

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

Form 20-F

- ☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934
OR
☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018
OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
OR
☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission file number 001-32328

MECHEL PAO

(Exact name of Registrant as specified in its charter)

RUSSIAN FEDERATION

(Jurisdiction of incorporation or organization)

Krasnoarmeyskaya Street 1, Moscow 125167, Russian Federation

(Address of principal executive offices)

Alexey Lukashov, tel.: +7-495-221-8888, e-mail: alexey.lukashov@mechel.com

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
COMMON AMERICAN DEPOSITARY SHARES, EACH COMMON ADS REPRESENTING TWO COMMON SHARES	NEW YORK STOCK EXCHANGE
COMMON SHARES, PAR VALUE	NEW YORK STOCK EXCHANGE ⁽¹⁾
10 RUSSIAN RUBLES PER SHARE	
PREFERRED AMERICAN DEPOSITARY SHARES, EACH PREFERRED ADS REPRESENTING ONE-HALF OF A PREFERRED SHARE	NEW YORK STOCK EXCHANGE
PREFERRED SHARES, PAR VALUE	NEW YORK STOCK EXCHANGE ⁽²⁾
10 RUSSIAN RUBLES PER SHARE	

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

416,270,745 common shares, of which 66,840,170 shares are in the form of common ADSs as of December 31, 2018

138,756,915 preferred shares (including 55,502,766 shares held by Skyblock Limited, a wholly-owned subsidiary of Mechel PAO), of which 9,324,697 shares are in the form of preferred ADSs as of December 31, 2018

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes ☐ No ☒

Note — Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐ Emerging growth company ☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act. ☐

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐

International Financial Reporting Standards as issued by the International Accounting Standards Board ☒

Other ☐

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 ☐ Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

- (1) Listed, not for trading or quotation purposes, but only in connection with the registration of common ADSs pursuant to the requirements of the Securities and Exchange Commission.
- (2) Listed, not for trading or quotation purposes, but only in connection with the registration of preferred ADSs pursuant to the requirements of the Securities and Exchange Commission.

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Unless the context otherwise requires, references to “Mechel” refer to Mechel PAO, and references to “Mechel group,” “the group,” “our group,” “we,” “us” or “our” refer to Mechel PAO together with its subsidiaries.

Our business consists of three segments: mining, steel and power. References in this document to segment revenues are to revenues of the segment excluding intersegment sales, unless otherwise noted. References in this document to our sales or our total sales are to third-party sales and do not include intra-group sales, unless otherwise noted.

For the purposes of calculating certain market share data, we have included businesses that are currently part of our group that may not have been part of our group during the period for which such market share data is presented.

The reporting currency of our consolidated financial statements is the Russian ruble. The reason of adopting the Russian ruble as the reporting currency in the consolidated financial statements under IFRS is to allow a greater transparency of our financial and operating performance as it more closely reflects the profile of our revenue and operating income that are mostly generated in Russian rubles.

References to “Russian rubles,” “rubles” or “RUB” are to the currency of the Russian Federation, references to “U.S. dollars,” “\$” or “USD” are to the currency of the United States and references to “euro,” “€” or “EUR” are to the currency of the member states of the European Union that participate in the Economic and Monetary Union.

The term “tonne” as used herein means a metric tonne. A metric tonne is equal to 1,000 kilograms or 2,204.62 pounds.

Certain amounts that appear in this document have been subject to rounding adjustments; accordingly, figures shown as totals in certain tables or in the text may not be an arithmetic aggregation of the figures that precede them.

“CIS” means the Commonwealth of Independent States.

The following table sets forth by business activity the official names and location of our key subsidiaries and their names as used in this document:

Name as Used in This Document	Official Name	Location
<i>Mining</i>		
Mechel Mining	Mechel Mining AO	Russia, Moscow
Southern Kuzbass Coal Company . . .	Southern Kuzbass Coal Company PJSC	Russia, Kemerovo region
Yakutugol	Yakutugol Joint-Stock Holding Company	Russia, Sakha Republic
Elgaugol	Elgaugol OOO	Russia, Sakha Republic
Elga-road	Elga-road OOO	Russia, Sakha Republic
Korshunov Mining Plant	Korshunov Mining Plant PAO	Russia, Irkutsk region
Moscow Coke and Gas Plant	Moscow Coke and Gas Plant JSC	Russia, Moscow region
Mechel Coke	Mechel Coke OOO	Russia, Chelyabinsk region
Port Posiet	Port Posiet JSC	Russia, Primorsky Krai
Port Temryuk	Port Mechel Temryuk OOO	Russia, Krasnodar Krai
<i>Steel</i>		
Chelyabinsk Metallurgical Plant	Chelyabinsk Metallurgical Plant PAO	Russia, Chelyabinsk region
Izhstal	Izhstal PAO	Russia, Republic of Udmurtia
Urals Stampings Plant	Urals Stampings Plant PAO	Russia, Chelyabinsk region
Beloretsk Metallurgical Plant	Beloretsk Metallurgical Plant AO	Russia, Republic of Bashkortostan
Vyartsilya Metal Products Plant	Vyartsilya Metal Products Plant AO	Russia, Republic of Karelia
Mechel Nemunas	Mechel Nemunas UAB	Lithuania, Kaunas
Bratsk Ferroalloy Plant	Bratsk Ferroalloy Plant OOO	Russia, Irkutsk region
Port Kambarka	Port Kambarka AO	Russia, Republic of Udmurtia
<i>Power</i>		
Southern Kuzbass Power Plant	Southern Kuzbass Power Plant PAO	Russia, Kemerovo region
Kuzbass Power Sales Company	Kuzbass Power Sales Company PAO	Russia, Kemerovo region
Mechel Energo	Mechel Energo OOO	Russia, Chelyabinsk region
<i>Marketing and Distribution</i>		
Mechel Carbon	Mechel Carbon AG	Switzerland, Baar
Mechel Service Global	Mechel Service Global B.V.	Netherlands, the Hague
Mechel Service	Mechel Service OOO	Russia, Moscow
<i>Other</i>		
Mecheltrans	Mecheltrans OOO	Russia, Moscow

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Matters discussed in this document may constitute forward-looking statements, as defined in the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. We wish to caution you that these statements are only predictions and that actual events or results may differ materially. Forward-looking statements include statements concerning plans, objectives, goals, strategies, future events or performance, and underlying assumptions and other statements, which are other than statements of historical facts. The words “believe,” “expect,” “anticipate,” “intend,” “estimate,” “forecast,” “plan,” “project,” “will,” “likely,” “goal,” “future,” “may,” “should” and similar expressions identify forward-looking statements. Forward-looking statements appear in a number of places including, without limitation, “Item 3. Key Information — Risk Factors,” “Item 4. Information on the Company” and “Item 5. Operating and Financial Review and Prospects,” and include statements regarding:

- strategies, outlook and growth prospects;
- the ability to maintain and generate sufficient cash and other liquid resources to meet our operating and debt service requirements;
- our ability to comply with the financial covenants in our loan agreements as well as other covenants and restrictions imposed by the existing and future financing arrangements and our ability to attract new financing or refinancing of debt, including an outcome in the ongoing debt restructuring negotiations with our lenders;
- the impact of competition;
- capital expenditures;
- demand for our products;
- economic outlook and industry trends;
- transactions with related parties;
- regulatory compliance;
- developments in our markets;
- future plans and potential for future growth;
- the results of any legal procedures;
- the impact of regulatory initiatives; and
- the strength of our competitors.

The forward-looking statements in this document are based upon various assumptions, many of which are based, in turn, upon further assumptions, including without limitation, management’s examination of historical operating trends, data contained in our records and other data available from third parties. Although we believe that these assumptions were reasonable when made, these assumptions are inherently subject to significant uncertainties and contingencies which are difficult or impossible to predict and are beyond our control, and we may not achieve or accomplish these expectations, beliefs or projections. See “Item 3. Key Information — Risk Factors” for a discussion of important factors that, in our view, could cause actual results to differ materially from those discussed in the forward-looking statements.

Except to the extent required by law, neither we, nor any of our agents, employees or advisers intend or have any duty or obligation to supplement, amend, update or revise any of the forward-looking statements contained or incorporated by reference in this document.

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

Selected Financial Data

The financial data set forth below as of December 31, 2018, 2017, 2016, 2015 and 2014, and for the years then ended, have been derived from our consolidated financial statements. Our reporting currency is the Russian ruble and we prepare our consolidated financial statements in accordance with International Financial Reporting Standards (“IFRS”).

The selected financial data set forth below should be read in conjunction with, and is qualified in its entirety by reference to, “Item 5. Operating and Financial Review and Prospects” and our audited consolidated financial statements and the notes thereto included in this annual report.

