rate	4%	5%
Future increases in salaries	4%	5%

25. TRADE ACCOUNTS AND OTHER PAYABLES

Trade accounts payable and accruals	518	302
Advances from customers	198	57
Accrual for vacation payments	72	56
Wages and salaries	66	57
Payables for the acquisition of Reftinskaya GRES (see note 33)	65	—
Other creditors	79	34
Total	**998**	**506**

26. TAXES PAYABLE

Value-added tax	72	80
Income tax	46	9
Social security contributions	28	18
Other	20	23
Total	**166**	**130**

27. TAXATION

	2019	2018
Current income tax expense	209	243
Deferred income tax (benefit)/expense	(75)	71
Income tax expense	**134**	**314**

The reconciliation of theoretical income tax, calculated at the rate effective in the Russian Federation, where the Company is domiciled, to the amount of actual income tax expense recorded in the consolidated statement of profit or loss and other comprehensive income is as follows:

	2019	2018
Profit before tax	**840**	**1,478**
Theoretical income tax expense at 20%	168	296
Impact of specific tax rates in Switzerland	(38)	(20)
Impact of tax rate change in Switzerland	(22)	—
Impact of specific tax rates in Russian Federation	(2)	(3)
Tax effect of non-deductible expenses	28	41
Total income tax expense	**134**	**314**

The tax effects of temporary differences that give rise to deferred taxation are presented below:

2019	Opening balance	Effect of IFRS 16	Recognised in equity	Recognised in profit or loss	Effect of translation to presentation currency	Closing balance
Deferred tax assets	**247**	**156**	**9**	**80**	**35**	**527**
Lease liabilities	—	156	—	62	10	228
Tax losses carried forward	193	—	6	(24)	16	191
Prepaid expenses and accruals	13	—	2	—	(1)	14
Environmental and other provisions	19	—	1	17	2	39
Employee benefit obligations	14	—	—	2	1	17
Trade accounts and other receivables	8	—	—	2	1	11
Inventory	—	—	—	—	5	5
Other	—	—	—	21	1	22
Deferred tax liabilities	**(1,774)**	**(156)**	**149**	**(5)**	**(85)**	**(1,871)**
Property, plant and equipment	(1,757)	—	161	39	(63)	(1,620)
Right-of-use	—	(156)	—	(62)	(10)	(228)
Derivative financial assets	(3)	—	(12)	—	—	(15)
Inventory	(7)	—	—	10	(3)	—
Other	(7)	—	—	8	(9)	(8)
Net deferred tax liabilities	**(1,527)**	—	**158**	**75**	**(50)**	**(1,344)**

2018	Opening balance	Recognised in equity	Recognised in profit or loss	Effect of translation to presentation currency	Closing balance
Deferred tax assets	**302**	**—**	**(17)**	**(38)**	**247**
Tax losses carried forward	242	—	(18)	(31)	193
Environmental and other provisions	17	2	2	(2)	19
Employee benefit obligations	15	1	(1)	(1)	14
Prepaid expenses and accruals	10	1	4	(2)	13
Trade accounts and other receivables	13	1	(4)	(2)	8
Derivative financial liabilities	5	(5)	—	—	—
Deferred tax liabilities	**(1,437)**	**(395)**	**(54)**	**112**	**(1,774)**
Property, plant and equipment	(1,424)	(392)	(53)	112	(1,757)
Inventory	(4)	—	(1)	(2)	(7)
Derivative financial assets	—	(3)	—	—	(3)
Other	(9)	—	—	2	(7)
Net deferred tax liabilities	**(1,135)**	**(395)**	**(71)**	**74**	**(1,527)**

In 2018 net effect of business combination, included in recognised in equity column above, amounted to 121 million USD.

Unrecognised temporary differences, related to investments in subsidiaries where the Group is able to control the timing of the reversal and distribution of dividends, including distribution on a tax-free basis when certain conditions are met, and it is probable that the temporary difference will not be reversed in the foreseeable future, amounted to 3,229 million USD (31 December 2018 – 4,032 million USD).

Management believes that sufficient taxable profits will be available, against which the unused tax losses can be utilised by the Group in the unlimited future period.

For disclosure purposes certain deferred tax assets and liabilities are offset in accordance with the accounting policy.

	2019	2018
Deferred tax assets	132	136
Deferred tax liabilities	(1,476)	(1,663)
Net deferred tax liabilities	**(1,344)**	**(1,527)**

28. RELATED PARTY TRANSACTIONS

Related parties are considered to include the ultimate beneficiary, affiliates and entities under common ownership and control of the same principal ultimate beneficiary. The Company and its subsidiaries, in the ordinary course of their business, enter into various sales, purchases and service transactions with related parties.

Transactions with related parties not dealt with elsewhere in the consolidated financial statements are as follows:

	2019	2018
Coal sales to DEC group, an associate of a company with the same principal ultimate beneficiary	134	136
Other energy sales	61	58
Other revenue from EuroChem group	25	7
Other coal sales	—	36
Other expenses	31	64
Interest expense	1	2
Remuneration of the Board of Directors and the Management members	16	18

The outstanding balances with related parties are as follows:

Trade accounts and other receivables from DEC group	14	14
Payables for the acquisition of SGC group to a related company	—	1,916
Other receivables	—	30

29. COMMITMENTS

Capital commitments. The following key capital expenditures were approved:

	2019	2018
Contracted	1,025	559
Not yet contracted	284	117
Total	**1,309**	**676**

30. CONTINGENCIES

Insurance. The insurance industry in the Russian Federation is in the process of development, and some forms of insurance protection common in developed markets are not yet generally available at commercially acceptable terms. The Group has limited coverage for its mining, processing, transportation and energy generating facilities for business interruption or for third-party liabilities in respect of property or environmental damage arising from accidents on the Group's property or relating to the Group's operations. Management understands that until the Group obtains adequate insurance coverage there is a risk that the loss or destruction of certain operating assets could have a material adverse effect on the Group's operations and financial position.

Litigation. The Group has a number of small claims and litigations relating to regular business activities and small fiscal claims. Management believes that none of these claims, individually or in aggregate, will have a material adverse impact on the Group.

Taxation contingencies in the Russian Federation. Russian tax, currency and customs legislation is subject to varying interpretations, and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transactions and activities of the Group may be challenged by the relevant regional and federal authorities. Recent events within the Russian Federation suggest that the tax authorities are taking a more assertive position in their interpretation of the legislation and assessments and, as a result, it is possible that transactions and activities that have not been challenged in the past may be challenged. It is therefore possible that significant additional taxes, penalties and interest may be assessed. Fiscal periods remain open to review by the authorities in respect of taxes for three calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods.

Management believes that it has paid or accrued all taxes that are applicable. Where uncertainty exists, the Group has accrued tax liabilities based on management's best estimate of the probable outflow of resources embodying economic benefits which will be required to settle such liabilities.

Management believes that it has provided adequately for all tax liabilities based on its interpretation of the tax legislation. However, the relevant authorities may have differing interpretations, and the effect could be significant.

Environmental matters. The Group is subject to extensive federal, state and local environmental controls and regulations in the regions in which it operates. The Group's operations involve disturbance of land, discharge of materials and contaminants into the environment and other environmental concerns.

The Group's management believes that it is in compliance with all current existing health, safety and environmental laws and regulations in the regions in which it operates. However, changes in environmental regulations are currently under consideration in the Russian Federation. The Group is continually evaluating its obligations relating to new and changing legislation. The Group is unable to predict the timing or extent to which environmental laws and regulations may change. Such change, if it occurs, may require the Group to modernise technology and incur future additional material costs to meet more stringent standards.

Russian Federation risk. The Group's operations are primarily located in the Russian Federation. Consequently, the Group is exposed to the economic and financial markets of the Russian Federation which display characteristics of an emerging market. The legal, tax and regulatory frameworks continue to develop, but are subject to varying interpretations and frequent changes which together with other legal and fiscal impediments contribute to the challenges faced by entities operating in the Russian Federation.