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(In millions of Russian rubles, unless stated otherwise)				
Consolidated statement of profit (loss) and other comprehensive income data:					
Revenue from contracts with customers	312,574	299,113	276,009	253,141	243,992
Cost of sales	(177,756)	(160,356)	(146,322)	(151,334)	(153,057)
Gross profit	134,818	138,757	129,687	101,807	90,935
Total selling, distribution and operating income and (expenses), net	(85,038)	(81,590)	(86,997)	(77,555)	(90,028)
Operating profit	49,780	57,167	42,690	24,252	907
Total other income and (expense), net	(33,563)	(41,447)	(28,539)	(131,380)	(131,994)
Profit (loss) before tax from continuing operations	16,217	15,720	14,151	(107,128)	(131,087)
Income tax (expense) benefit	(2,681)	(3,150)	(4,893)	(8,322)	8,822
Profit (loss) for the period from continuing operations	13,536	12,570	9,258	(115,450)	(122,265)
(Loss) profit after tax for the period from discontinued operations, net	—	—	(426)	822	(11,702)
Profit (loss) for the period	13,536	12,570	8,832	(114,628)	(133,967)
Less: profit (loss) attributable to non-controlling interests	908	1,013	1,706	535	(1,263)
Profit (loss) attributable to equity shareholders of Mechel PAO	12,628	11,557	7,126	(115,163)	(132,704)
Profit (loss) for the period	13,536	12,570	8,832	(114,628)	(133,967)
Exchange differences on translation of foreign operations	(9)	313	431	287	1,168

	Year Ended December 31,				
	2018	2017	2016	2015	2014
(In millions of Russian rubles, unless stated otherwise)					
Net (loss) gain on available for sale financial assets	—	—	(1)	8	2
Re-measurement of defined benefit plans ...	487	145	(23)	(194)	(127)
Total comprehensive income (loss) for the period, net of tax	14,014	13,028	9,239	(114,527)	(132,924)
Total comprehensive income (loss) attributable to non-controlling interests ..	918	1,016	1,710	537	(1,249)
Total comprehensive income (loss) attributable to equity shareholders of Mechel PAO	13,096	12,012	7,529	(115,064)	(131,675)
Earnings (loss) per share from continuing operations (Russian rubles per share), basic and diluted	30	28	18	(278)	(290)
(Loss) earnings per share from discontinued operations (Russian rubles per share)	—	—	(1)	2	(29)
Basic and diluted, profit (loss) for the period attributable to common equity shareholders of Mechel PAO	30	28	17	(277)	(319)
Dividends declared per common share (Russian rubles per share)	—	—	—	—	—
Dividends declared per preferred share (Russian rubles per share)	—	16.66	10.28	0.05	0.05
Weighted average number of common shares	416,270,745	416,270,745	416,270,745	416,270,745	416,270,745
Mining segment statement of profit (loss) data⁽¹⁾:					
Revenue from contracts with customers	134,431	142,416	121,555	108,723	100,558
Cost of sales	(57,232)	(48,952)	(45,040)	(51,280)	(51,435)
Gross profit	77,199	93,464	76,515	57,442	49,123
Total selling, distribution and operating income and (expenses), net	(44,625)	(45,273)	(45,503)	(41,437)	(47,405)
Operating profit	32,574	48,191	31,012	16,005	1,718
Steel segment statement of profit (loss) data⁽¹⁾:					
Revenue from contracts with customers	193,783	180,382	168,893	153,004	146,867
Cost of sales	(149,349)	(146,369)	(126,745)	(119,610)	(115,485)
Gross profit	44,433	34,013	42,148	33,394	31,382
Total selling, distribution and operating income and (expenses), net	(24,602)	(24,859)	(30,617)	(24,868)	(32,701)
Operating profit (loss)	19,831	9,154	11,531	8,526	(1,319)

	Year Ended December 31,				
	2018	2017	2016	2015	2014
(In millions of Russian rubles, unless stated otherwise)					
Power segment statement of profit (loss) data⁽¹⁾:					
Revenue from contracts with customers	43,245	42,562	40,625	41,467	39,554
Cost of sales	(30,674)	(29,838)	(29,047)	(30,178)	(29,215)
Gross profit	12,571	12,724	11,578	11,289	10,339
Total selling, distribution and operating income and (expenses), net	(15,811)	(11,458)	(10,877)	(11,250)	(9,922)
Operating (loss) profit	(3,240)	1,266	701	39	417
Consolidated statement of financial position data (at period end):					
Total assets	317,625	319,127	325,465	342,071	369,258
Equity attributable to equity shareholders of Mechel PAO	(243,041)	(253,066)	(260,274)	(267,803)	(154,666)
Equity attributable to non-controlling interests	9,846	8,933	7,687	5,948	8,253
Loans and borrowings, including interest payable, fines and penalties on overdue amounts of RUB 9,877 million, RUB 41,992 million, RUB 38,594 million, RUB 47,475 million and RUB 14,615 million as of December 31, 2018, 2017, 2016, 2015 and 2014, respectively	412,294	422,533	434,165	491,674	386,518
Non-current loans and borrowings	6,538	17,360	11,644	4,308	9,346
Consolidated statement of cash flows data:					
Net cash provided by operating activities . . .	68,118	63,282	53,207	38,867	43,013
Net cash used in investing activities	(5,647)	(7,138)	(4,969)	(5,218)	(14,494)
Net cash used in financing activities	(63,286)	(55,737)	(45,869)	(34,433)	(34,206)
Non-IFRS measures⁽²⁾:					
Consolidated Adjusted EBITDA	75,667	81,106	66,164	45,730	29,759
Mining Segment Adjusted EBITDA	45,516	61,425	41,884	26,831	13,359
Steel Segment Adjusted EBITDA	27,990	18,817	23,172	17,127	14,906
Power Segment Adjusted EBITDA	1,546	2,308	1,662	2,090	1,403

(1) Segment revenues and cost of sales include intersegment sales.

(2) Adjusted EBITDA represents profit (loss) attributable to equity shareholders of Mechel PAO before depreciation and amortization, foreign exchange (gain) loss, net, finance costs, including fines and penalties on overdue loans and borrowings and finance lease payments, finance income, net result on the disposal of non-current assets, impairment of goodwill and other non-current assets, write-off of trade and other receivables, allowance for expected credit losses on financial assets, provision (reversal of provision) for doubtful accounts, write-off of inventories to net realizable value, loss (profit) after tax for the period from discontinued operations, net, net result on the disposal of subsidiaries, profit (loss) attributable to non-controlling interests, income tax expense (benefit), effect of pension obligations, other fines and penalties, gain on restructuring and forgiveness of trade and other payables and write-off of trade and other payables with expired legal term, and other one-off items. Income tax, deferred tax related to the consolidated group of taxpayers and certain other assets and liabilities are not allocated to segments as they are managed on the group basis.

Reconciliation of Adjusted EBITDA to profit (loss) attributable to equity shareholders of Mechel PAO is as follows for the periods indicated:

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(In millions of Russian rubles)				
Consolidated Adjusted EBITDA reconciliation:					
Profit (loss) attributable to equity shareholders of Mechel PAO	12,628	11,557	7,126	(115,163)	(132,704)
Add:					
Depreciation and amortization	13,859	14,227	13,714	14,085	14,429
Foreign exchange loss (gain), net	25,775	(4,237)	(25,947)	71,106	103,176
Finance costs, including fines and penalties on overdue loans and borrowings and finance lease payments ...	42,052	47,610	54,240	60,452	28,110
Finance income	(34,056)	(633)	(1,176)	(183)	(107)
Net result on the disposal of non-current assets, impairment of goodwill and other non-current assets, write-off of trade and other receivables, allowance for expected credit losses on financial assets, provision (reversal of provision) for doubtful accounts and write-off of inventories to net realizable value	10,146	7,334	8,447	4,772	12,710
Loss (profit) after tax for the period from discontinued operations, net	—	—	426	(932)	11,702
Net result on the disposal of subsidiaries	(3)	(470)	(194)	19	89
Profit (loss) attributable to non-controlling interests ...	908	1,013	1,706	535	(1,263)
Income tax expense (benefit)	2,681	3,150	4,893	8,322	(8,822)
Effect of pension obligations	548	(33)	(171)	50	(6)
Other fines and penalties	1,554	2,551	1,396	1,598	915
Gain on restructuring and forgiveness of trade and other payables and write-off of trade and other payables with expired legal term	(425)	(963)	(115)	(224)	(38)
Other one-off items	—	—	1,819	1,293	1,568
Consolidated Adjusted EBITDA	75,667	81,106	66,164	45,730	29,759
Mining Segment Adjusted EBITDA reconciliation:					
Profit (loss) attributable to equity shareholders of Mechel PAO	11,304	16,801	6,931	(66,641)	(95,604)
Add:					
Depreciation and amortization	7,621	7,979	7,912	9,106	8,747
Foreign exchange loss (gain), net	10,771	(4,379)	(14,960)	49,872	70,553
Finance costs, including fines and penalties on overdue loans and borrowings and finance lease payments ...	29,153	34,546	39,345	33,880	15,045
Finance income	(24,458)	(1,810)	(2,482)	(1,030)	(777)
Net result on the disposal of non-current assets, impairment of goodwill and other non-current assets, write-off of trade and other receivables, allowance for expected credit losses on financial assets, provision (reversal of provision) for doubtful accounts and write-off of inventories to net realizable value	4,796	4,443	2,584	900	1,357