Starting in 2014, the United States of America, the European Union and some other countries have imposed and expanded economic sanctions against a number of Russian individuals and legal entities. The imposition of the sanctions has led to increased economic uncertainty, including more volatile equity markets, a depreciation of the Russian Rouble, a reduction in both local and foreign direct investment inflows and a significant tightening in the availability of credit. This change in the environment did not have a significant effect on the Group's operations, however, the longer-term effects of the imposed and possible additional sanctions are difficult to determine. The Group implemented relevant compliance policy, continuously monitors economic sanctions and analyses their effect on the Group's financial position and operation results.

The consolidated financial statements reflect management's assessment of the impact of the Russian business environment on the operations and the financial position of the Group. The future business environment may differ from management's assessment.

31. FAIR VALUE MEASUREMENT

The fair value of assets and liabilities is determined with reference to various market information and other valuation methods as considered appropriate. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in valuation techniques, as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.
Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
Level 3: Inputs for the asset or liability that are not based on observable market data.

Financial instruments carried at amortised cost. At 31 December 2019, the fair values of financial instruments carried at amortised cost, which are mainly loans and receivables, did not materially differ from the carrying values.

Financial instruments carried at fair value. Fair values of derivative financial assets and liabilities were determined using inputs from observable market data, which correspond to Level 2 of the hierarchy of fair values.

Mining assets carried at fair value. The fair value of mining assets was determined using discounted cash flow method corresponding to Level 3 of the hierarchy of fair values (see note 4).

32. FINANCIAL RISK MANAGEMENT

In the normal course of its operations, the Group is exposed to market (including foreign currency and interest rate), credit and liquidity risks. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group uses derivative financial instruments to hedge certain risk exposures.

Risk management is carried out through regular meetings of a risk management committee of operational management and by the central treasury department. The Board of Directors approves principles for overall risk management. In addition, operational management have developed policies covering specific areas, such as foreign currency risk, interest rate risk and the use of derivative and non-derivative financial instruments.

32.1. Market risk

Market risk is the risk that changes in market prices, such as coal prices, foreign exchange rates and interest rates will negatively impact the Group's results or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on risk. Market risk management includes the analysis of foreign currency and interest rate risks.

Interest rate risk

Interest rate risk is the risk that changes in interest rates will adversely impact the financial results of the Group. The total net unhedged liability which exposes the Group to interest rate risk amounts to 2,952 million USD (31 December 2018 – 3,050 million USD).

The Group's interest rate risk arises primarily from long-term borrowings. The Group's borrowings at variable interest rates are primarily denominated in USD. Borrowings at variable interest rates expose the Group to a cash flow interest rate risk. The Group monitors the risk and, if necessary, manages its exposure by entering into variable-to-fixed interest rate swaps. Such interest rate swaps have the economic effect of converting borrowings from variable interest rates to fixed interest rates.

An increase or decrease in the floating interest rate by 1 percentage point, provided that the amount of outstanding balance remained constant for the whole year, would have decreased or increased profit for the year by 30 million USD (2018 – 31 million USD).

Foreign currency risk

Foreign currency risk is the risk that the financial results of the Group will be adversely impacted by changes in exchange rates to which the Group is exposed.