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(In millions of Russian rubles)				
(Profit) loss after tax for the period from discontinued operations, net	—	—	—	(764)	13,141
Net result on the disposal of subsidiaries	(3)	(470)	—	—	—
Profit (loss) attributable to non-controlling interests . . .	183	407	511	(444)	(971)
Income tax expense (benefit)	5,940	3,410	(115)	1,153	379
Effect of pension obligations	515	(58)	(198)	125	(5)
Other fines and penalties	(15)	941	556	707	755
Gain on restructuring and forgiveness of trade and other payables and write-off of trade and other payables with expired legal term	(291)	(385)	(19)	(33)	(2)
Other one-off items	—	—	1,819	—	741
Mining Segment Adjusted EBITDA	<u>45,516</u>	<u>61,425</u>	<u>41,884</u>	<u>26,831</u>	<u>13,359</u>
Steel Segment Adjusted EBITDA reconciliation:					
Profit (loss) attributable to equity shareholders of Mechel PAO	<u>693</u>	<u>(4,533)</u>	<u>7,619</u>	<u>(39,029)</u>	<u>(46,569)</u>
Add:					
Depreciation and amortization	5,738	5,800	5,435	4,650	5,391
Foreign exchange loss (gain), net	14,969	144	(10,904)	21,122	32,910
Finance costs, including fines and penalties on overdue loans and borrowings and finance lease payments . . .	13,825	14,136	17,411	25,645	12,966
Finance income	(9,874)	(717)	(2,234)	(344)	(390)
Net result on the disposal of non-current assets, impairment of goodwill and other non-current assets, write-off of trade and other receivables, allowance for expected credit losses on financial assets, provision (reversal of provision) for doubtful accounts and write-off of inventories to net realizable value	1,846	2,406	5,389	2,122	10,658
Loss (profit) after tax for the period from discontinued operations, net	—	—	406	(168)	(1,468)
Net result on the disposal of subsidiaries	—	—	(194)	19	89
Profit (loss) attributable to non-controlling interests . . .	637	417	1,056	812	(408)
Income tax (benefit) expense	(531)	203	(1,485)	416	838
Effect of pension obligations	30	22	26	(81)	(7)
Other fines and penalties	788	1,512	742	890	189
Gain on restructuring and forgiveness of trade and other payables and write-off of trade and other payables with expired legal term	(131)	(573)	(95)	(190)	(35)
Other one-off items	—	—	—	1,263	742
Steel Segment Adjusted EBITDA	<u>27,990</u>	<u>18,817</u>	<u>23,172</u>	<u>17,127</u>	<u>14,906</u>

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(In millions of Russian rubles)				
Power Segment Adjusted EBITDA reconciliation:					
(Loss) profit attributable to equity shareholders of Mechel					
PAO	(2,631)	39	(451)	(2,272)	(851)
Add:					
Depreciation and amortization	500	448	367	329	291
Foreign exchange loss (gain), net	37	(2)	(83)	111	(287)
Finance costs, including fines and penalties on overdue loans and borrowings and finance lease payments ...	581	880	1,078	2,173	1,208
Finance income	(1,231)	(57)	(54)	(55)	(48)
Net result on the disposal of non-current assets, impairment of goodwill and other non-current assets, write-off of trade and other receivables, allowance for expected credit losses on financial assets, provision (reversal of provision) for doubtful accounts and write-off of inventories to net realizable value	3,504	486	474	1,751	696
Loss (profit) after tax for the period from discontinued operations, net	—	—	20	—	29
Net result on the disposal of subsidiaries	—	—	—	—	—
Profit attributable to non-controlling interests	87	189	139	166	114
Income tax (benefit) expense	(83)	229	73	(118)	187
Effect of pension obligations	4	3	2	6	7
Other fines and penalties	781	98	98	—	(29)
Gain on restructuring and forgiveness of trade and other payables and write-off of trade and other payables with expired legal term	(3)	(5)	(1)	(1)	—
Other one-off items	—	—	—	—	86
Power Segment Adjusted EBITDA	1,546	2,308	1,662	2,090	1,403

Adjusted EBITDA is a measure of our operating performance that is not required by, or presented in accordance with, IFRS. Adjusted EBITDA is not a measure of our operating performance under IFRS and should not be considered as an alternative to net income, operating income or any other performance measures derived in accordance with IFRS or as an alternative to cash flow from operating activities or as a measure of our liquidity. In particular, Adjusted EBITDA should not be considered as a measure of discretionary cash available to us to invest in the growth of our business. We believe that Adjusted EBITDA provides useful information to investors because it is an indicator of the strength and performance of our business operations, and it allows investors to evaluate and compare our periodic operating performance.

Adjusted EBITDA has limitations as an analytical tool, and should not be considered in isolation or as a substitute for analysis of our operating results as reported under IFRS. Some of these limitations are as follows:

- Adjusted EBITDA does not reflect the impact of depreciation and amortization on our operating performance. The assets of our businesses which are being depreciated and/or amortized (including, for example, our mineral reserves) will have to be replaced in the future and such depreciation and amortization expense may approximate the cost to replace these assets in the future. By excluding such expense from Adjusted EBITDA, Adjusted EBITDA does not reflect our future cash requirements for such replacements.
- Adjusted EBITDA does not reflect the impact of foreign exchange gains and losses, which may recur.

- Adjusted EBITDA does not reflect the impact of finance income and finance costs, including fines and penalties on overdue loans and borrowings and finance lease payments, which are significant and could further increase if we incur more debt, on our operating performance.
- Adjusted EBITDA does not reflect the impact of the net result on the disposal of non-current assets on our operating performance, which may recur.
- Adjusted EBITDA does not reflect the impact of impairment of goodwill and other non-current assets, which may recur.
- Adjusted EBITDA does not reflect the impact of write-off of trade and other receivables, which may recur.
- Adjusted EBITDA does not reflect the impact of allowance for expected credit losses on financial assets, provision (reversal of provision) for doubtful accounts, which may recur.
- Adjusted EBITDA does not reflect the impact of write-off of inventories to net realizable value, which may recur.
- Adjusted EBITDA does not reflect the impact of profits and losses after tax for the period from discontinued operations.
- Adjusted EBITDA does not reflect the impact of net result on the disposal of subsidiaries.
- Adjusted EBITDA does not reflect the impact of profits and losses attributable to non-controlling interests on our operating performance.
- Adjusted EBITDA does not reflect the impact of income tax expenses and benefits on our operating performance.
- Adjusted EBITDA does not reflect the impact of effect of pension obligations.
- Adjusted EBITDA does not reflect the impact of other fines and penalties.
- Adjusted EBITDA does not reflect the impact of gain on restructuring and forgiveness of trade and other payables and write-off of trade and other payables with expired legal term.
- Adjusted EBITDA does not reflect the impact of other one-off items.
- Other companies in our industry may calculate Adjusted EBITDA differently or may use it for different purposes than we do, limiting its usefulness as a comparative measure.

We compensate for these limitations by relying primarily on our IFRS operating results and using Adjusted EBITDA only supplementally. See our consolidated statement of financial position, consolidated statement of profit (loss) and other comprehensive income and consolidated statement of cash flows included elsewhere in this document.

Exchange Rates

The following tables show, for the periods indicated, certain information regarding the official exchange rate between the ruble and the U.S. dollar, based on data published by the Central Bank of the Russian Federation (the “CBR”).

These rates may differ from the actual rates used in preparation of our financial statements and other financial information provided herein.

<u>Year Ended December 31,</u>	<u>Rubles per U.S. Dollar</u>			
	<u>High</u>	<u>Low</u>	<u>Average⁽¹⁾</u>	<u>Period End</u>
2018	69.97	55.67	62.71	69.47
2017	60.75	55.85	58.35	57.60
2016	83.59	60.27	67.03	60.66
2015	72.88	49.18	60.96	72.88
2014	67.79	32.66	38.42	56.26

(1) The average of the exchange rates on the last business day of each full month during the relevant period.

	<u>Rubles per U.S. Dollar</u>	
	<u>High</u>	<u>Low</u>
February 2019	66.70	65.26
January 2019	69.47	65.92
December 2018	69.52	66.24
November 2018	68.00	65.58
October 2018	66.97	65.22
September 2018	69.97	65.59

The exchange rate between the ruble and the U.S. dollar on March 21, 2019 was 64.28 rubles per one U.S. dollar.

No representation is made that the ruble or U.S. dollar amounts in this document could have been or can be converted into U.S. dollars or rubles, as the case may be, at any particular rate or at all.

Risk Factors

An investment in our shares and ADSs involves a high degree of risk. You should carefully consider the following information about these risks, together with the information contained in this document, before you decide to buy our shares or ADSs. We have described only the risks that we consider to be material. However, there may be additional risks that we currently consider not to be material or of which we are not presently aware. If any of the following risks actually occurs, our business, financial condition, results of operations or prospects could be materially adversely affected. In that case, the value of our shares or ADSs could also decline and you could lose all or part of your investment.

Risks Relating to Our Financial Condition and Financial Reporting

There is substantial doubt about our ability to continue as a going concern.

Because we have a substantial amount of outstanding indebtedness that we do not have the ability to repay without refinancing or restructuring, and our ability to do so is dependent upon continued negotiations with our creditors, there is substantial doubt about our ability to continue as a going concern. See note 4 to our consolidated financial statements in “Item 18. Financial Statements.” We also note that we have defaulted on payments of principal and interest under the group’s non-restructured export credit facility agreements with international lenders (“**ECA-lenders**”) and have been and continue to be in non-compliance with certain financial and non-financial covenants in several loan agreements. See “— We have experienced and may continue to experience liquidity shortages and a working capital deficit,” “— Our creditors have accelerated and in the future may accelerate amounts due under our loan agreements due to our failure to comply with our payment and other obligations,” “— We may be unable to restructure all of our indebtedness or we may fail to comply with the new terms of the restructured indebtedness” and “— We have a substantial amount of

outstanding indebtedness with restrictive financial covenants and most shares and assets in our subsidiaries are pledged.” These breaches constitute an event of default and cross-default under various loan agreements and, as a result, the creditors may request accelerated repayments and initiate legal procedures for enforcement of our debts. We do not have the resources to repay such overdue debt or to enable us to comply with accelerated repayment requests immediately.

Our plans, including the achievement of the restructuring with all of our lenders and aligning the servicing of our debt with current repayment schedules and projected cash flows to be generated by our group in 2019 and beyond, are discussed in “Item 5. Operating and Financial Review and Prospects — Liquidity and Capital Resources — Outlook for 2019” and note 4 to our consolidated financial statements in “Item 18. Financial Statements.” Our future is dependent on our ability to refinance or restructure our indebtedness successfully or otherwise address these matters. If we fail to do so for any reason, we would not be able to continue as a going concern and could be forced to seek relief under applicable bankruptcy or insolvency procedures, in which case our shares and ADSs would lose all or a substantial amount of their value. However, given management’s plans, our consolidated financial statements have been prepared on the basis that we will continue as a going concern entity, and no adjustments have been made in our consolidated financial statements relating to the recoverability and classification of the recorded value of assets, the amounts and classification of liabilities or any other adjustments that might result in any potential impact of us not being able to refinance our debt obligations as outlined in note 4 to our consolidated financial statements in “Item 18. Financial Statements.”

We have experienced and may continue to experience liquidity shortages and a working capital deficit.

We have experienced and may continue to experience liquidity shortages from, *inter alia*, acquisitions, our substantial investment program, commodity price decreases, currency fluctuations and other economic and financial difficulties, particularly since the global economic crisis beginning in the late 2000s. In the first half of 2014, as a result of our deteriorating liquidity position and difficulties with refinancing of our debt, we failed to fulfill our payment obligations in connection with the servicing of interest and the repayment of our indebtedness. Since 2015, we have restructured and refinanced a significant amount of indebtedness, including loans from Russian state banks, pre-export credit facilities and bonds issuances. See “— We may be unable to restructure all of our indebtedness or we may fail to comply with the new terms of the restructured indebtedness.” Our primary objective in negotiating our debt refinancing and restructuring relates to matching our projected available free cash flows with future financial and investment payments and resetting the financial covenants to ensure a stable financial environment. We also aim to lengthen the maturity profile and repayment grace periods of the portion of our debt portfolio that currently remains not restructured.

Our working capital deficit amounted to RUB 404,055 million as of December 31, 2018 as compared to RUB 416,686 million as of December 31, 2017. Cash and cash equivalents as of December 31, 2018 were RUB 1,803 million as compared to RUB 2,452 million as of December 31, 2017 and our total liabilities exceeded total assets by RUB 233,195 million as of December 31, 2018. For additional details about our capital requirements and resources, see “Item 5. Operating and Financial Review and Prospects — Liquidity and Capital Resources.”

Any deterioration in our operating performance, including due to any worsening of prevailing economic conditions, fall in commodity prices (whether due to the cyclical nature of the industry or otherwise) and/or financial, business or other factors (including the imposition of further international sanctions against Russian companies or individuals, as well as certain industries, including steel and mining sectors), many of which are beyond our control, may adversely and materially affect our cash flow, liquidity and working capital position and may result in an increase in our working capital deficit and in our inability to meet our obligations as they fall due.

We have restructured most of our debt portfolio and optimized the capital investment program to reduce the risk of facing a liquidity shortage, as well as allow us to reduce our debt leverage over time. See “— We may be

unable to restructure all of our indebtedness or we may fail to comply with the new terms of the restructured indebtedness” and “— We will require a significant amount of cash to fund our capital investment program.” However, these efforts might not be successful. Our ability to refinance existing debt is limited due to difficult conditions in the domestic and international capital markets and in the banking sector, together with sanctions imposed on certain Russian banks preventing them from raising additional long-term financing on the international capital markets and the risk of future sanctions which may be imposed.

There is no guarantee that we would be successful in refinancing and restructuring our debt or in raising additional capital (particularly if we or any of our subsidiaries, directors or officers, or significant counterparties are subject to international sanctions which could, among other things, prevent or restrict us from accessing foreign capital markets and/or supplying our products on certain export markets), or that we would be able to do so on a timely basis or on terms which are acceptable to us. Even if we were successful, the terms of such refinancing or new capital may be detrimental to holders of ADSs and shares including due to a dilution of their interests. Any such deterioration, affect or failure could negatively impact our liquidity and working capital and have a material adverse effect on our business, financial condition, results of operations and the trading price of our ADSs and shares. In addition, Mechel has not been rated by a “big three” credit rating agency since Moody’s Investors Service withdrew our corporate family rating at our request in March 2015. The absence of an international rating (or the assignment of a poor rating) may reduce our opportunities to raise necessary debt financing, including by accessing the debt capital markets, on favorable terms or at all.

Poor liquidity and a working capital deficit could lead to debt repayment difficulties, defaults, enforcement of security and eventually insolvency. All these factors could lead to difficulties with refinancing or raising additional capital and would require further restructuring. See “— Risks Relating to Our Business and Industry — We operate in cyclical industries, and any local or global downturn, whether or not primarily affecting the mining and/or steel industries, may have an adverse effect on our business, financial condition, results of operations and prospects” and “— Risks Relating to the Russian Federation — Sanctions imposed by the United States and the European Union, as well as other politically related disagreements and allegations between Russia and other countries, may have a material adverse effect on our business, liquidity and financial condition, as well as the trading market for and value of our shares and ADSs.”

Our creditors have accelerated and in the future may accelerate amounts due under our loan agreements due to our failure to comply with our payment and other obligations.

Most of the loan agreements under which we or our subsidiaries are borrowers contain various representations, undertakings, restrictive covenants and events of default. Furthermore, according to the terms of such agreements, certain of our actions aimed at developing our business and pursuing our strategic objectives, such as acquisitions, disposal of assets, corporate restructurings, investments into certain of our subsidiaries and others, require prior notice to or consent from the respective lenders. We have restrictions on our ability to pay dividends, incur additional indebtedness and make certain capital expenditures, as well as expand through further acquisitions and use proceeds from certain disposals. A breach of our obligations under the loan agreements may give our creditors the right to claim for accelerated payment.

For example, during 2014 and 2015, VTB Bank and Sberbank decided to accelerate outstanding amounts due under our credit facilities due to our payment defaults. Although we were able to settle with VTB Bank and Sberbank, such acceleration, in turn, would give our other creditors the right to trigger acceleration under their loan agreements. In addition, we may be unable to settle any such claims in the future. See “— We may be unable to restructure all of our indebtedness or we may fail to comply with the new terms of the restructured indebtedness.”

In February 2017, a number of lenders under pre-export facility agreements filed requests for arbitration with the London Court of International Arbitration (the “LCIA”). See “Item 8. Financial Information — Litigation — Debt litigation.” In December 2017, we entered into a lock-up agreement with a majority of our

international lenders in order to facilitate the pre-export facility restructuring. The terms of the lock-up agreement applied until July 16, 2018. At the end of July 2018, we started the process of refinancing of the pre-export facilities using a loan acquired from VTB Bank. In October 2018, the LCIA terminated the arbitrations due to settlement of the disputes. As of December 31, 2018, we had refinanced 99.99% of the pre-export facilities, and, in January 2019, the pre-export facilities were fully refinanced.