A significant portion of the Group's revenues are denominated in USD, whereas the majority of the Group's expenditures are denominated in RUB. Accordingly, operating profits may be adversely impacted by the appreciation of the RUB against the USD. The risk of negative fluctuations in the USD/RUB exchange rate for future revenue streams is naturally hedged by the USD borrowings. The Group had the following monetary assets and liabilities denominated in currencies other than the functional currency of the respective Group entity:

	2019				2018			
	RUB	**USD**	**EUR**	**Total**	**RUB**	**USD**	**EUR**	**Total**
Balances with third and related parties	**(203)**	**(1,787)**	**(312)**	**(2,302)**	**(108)**	**(1,918)**	**(225)**	**(2,251)**
Prepaid and recoverable taxes	137	—	—	**137**	93	—	—	**93**
Cash and cash equivalents	49	7	—	**56**	30	1	—	**31**
Trade accounts receivable	45	—	1	**46**	38	—	1	**39**
Other receivables	23	—	—	**23**	3	—	—	**3**
Borrowings	—	(1,772)	(185)	**(1,957)**	—	—	(141)	**(141)**
Other long-term liabilities	(245)	—	(6)	**(251)**	(97)	—	(14)	**(111)**
Trade accounts payable and accruals	(142)	(22)	(76)	**(240)**	(114)	(3)	(49)	**(166)**
Other creditors	(1)	—	(46)	**(47)**	(7)	—	(22)	**(29)**
Taxes payable	(25)	—	—	**(25)**	(17)	—	—	**(17)**
Accrual for vacation payments	(24)	—	—	**(24)**	(19)	—	—	**(19)**
Wages and salaries	(20)	—	—	**(20)**	(18)	—	—	**(18)**
Payables for acquisition of SGC	—	—	—	**—**	—	(1,916)	—	**(1,916)**
Intra-group balances	**(696)**	**(202)**	**4**	**(894)**	**(467)**	**(164)**	**1**	**(630)**
Intra-group receivables	254	12	160	**426**	204	38	146	**388**
Intra-group borrowings	(450)	(206)	(156)	**(812)**	(344)	(202)	(144)	**(690)**
Intra-group payables	(500)	(8)	—	**(508)**	(327)	—	(1)	**(328)**
Total net liabilities	**(899)**	**(1,989)**	**(308)**	**(3,196)**	**(575)**	**(2,082)**	**(224)**	**(2,881)**

A 10% devaluation of functional currencies against foreign currencies at the reporting date would have the following effect on the equity and profit or loss for the year:

	2019			
	RUB	**USD**	**Other**	**Total**
(Increase)/decrease in equity	(41)	145	15	119
(Increase)/decrease in profit or loss for the year	(74)	130	15	71

32.2. Credit risk

Credit risk is the risk that a counterparty may default or not meet its obligations to the Group on a timely basis, leading to a financial loss to the Group. The Group minimises its exposure to this risk by ensuring that credit risk is spread across a number of counterparties. Trade receivables comprise international companies and large Russian companies, and credit is only extended to these customers after rigid credit approval procedures. The maximum exposure to credit risk is represented by the carrying amount of each financial asset in the balance sheet.

At 31 December 2019 8% of total trade receivables were due from the Group's largest customer and 26% of the total trade receivables were due from the Group's next 19 largest customers (31 December 2018 – 3% and 26%, respectively).

The table below analyses the Group's trade receivables into relevant groupings based on ageing.

	2019		2018	
	Gross	**Allowance for doubtful debts**	**Gross**	**Allowance for doubtful debts**
Not past due	708	—	625	—
Past due for less than 12 months	153	61	107	41
Past due for more than one year	124	124	127	127
Total	**985**	**185**	**859**	**168**

The movement in the allowance for doubtful debts in respect of trade receivables during the year was as follows:

	2019	**2018**
Opening balance	**168**	**151**
Additional doubtful debts	99	94
Bad debt recovered	(95)	(70)
Bad debt written-off (impairment loss recognised)	(7)	(11)
Effect of translation to presentation currency	20	(9)
Adjustment of expected credit losses under IFRS 9	—	13
Closing balance	**185**	**168**

Analysis of credit quality of cash and cash equivalents, including bank deposits, based on credit ratings of independent agencies "Standard & Poor's", "Fitch Ratings" and others is listed in the table below:

	2019	2018
From A- to AAA	48	36
From BBB- to BBB+	85	42
From BB- to BB+	30	60
Other	13	28
Total	**176**	**166**

32.3. Liquidity risk

Liquidity risk is the risk that the Group will not be able to settle all liabilities as they fall due.