As of December 31, 2018, the overdue debt amounted to 6.4% of our total debt, and we were in breach of certain financial and non-financial covenants in several loan agreements and in default as a result of triggering certain cross-default provisions. Such provisions allow the relevant creditors to claim for accelerated repayment of all outstanding amounts at any time; however, we have not received any acceleration notices from the creditors as of December 31, 2018. See “Item 5. Operating and Financial Review and Prospects — Liquidity and Capital Resources — Restrictive Covenants,” “Item 5. Operating and Financial Review and Prospects — Description of Certain Indebtedness,” “Item 10. Additional Information — Material Contracts” and “Item 13. Defaults, Dividend Arrearages and Delinquencies.”

Currently, we continue to be in default under our export credit facility agreements with international lenders, and are negotiating refinancing and restructuring thereof. The ECA-lenders have not waived their rights in respect of or granted their consent to our breaches. We have received notification on defaults under the facilities with our ECA-lenders, as well as reservations of rights and calls of guarantees from certain lenders, but the ECA-lenders have not yet made claims for accelerated repayment. The refusal of any one lender to grant or extend a waiver or amend the loan documentation even if other lenders may have waived covenant defaults under the respective credit facilities, could result in substantially all of our indebtedness being accelerated. We do not have the resources to repay overdue debt or to enable us to comply with accelerated repayment requests immediately.

Our ability to continue to comply with our financial and other loan covenants in the future and to continue to service and refinance our indebtedness will depend on our results of operations and our ability to generate cash in the future and attract new financing and refinance the existing indebtedness, which will depend on several factors, including lenders’ credit decisions, limitations on the ability of Russian companies to access international capital markets as a result of a tightening of international sanctions against Russian companies and individuals and general economic, financial, competitive, legislative and other factors that are beyond our control. We cannot assure you that any breach of financial and other covenants in our loan agreements, including defects in security, will not result in new demands from our lenders for acceleration of our loan repayment obligations or related litigation, including as a result of cross-defaults. If our indebtedness is accelerated in full or in part, it would be very difficult in the current financing environment for us to refinance our debt or obtain additional financing, and we could lose our assets, including fixed assets and shares in our subsidiaries, if our lenders foreclose on their liens, which would adversely affect our ability to conduct our business and result in a significant decline in the value of our shares and ADSs.

We may be unable to restructure all of our indebtedness or we may fail to comply with the new terms of the restructured indebtedness.

We have a number of facilities with ECA-lenders under which we have been in non-compliance. We are negotiating to restructure the indebtedness under these agreements in order to extend the repayment schedule and final maturity, as well as to decrease interest payments. If we fail to negotiate restructuring of these agreements, lenders thereunder could claim for accelerated repayment, which we may not be able to make. This could lead to cross-defaults under our other agreements and could have a material adverse effect on our business, financial condition, results of operations and prospects.

In 2015, we signed agreements on restructuring of our debt with our major Russian lenders, such as VTB Bank and Gazprombank. We also signed restructuring agreements with Sberbank in February-April 2016 which granted a grace period and extended repayments of our debt, as well as waived all previous defaults. In December 2016, we signed the last set of the agreements with VTB Bank which provide for extension of maturity of our credit lines until April 2022. Signing of these agreements was condition precedent to coming into

effect of the similar provisions under agreements with Gazprombank and Sberbank. In April 2017, Gazprombank, VTB Bank and Sberbank confirmed the restructuring terms, including an extension of the repayment grace period until 2020 and the final maturity until 2022. In July 2018, we signed a new loan agreement with VTB Bank to refinance existing pre-export credit facilities with a syndicate of banks. See “Item 5. Operating and Financial Review and Prospects — Restructuring of financial indebtedness.”

Our major Russian lenders, such as Gazprombank, VTB Bank and Sberbank, required that all the loans provided to our subsidiaries be secured with the suretyship or pledge of assets of Mechel PAO or its subsidiaries. See “— We have a substantial amount of outstanding indebtedness with restrictive financial covenants and most shares and assets in our subsidiaries are pledged.” In accordance with the Joint-Stock Companies Law then in effect, such transactions exceeding 2% of the balance sheet value of the company’s assets determined under the Russian accounting standards required participation and obtaining of approval from a majority of disinterested shareholders of the company; starting from January 1, 2017, the Joint-Stock Companies Law was amended and the threshold was set at 10%. Such security is an additional guarantee for our lenders which they require for restructuring of our debt. On March 4, 2016, we called the extraordinary general shareholders’ meeting to approve a number of interested party transactions but we did not manage to obtain the required quorum to approve such transaction. Although we managed to obtain the required quorum thereafter in 2016 and 2017 (and no such general shareholders’ meetings were held in 2018), we cannot predict whether we could obtain such shareholders’ approval in order to secure our loans in the future or we could get a waiver from the banks for the amendment of the security structure.

During 2016, we successfully restructured our ruble bonds, however we might need to negotiate with the bondholders extension of maturities thereof and new amortization schedules in case of liquidity shortages in the future. If we fail to agree with the bondholders on a restructuring and do not have liquidity to finance the buy-back of these bonds, payment default will occur. Payment default under any of ruble bonds may result in cross-default under our other bond issuances and restructured credit facilities. The bondholders also could initiate legal proceedings against us after the restructuring and this could lead to termination of the restructuring.

If we are unable to restructure all of our indebtedness or fail to comply with the new terms of the restructured indebtedness, our lenders may claim for accelerated repayment, which could lead to cross-default under other borrowings and have a material adverse effect on our business, financial condition, results of operations and prospects.

We have a substantial amount of outstanding indebtedness with restrictive financial covenants and most shares and assets in our subsidiaries are pledged.

We have a substantial amount of outstanding indebtedness, primarily consisting of debt we incurred in connection with the financing of our acquisitions of Yakutugol and Oriel Resources in 2007 and 2008, as well as debt we incurred to finance our investment program and working capital needs in late 2008 and 2009. As of December 31, 2018, our consolidated total debt, including finance lease obligations and the put option of Gazprombank, was RUB 471,181 million, of which RUB 418,174 million was short-term debt (including RUB 406,077 million with loan covenant violations, of which RUB 361,328 million was long-term debt reclassified to short-term debt due to defaults and cross-defaults under our loan agreements). Our finance costs for the year ended December 31, 2018 were RUB 42,052 million, net of the amount capitalized.

Most of our outstanding debt has restrictive financial covenants. See “Item 5. Operating and Financial Review and Prospects — Restrictive Covenants,” “Item 5. Operating and Financial Review and Prospects — Description of Certain Indebtedness” and “Item 10. Additional Information — Material Contracts.” Should we be in payment defaults or breaches of covenants and restrictions under our financial agreements and fail to receive waivers, the security may be enforced, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In order to secure bank financings, we have pledged shares in certain our subsidiaries, including 100%-1 share of Yakutugol, 95%+4 shares of Southern Kuzbass Coal Company, 91.66% of shares of Chelyabinsk Metallurgical Plant, 50%+2 shares of common shares of Beloretsk Metallurgical Plant, 80%+3 shares of Korshunov Mining Plant, 87.5%+3 shares of Mechel Mining, 75%+2 shares of Urals Stampings Plant, 33.33%+1 share of common shares of Izhstal, 25%+1 share of Port Posiet, 50.99% of registered capital of Elgaugol, 25% of registered capital of Mecheltrans, 100% of registered capital of Fincom-invest OOO, 25% of registered capital of Port Temryuk, 25% of registered capital of Bratsk Ferroalloy Plant, 1.99% of registered capital of MecheltransVostok OOO and 1.99% of registered capital of Elga-road as of December 31, 2018. Also, property, plant and equipment and certain other assets of our subsidiaries are pledged to the lenders. As of December 31, 2018, the carrying value of property, plant and equipment, inventory and accounts receivable pledged under our loan agreements amounted to RUB 122,720 million. See note 11.1(h) to the consolidated financial statements.

Our ability to make payments on our indebtedness depends upon our operating performance, which is subject to general economic and market conditions, commodity prices, and financial, business and other factors (including the maintenance or extension of international sanctions against Russian companies and individuals, as well as sanctions imposed on certain industrial sectors), many of which we cannot control. See “— We have experienced and may continue to experience liquidity shortages and a working capital deficit.”

Among other things, high levels of indebtedness, the restrictive financial covenants in our credit facilities and breaches thereof, as well as default on our loans, could potentially: (1) limit our ability to raise capital through debt financing; (2) limit our flexibility to plan for, or react to, changes in the markets in which we compete; (3) disadvantage our group relative to our competitors with superior financial resources; (4) lead to a loss of assets pledged as security; (5) render us more vulnerable to general adverse economic and industry conditions; (6) require us to dedicate all or a substantial part of our cash flow to service our debt; and (7) limit or eliminate our ability to pay dividends.

We may become subject to bankruptcy procedures, which may result in the inability of holders of our shares and ADSs to recover some or all of their investments.

Our future is dependent on our ability to refinance, restructure and service our indebtedness successfully. If we fail to do so for any reason, we may become subject to voluntary or involuntary bankruptcy proceedings, in which case our shares and ADSs may lose all or substantial amount of their value. See “— There is substantial doubt about our ability to continue as a going concern.”

Our creditors, including the Federal Tax Service of the Russian Federation, may file a bankruptcy petition with a court seeking to declare us insolvent if we are unable to make payments to our creditors in excess of RUB 300,000 within three months of such payments becoming due. In most cases, for such petition to be accepted, the outstanding indebtedness must be confirmed by a separate court decision or arbitral award that has already entered into force. However, under the Federal Law No. 127-FZ “On Insolvency (Bankruptcy)” dated October 26, 2002, as amended (the “**Bankruptcy Law**”), financial (credit) organizations, which include our major creditors, may file a petition for bankruptcy without such separate court decision. In this case, the financial organization is required to notify the debtor and its creditors in writing at least 15 days from the date of publication of the bankruptcy petition in the Unified Federal Register of Information on Facts of Business Activity of Legal Entities. In March 2015, VTB Bank published a notification of its intention to initiate bankruptcy proceedings against us and informed our main creditors of its intention to proceed with such bankruptcy petition. In April 2015, VTB Bank and VTB Capital Plc filed a claim with the High Court of Justice Queen’s Bench Division Commercial Court in England seeking for injunctive relief under pre-export facility agreements with a syndicate of banks. This claim and court proceedings were put on hold until the execution in September 2018 of a settlement agreement with VTB Bank and VTB Capital Plc according to which the claims were discontinued. See “Item 8. Financial Information — Litigation — Debt litigation.” After signing the restructuring documents in September 2015, VTB Bank and VTB Capital Plc have terminated Russian court

proceedings and recalled all of their Russian claims against us in October 2015. If any other creditor initiates court proceedings seeking to declare us insolvent, it could have a material adverse effect on our prospects and on the value of our shares and ADSs and may ultimately result in the inability of holders of our shares and ADSs to recover any of their investments.

From time to time, the group's suppliers, services providers and other third-party creditors may file bankruptcy claims against us based on the formal debt limit provided by the Bankruptcy Law. Although we aim to settle such claims before court consideration, the overall debt of our group companies is substantial. There is a risk that our creditors may file bankruptcy petitions and we may be unable to settle the claims, which could have a material adverse effect on our prospects and on the value of our shares and ADSs, and our shareholders and ADS holders may lose all or substantial part of their investment.

The Bankruptcy Law is still developing and it remains subject to varying interpretations. While the Bankruptcy Law establishes the principle of adequate protection of creditors, debtors, shareholders and other stakeholders in bankruptcy, it often fails to provide instruments for such protection that are available in other jurisdictions with more developed bankruptcy procedures. Bankruptcy proceedings in Russia are often not conducted in the best interests of shareholders or creditors. In addition, Russian courts that conduct bankruptcy proceedings may be subject to a greater degree of political interference and may employ a more formalistic, and less commercially sophisticated, approach to rendering decisions than like court in other jurisdictions. Russian insolvency proceedings in the past have shown a bias towards liquidation and not rehabilitation or restructuring.

The Bankruptcy Law provides for the following order of priority for the satisfaction of creditor claims: (i) personal injury claims; (ii) employment claims (wages and severance payments) and royalty claims under copyright agreements; and (iii) all other claims. The claims of secured creditors are satisfied in accordance with a special procedure, that is, out of the proceeds of sale of the pledged or mortgaged assets. Equity claims of shareholders or ADSs holders may be satisfied only if any assets remain after all creditors have been paid in full. Therefore, there is a risk that our shareholders and ADS holders may lose all or substantial part of their investment. This risk is even more significant for ADS holders whose status in the bankruptcy proceedings is unclear.

If we fail to fulfill payment obligations under the group's lease agreements, our lessors may require the return of the leased assets, which could materially adversely affect our business, financial condition, results of operations and prospects.

Some of our group companies have entered into lease agreements with different leasing companies for mining equipment, trucks, railcars and other assets.

Each of the lease agreements has a certain payment schedule. Starting from the second quarter of 2014, we began to delay the regular payments under several of these lease agreements. According to the Civil Code of the Russian Federation, as amended (the "**Civil Code**"), and the Federal Law No. 164-FZ "On Financial Leasing" dated October 29, 1998, as amended, a lessor is generally entitled to apply to a court for the early termination of a lease agreement if the lessee fails to make two consecutive payments under the lease agreement. The lessor is required to notify the lessee in writing and request fulfillment of its obligations under the lease agreement within a reasonable time before applying to the court.

The lease agreements we have entered into generally provide for a stricter procedure, whereby the lessor is also entitled to terminate the contract unilaterally, without applying to the court, by way of sending a notification to the lessee in case of non-payment within a specified period of time. The lessor is entitled to receive penalties in case of a delay in payment and early termination of the lease agreement due to the lessee's default. Upon termination of the lease agreement, the lessor is entitled to request the return of the leased equipment. If the lessee fails to return the equipment, the lessor is entitled to receive rental payments covering the time of the delay and compensation for damages if not covered by rental payments.

For example, in 2014, we failed to fulfill our payment (and other) obligations under lease agreements with Sberbank Leasing AO and Sberbank Leasing AO applied to the courts requesting accelerated repayment of amounts due and the return of the leased assets. We subsequently signed settlement agreements with Sberbank Leasing AO, which waived our previous defaults and restructured our future payment schedules; the relevant agreements were approved by the courts in 2017; and we fully repaid the outstanding amounts in 2018.

During the period from May to August 2015, following our failure to fulfill payment obligations under the respective lease agreements, Caterpillar Financial OOO sent termination notices to certain of our group companies. We have not settled the claims and Caterpillar Financial OOO filed lawsuits seeking termination of lease agreements, withdrawal of leasing assets and recovery of debt in an aggregate amount of approximately \$5.2 million and €313.9 thousand. In 2017, Caterpillar Financial OOO restructured part of our overdue lease payments by means of settlement agreements, which were approved by the courts. In 2018, we fully repaid the overdue lease payments to Caterpillar Financial OOO. Currently, we expect to sign settlement agreements for the relevant penalties and expenses. See “Item 8. Financial Information — Litigation — Debt litigation.”

In the event such leased equipment is returned to the lessor, there is a risk that our operating activities (for the group companies that are lessees under the delinquent leases) will be adversely affected, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We will require a significant amount of cash to fund our capital investment program.

Our business requires maintenance capital expenditures in order to maintain production levels adequate to meet the demand for our products, as well as other capital expenditures to implement our business strategy. We spent RUB 4.8 billion during 2018 on our capital expenditures (including RUB 2.4 billion in maintenance capital expenditures). In planning for 2019, we followed our current investment policy focusing only on those items that are either close to completion or are of major importance for our operations. Our capital investment program currently contemplates capital spending of up to RUB 12.6 billion in 2019 (including up to RUB 6.5 billion in maintenance capital expenditures). A considerable part of the planned capital expenditures relate to the renewal of mining-and-transport equipment and to the development of the Elga coal deposit. The Elga capital expenditures are planned in the amount of approximately RUB 7.9 billion to be financed from our own funds in 2019-2021. Overall, we plan to spend up to RUB 33.0 billion for the three-year period of 2019-2021 on capital investments (including up to RUB 18.3 billion in maintenance capital expenditures). See “Item 4. Information on the Company — Capital Investment Program.”

Our ability to undertake and fund planned capital expenditures will depend on our ability to generate cash in the future and access debt financing. Lack of liquidity may jeopardize our capital expenditure plans, see “— We have experienced and may continue to experience liquidity shortages and a working capital deficit.” This, to a certain extent, is subject to general economic and market conditions, financial, competitive, legislative, regulatory and other factors (including the status of international sanctions against Russian companies and individuals, as well as sanctions imposed on certain types of products in different sectors) that are beyond our control. Raising debt financing for our capital expenditures on commercially reasonable terms (or at all) may be particularly challenging given our current high levels of indebtedness and restrictive covenants imposed under the loan agreements. Any deterioration in our operating performance, including due to a worsening of economic conditions, fall in commodity prices and/or financial, business or other factors, many of which are beyond our control, may adversely and materially affect our cash flow which may leave us unable to conduct our capital expenditure plans as necessary or required, which could adversely affect our business and our ability to comply with applicable regulations.

Changes in the exchange rate of the ruble against the U.S. dollar and the euro and in interest rates may materially adversely affect our business, financial condition and results of operations.