Recently global and Russian capital markets have experienced significant volatility, including a lack of available sources of financing and significant fluctuation of the Russian Rouble against the USD and the Euro. Despite stabilisation measures undertaken by various governments, markets remain volatile.

Prudent liquidity risk management includes maintaining sufficient cash, the availability of funding from an adequate amount of committed credit facilities and the ability to close out market positions. The Group expects that cash generated from operations will be the major source of the Group's liquidity in 2020 and will be sufficient to cover the capital expenditures programme of the Group. In addition, management believes that the Company will be able to attract additional sources of financing in order to refinance existing short-term facilities.

The central treasury department of the Group maintains flexibility in funding by ensuring the availability of credit line facilities. The unused portion of these lines at 31 December 2019 totalled 2,889 million USD (31 December 2018 – 3,427 million USD).

The table below analyses the Group's financial liabilities and net-settled derivative financial liabilities into relevant maturity groupings based on the contractual undiscounted cash flows to maturity, including interest payments.

	Carrying amount	Contractual cash flows	Due in the first year	Due in the second year	Due thereafter
Balance at 31 December 2019					
Long-term borrowings	4,939	5,303	259	2,087	2,957
Short-term borrowings	1,799	1,799	1,799	—	—
Lease liabilities	1,209	1,793	282	273	1,238
Trade accounts payable and accruals	518	518	518	—	—
Payables for the acquisition of Reftinskaya GRES (see note 33)	65	65	65	—	—
Net-settled derivative liabilities	12	12	12	—	—
Other creditors	79	79	79	—	—
Total	**8,621**	**9,569**	**3,014**	**2,360**	**4,195**
Balance at 31 December 2018					
Long-term borrowings	3,272	3,820	246	1,409	2,165
Short-term borrowings	1,081	1,081	1,081	—	—
Payables for the acquisition of SGC group	1,916	1,997	—	1,997	—
Trade accounts payable and accruals	302	302	302	—	—
Net-settled derivative liabilities	4	4	4	—	—
Other creditors	34	34	34	—	—
Total	**6,609**	**7,238**	**1,667**	**3,406**	**2,165**

32.4. Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns to equity holders and benefits for other stakeholders.

The Group defines capital as shareholders' equity. In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to equity holders, return capital to equity holders or issue new shares. This strategy remains unchanged from prior years.

33. INVESTMENTS IN SIGNIFICANT SUBSIDIARIES

Subsidiaries by country of incorporation	Principal activity	2019	2018
Russian Federation			
Murmansk			
JSC "Murmanskiy Morskoi Torgovyi Port"	Port facilities	100%	100%
Kemerovo			
JSC "SUEK-Kuzbass"	Hard coal extraction	100%	100%
JSC "Kuzbassenergo"	Energy generation	99.9%	99.9%
JSC "Kemerovo Generation"	Energy generation	100%	100%
JSC "Novo-Kemerovskaya CHPP"	Energy generation	100%	100%
JSC "Kuznetskaya CHPP"	Energy generation	100%	100%
Krasnoyarsk			
SJSC "SUEK-Krasnoyarsk"	Brown coal extraction	100%	100%
JSC "Razrez Berezovskiy"	Brown coal extraction	100%	100%
JSC "Razrez Nazarovskiy"	Brown coal extraction	100%	100%
JSC "Yenisei Territorial Generating Company (TGC-13)"	Energy generation	99.9%	99.9%
JSC "Nazarovo GRES"	Energy generation	100%	100%
JSC "Krasnoyarsk CHPP-1"	Energy generation	100%	100%
JSC "Krasnoyarsk Heat Transportation Company"	Transfer of heat	100%	100%
Khakasia			
LLC "SUEK-Khakasia"	Hard coal extraction	100%	100%
LLC "Vostochno-Beyskiy razrez"	Hard coal extraction	50%	50%
JSC "Razrez Izykhskiy"	Hard coal extraction	100%	100%
Buryatia			
JSC "Razrez Tugnuiskiy"	Hard coal extraction	100%	100%
Zabaikalye			
JSC "Razrez Kharanorskiy"	Brown coal extraction	100%	100%
LLC "Chitaugol"	Brown coal extraction	100%	100%
Altai			
JSC "Barnaul CHPP-3"	Energy generation	100%	100%
JSC "Barnaul Generation"	Energy generation	100%	100%
JSC "Byiskenergo"	Energy generation	100%	97.1%
JSC "Barnaul Heat Network Company"	Transfer of heat	100%	100%
Novosibirsk			
JSC "SIBECO"	Energy generation	100%	97.1%
Khabarovsk			
JSC "Urgalugol"	Hard coal extraction	100%	100%
JSC "Daltransugol"	Port facilities	100%	100%
Primorye			
LLC "Primorskugol"	Brown coal extraction	100%	100%
Switzerland			
SUEK AG	Export sales of coal	100%	100%
Republic of Cyprus			
SUEK LTD	Debt holding company	100%	100%