Part of our sales are denominated in U.S. dollars, whereas the majority of our direct costs are incurred in rubles. In addition, we have foreign currency loans that are denominated in U.S. dollars and euros. Depreciation

in real terms of the ruble against the U.S. dollar may result in a decrease in our costs relative to our export revenues assuming a stable level of prices for our products. Also, depreciation in real terms of the ruble against the U.S. dollar and/or euro may result in a reduction in our ability to service debt obligations denominated in U.S. dollars or euros in case of a sharp decline in sales in general and sales denominated in foreign currencies in particular. Conversely, appreciation in real terms of the ruble against the U.S. dollar may materially adversely affect our results of operations if the prices we are able to charge for our products do not increase sufficiently to compensate for the increase in real terms in our ruble-denominated expenditures. In 2018, the ruble depreciated in real terms against the U.S. dollar and the euro by 6.3% and 9.8%, respectively, as compared to 2017, according to the CBR.

In an effort to protect the country's foreign currency reserves from substantial depletion, the CBR moved to a free floating exchange rate regime in November 2014. In response to continuing ruble depreciation, the CBR in an unexpected, emergency meeting in December 2014 increased its key rate, which determines the borrowing costs for commercial banks, from 10.5% to 17%. The CBR subsequently decreased the key rate several times between 2015 and early 2018 to 7.25%, before increasing the key rate in late 2018 to 7.75%. Upon restructuring, interest rates under our ruble-denominated facilities with Russian state banks are linked to the CBR key rate (plus a margin above the key rate). Should the CBR key rate continue to increase, or should interest rates under our existing facility agreements otherwise increase, we will face higher borrowing costs, which could have a material adverse effect on our business, cash flows, financial condition, results of operations and prospects.

Inflation could increase our costs and decrease operating margins.

In 2018, 2017 and 2016, the consumer price inflation rate in Russia was 4.3%, 2.5% and 5.4%, respectively, according to the Russian Federal State Statistics Service ("Rosstat"). The record low levels of inflation in Russia in 2016 and 2017 were due to the tight monetary policy of the CBR and slowing growth of prices on consumer goods and services. The increase in 2018 as compared to 2017 was primarily due to the depreciation of the ruble and an increase in prices on consumer goods and services. Inflation increases our operating costs on monetary items, which are sensitive to rises in the general price level in Russia, including fuel and energy costs, the cost of production services and salaries (as under existing collective bargaining agreements, wage indexation takes inflation into account). Inflation could also potentially increase the prices we can charge for our products. The impact of inflation on our operating margins depends on whether we can charge higher prices corresponding with the increase in costs. Nevertheless, there is a high risk that inflation will have an overall negative impact on our operating margins.

If limitations on the conversion of rubles into foreign currencies in Russia are imposed, this could cause us to default on our obligations.

Part of our indebtedness and part of our capital expenditures are payable in foreign currencies, including the U.S. dollar and the euro. Russian legislation currently permits the conversion of ruble revenues into foreign currency without limitation. If the Russian authorities were to impose limitations on the convertibility of the ruble or other restrictions on operations with rubles and foreign currencies in the event of an economic crisis or otherwise, there may be delays or other difficulties in converting rubles into foreign currency to make a payment or delays in or restrictions on the transfer of foreign currency. This, in turn, could limit our ability to meet our payment and debt obligations, which could result in the loss of suppliers, acceleration of debt obligations and cross-defaults and, consequently, have a material adverse effect on our business, financial condition, results of operations and prospects.

Our business could be materially adversely affected if creditors of certain of our subsidiaries accelerate their debt.

If we decide to merge certain subsidiaries for operational reasons from time to time, under Russian law such mergers are considered to be a reorganization and the merged subsidiaries are required to publish the information

regarding this reorganization twice: the first publication due at the beginning of the reorganization and the second to follow one month after the first publication. Russian law also provides that, for a period of 30 days after the date of latest publication, the creditors of merging subsidiaries have a right to file a claim seeking acceleration of the reorganized subsidiaries' indebtedness and demand reimbursement for applicable losses, except in cases where the creditors have adequate security or are provided with adequate security within 30 days after filing of such claim. In the event that we undertake any such merger and all or part of our subsidiaries' indebtedness is accelerated, we and such subsidiaries may not have the ability to raise the funds necessary for repayment, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Russian law restrictions on depositary receipt programs limit our access to equity capital and constrain our refinancing options.

Russian companies are limited in their ability to place shares in circulation outside of Russia, including in the form of depositary receipts such as our common American Depositary Shares (“**common ADSs**”) and our Global Depositary Shares (“**GDSs**”), each representing our common shares, as well as our preferred American Depositary Shares representing our preferred shares (“**preferred ADSs**,” and together with the common ADSs, the “**ADSs**”) due to Russian securities regulations. We received permission from the Russian Federal Financial Markets Service (“**FFMS**”) for up to 40% of our common shares to be circulated abroad through depositary receipt programs, which was the maximum amount allowed at that time. Later we also received FFMS permission for a total of 41,627,074 preferred shares to be circulated through depositary receipt programs, representing 30% of the total number of issued preferred shares, which was the maximum amount allowed at that time. Currently, Russian securities regulations provide that no more than 25% of the total number of a Russian company's shares may be placed and circulated abroad through depositary receipt programs or otherwise. It is unclear whether the FFMS's approvals of higher amounts prior to the establishment of this lower limit will be allowed to remain in place. As of December 31, 2018, our common ADSs and GDSs together accounted for approximately 29% of our common shares, and accordingly we believe we cannot raise additional equity financing through placement of common shares in the form of depositary receipts. If the current limit is enforced, Deutsche Bank Trust Company Americas (the “**depositary**”) may be forced to cancel some of our common ADSs and GDSs and deliver a corresponding number of the underlying common shares to holders of common ADSs or GDSs. The Russian government or its agencies may also impose other restrictions on international financings by Russian issuers.

We had in the past material weaknesses in our internal control over financial reporting, and we make no assurances that any material weaknesses will not be identified in the future.

Management identified material weaknesses in our internal control over financial reporting as defined in Rule 12b-2 under the Securities Exchange Act of 1934 and Rule 1-02 of Regulation S-X that affected our financial statements for the years ended December 31, 2006, 2007, 2008, 2009, 2010, 2011, 2015 and 2016. Due to the effect of these material weaknesses, our auditors opined that we did not maintain effective internal control over financial reporting as of December 31, 2006, 2007, 2008, 2009, 2010, 2011, 2015 and 2016 under Section 404 of the Sarbanes-Oxley Act of 2002.

The latest material weakness was that we failed to operate effective controls over the IFRS financial statements close process, and this material weakness was disclosed as of December 31, 2016. We have implemented and executed our remediation plan, and as of December 31, 2017, the remediation plan activities were tested and the material weakness was considered as remediated. However, we make no assurances that no significant deficiencies or material weaknesses in our internal control over financial reporting will be identified in the future. Our failure to implement and maintain effective internal control over financial reporting could result in errors in our financial statements that could result in a restatement of financial statements, cause us to fail to meet our reporting obligations and cause investors to lose confidence in our reported financial information, leading to a decline in the market price of our shares and ADSs.

We may incur impairments to goodwill or other non-current assets which could negatively affect our future profits.

We assess, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, we estimate the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or a cash-generating unit's fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, we use assumptions that include estimates regarding the discount rates, growth rates and expected changes in selling prices, sales volumes and operating costs, as well as capital expenditures and working capital requirements during the forecasted period. The estimated future cash flows expected to be generated by the asset, when the quoted market prices are not available, 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. The growth rates are based on our growth forecasts, which are largely in line with industry trends. Changes in selling prices and direct costs are based on historical experience and expectations of future changes in the market. In determining fair value less costs of disposal, recent market transactions are taken into account.

We base our impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of our group's cash-generating units to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. A long-term growth rate is calculated and applied to project future cash flows after the fifth year.

For a cash-generating unit involved in mining activity future cash flows include estimates of recoverable minerals that will be obtained from proved and probable reserves, mineral prices (considering current and historical prices, price trends and other related factors), production levels, capital and reclamation costs, all based on the life of mine models prepared by our engineers.

Impairment losses of continuing operations are recognized in the consolidated statement of profit (loss) and other comprehensive income in expense categories consistent with the function of the impaired asset.

For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognized impairment losses no longer exist or have decreased. If such indication exists, we estimate the asset's or the cash-generating unit's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the consolidated statement of profit (loss) and other comprehensive income unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

Goodwill is tested for impairment annually as of December 31 and when circumstances indicate that the carrying value may be impaired.

Impairment is determined for goodwill by assessing the recoverable amount of each cash-generating unit (or group of cash-generating units) to which the goodwill relates. When the recoverable amount of the cash-generating unit is less than its carrying amount, an impairment loss is recognized. Impairment losses relating to goodwill cannot be reversed in future periods.