Business combination. In October 2019 the Group acquired generating and other assets of Reftinskaya GRES for 345 million USD, including a contingent consideration described below, from a third party. The core activity of the acquired business is generation and sales of energy. Along with the acquired assets the Group obtained control over all processes of generation and sales, acquired rights and obligations under key contracts were transferred to the Group. The Group recognizes the acquisition of the assets of Reftinskaya GRES as a business combination since assets represent a unified complex for generation of electricity and the Group also acquired all key processes, altogether representing the attributes of the business. Before the Group completes the process of obtaining permits and licenses required to operate Reftinskaya GRES, the acquired assets are leased back to the seller. Under the terms of the lease, the Group has control over business processes and financial results, thus, at the time of the transitional period, the Group consolidates Reftinskaya GRES. At 31 December 2019 the Group did not finalise purchase price allocation for this business combination, therefore, the carrying amounts of the acquired assets and assumed liabilities at the date of acquisition were estimated on a provisional basis at 353 million USD and 8 million USD, respectively.

By 31 December 2019 the Group paid 259 million USD for the acquisition. The Group also recognised a contingent consideration at fair value of 24 million USD and allocated it to the generating assets. The effect of the consolidation of the acquired assets on the consolidated statement of profit or loss for the year ended 31 December 2019 is 22 million USD.

Acquisition of Krasnoyarskaya GRES-2. In December 2019 the Group signed an agreement with a third party for the acquisition of generating and other assets of Krasnoyarskaya GRES-2 for 157 million USD. The transfer of ownership and payments will take place in the first half of 2020.

Acquisition of SGC group. In August 2018 the Group acquired from a parent company 99.9% of LLC “SGC” for 1,916 million USD. In 2019 the consideration of 1,916 million USD and interest accrued for deferred payment of 25 million USD were fully paid.

Non-controlling interests. Information of LLC "Vostochno-Beyskiy razrez" that has significant non-controlling interests is as follows:

	2019	2018
Non-current assets	285	311
Current assets	55	56
Non-current liabilities	(55)	(60)
Current liabilities	(15)	(14)
Net assets	**270**	**293**
Accumulated non-controlling interests	**135**	**147**
Revenue	139	155
Net (loss)/profit for the year	(2)	33
(Loss)/profit allocated to non-controlling interests	(1)	17
Revaluation of mining assets	(22)	28
Cash flows from operating activities	11	26
Cash flows used in investment activities	(11)	(20)
Cash flows used in financing activities	(13)	(8)
Dividends to non-controlling interests	6	4

34. EVENTS SUBSEQUENT TO THE BALANCE SHEET DATE

In January 2020 the Group issued 10-years rouble-denominated bonds with the nominal value of 477 million USD and a coupon rate of 6.9% p.a.

In January 2020 the Group paid 81 million USD net of VAT to a third party for the acquisition of generating and other assets of Krasnoyarskaya GRES-2.

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