The amount of goodwill on our balance sheet as of December 31, 2018 that is subject to impairment analysis is RUB 18,421 million or 6% of our total assets. This amount includes goodwill of Yakutugol, Southern Kuzbass

Power Plant, Kuzbass Power Sales Company and Port Posiet of RUB 13,399 million, RUB 2,382 million, RUB 1,026 million and RUB 756 million, respectively, as of December 31, 2018. See note 18 to the consolidated financial statements.

Based on the results of the impairment analysis of goodwill we performed as of December 31, 2018, an impairment loss of RUB 2,382 million was recognized. According to the results of the impairment analysis of non-current assets as of December 31, 2018, an impairment loss of RUB 2,269 million was recognized. See note 18 to the consolidated financial statements.

We continue to monitor relevant circumstances, including consumer levels, general economic conditions and market prices for our products, and the potential impact that such circumstances might have on the valuation of our goodwill and non-current assets. It is possible that changes in such circumstances, or in the numerous variables associated with our judgments, assumptions and estimates made in assessing the appropriate valuation of goodwill and recoverable value of non-financial assets, could in the future require us to further reduce our goodwill and non-financial assets and record related non-cash impairment charges. If we are required to record additional impairment charges, this could have a material adverse impact on our results of operations or financial position.

Risks Relating to Our Business and Industry

We operate in cyclical industries, and any local or global downturn, whether or not primarily affecting the mining and/or steel industries, may have an adverse effect on our business, financial condition, results of operations and prospects.

Our mining segment sells coal (metallurgical and steam), iron ore concentrate, coke and chemical products. These commodities are traded in markets throughout the world and are influenced by various factors beyond our control, such as global economic cycles and economic growth rates. Prices of these products have varied significantly in the past and could vary significantly in the future. For example, in 2018, coal prices were highly volatile. According to Metals & Mining Intelligence (“**MMI**”), a private information and research company, hard coking coal spot prices fluctuated in a wide range of \$173-249 per tonne (FOB Australia).

Our steel segment sells steel products, including semi-finished products, long products of a wide range of steel grades, carbon and stainless flat products, wire products, stampings and forgings and others, as well as ferrosilicon. Ferrosilicon is primarily used in the manufacture of steel and its market demand generally follows the cycles of the steel industry. The steel industry is highly cyclical in nature because the industries in which steel customers operate are subject to changes in general economic conditions. The demand for steel products thus generally correlates to macroeconomic fluctuations in the economies in which steel producers sell products, as well as in the global economy. The prices of steel products are influenced by many factors, including demand, worldwide production capacity, capacity-utilization rates, raw materials costs, exchange rates, trade barriers and improvements in steelmaking processes. Steel products prices have experienced, and in the future may experience, significant fluctuations as a result of these and other factors, many of which are beyond our control.

Our power segment generates and supplies power resources. Power demand in Russia depends on its consumption by the industrial sector, as well as other factors, including the outside air temperature. In Russia, the steel and mining industries are major consumers of power and the level of production of steel and mining companies impact demand for power. Market demand for the power produced by our power segment is affected by many of the same factors and cycles that affect our mining and metals businesses.

As a result of the global economic crisis that began in the late 2000s and the subsequent global economic slowdown, the demand and prices for our products sharply declined. The continuing stagnation of economies in Europe, the 2012-2018 economic slowdowns in Asia, primarily in China, as well as the existing uncertainty as to global economic growth in the near future, trade tensions between China and the United States and international

sanctions against Russia and Russian individuals or businesses, may have adverse consequences for our customers and our business as a whole. See “— Risks Relating to the Russian Federation — Sanctions imposed by the United States and the European Union, as well as other politically related disagreements and allegations between Russia and other countries, may have a material adverse effect on our business, liquidity and financial condition, as well as the trading market for and value of our shares and ADSs.”

Prices for our products, including coal, iron ore, metals, ferrosilicon and power, as well as the prices of coal, iron ore, ferroalloys, power and natural gas and other commodities and materials we purchase from third parties for the production of our products, fluctuate substantially over relatively short periods of time and expose us to commodity price risk. We do not use options, derivatives or swaps to manage commodity price risk. We use our vertically integrated business model and intersegment sales, as well as short-term and long-term purchase and sales contracts with third-party suppliers and customers, to manage such risk. In addition, the length and pricing terms of our sales contracts on certain types of products are affected and can be regulated by orders issued by Russian antimonopoly authorities. In particular, pursuant to a directive issued to us by the Russian Federal Antimonopoly Service (“FAS”) in August 2008, we entered into long-term contracts for supply of certain grades of our coking coal with a formula of price calculation and with fixed volumes for the entire period of the contract. See “— Antimonopoly regulation could lead to sanctions with respect to the subsidiaries we have acquired or established or our prices, sales volumes and business practices.” Terms of sales of other types of our products may also be affected by regulations of the authorities. We cannot assure you that our strategies and contracting practices will be successful in managing our pricing risk or that they will not result in liabilities. If our strategies to manage commodity price risk and the impact of business cycles and fluctuations in demand are not successful, it could have a material adverse effect on our business, financial condition, results of operations and prospects.

The steel and mining industries are highly competitive, and we may not be able to compete successfully.

We face competition from Russian and international steel and mining companies. Consolidation in the steel and mining sectors globally has led to the creation of several large producers, some of which have greater financial resources and more modern facilities than our group. We also face price-based competition from producers in emerging market countries, including, in particular, Mongolia, Poland and Columbia (in the export of raw materials for metallurgy) and China, Ukraine, Turkey and Kazakhstan (in the export of semi-finished products and rolled products). Increased competition could result in more competitive pricing and reduce our operating margins.

Our competitiveness is based in part on our operations in Russia having a lower cost of production than competitors in higher-cost locations. We have been facing a consistent upward trend in the past several years in production costs, particularly with respect to wages and transportation. For example, our rail transportation costs increased consistently during the last three years with the railway tariff increases of 9.0% in 2016, 6.08% in 2017 and 5.4% in 2018. In addition, for export traffic, with certain exceptions, there was an additional increase to railway tariffs of 13.4% in 2016, 10.0% in 2017 and 8.0% in 2018. See “— A limited capacity of the railway infrastructure and an increase in railway tariffs expose us to uncertainties regarding transportation costs of raw materials and steel products,” “— Increasing costs of electricity, natural gas, diesel fuel and labor could materially adversely affect our operating margins” and “— Inflation could increase our costs and decrease operating margins.” If these production costs continue to increase in the jurisdictions in which we operate, our competitive advantage will be diminished, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Changes in our estimates of reserves or failure to implement mine development plans could result in lower than expected revenues, higher than expected costs or decreased operating margins.

We base our reserve information on engineering, economic and geological data which is assembled, analyzed and reviewed by our staff, which includes various engineers and geologists, annually and which is

reviewed by independent mining engineers as of the acquisition dates as part of business combinations. The reserve estimates as to both quantity and quality are periodically updated to reflect production from reserves and new drilling, engineering or other data received. There are numerous uncertainties inherent in estimating quantities and qualities and the costs to mine recoverable reserves, including many factors beyond our control. Estimates of economically recoverable reserves and net cash flows necessarily depend upon a number of variable factors and assumptions, such as geological and mining conditions which may not be fully identified by available exploration data or which may differ from our experience in current operations, projected rates of production in the future, historical production from the area compared with production from other similar producing areas, the assumed effects of regulation and taxes by governmental agencies and assumptions concerning prices, operating costs, mining technology improvements, mineral extraction and excise tax, development costs and reclamation costs, all of which may vary considerably from actual results. In addition, it may take many years from the initial phase of drilling before production is possible. During that time, the economic feasibility of exploiting a discovery may change as a result of changes in the market price of the relevant commodity. Mine development plans may have to be revised due to geological and mining conditions and other factors described above, as well as due to shortages in capital funding. Our planned development projects also may not result in significant additional reserves and we may not have continuing success developing new mines or expanding existing mines beyond our existing reserves.

The financial performance of our mining segment depends substantially on our ability to mine coal reserves that have the geological characteristics that enable them to be mined at competitive costs and to meet the quality needed by our customers. Actual tonnage recovered from identified reserve areas or properties and revenues and expenditures with respect to our reserves may vary materially from estimates. Replacement reserves may not be available when required or, if available, may not be capable of being mined at costs comparable to those characteristic of the depleting mines. Our ability to obtain other reserves through acquisitions in the future could be limited by restrictions under our existing or future loan agreements, competition from other mining companies for attractive properties, the lack of suitable acquisition candidates or the inability to acquire mining properties on commercially reasonable terms. Furthermore, we may not be able to mine all of our reserves as profitably as we do at our current operations due to increases in wages, power and fuel prices and other factors.

Therefore, changes in our estimates of reserves or failure to implement mine development plans could result in lower than expected revenues, higher than expected costs or decreased operating margins.

The development of the Elga coal deposit is subject to certain risks due to the substantial amount of capital costs involved in developing the required infrastructure.

The risks associated with the development of the Elga coal deposit have the potential to impact the project's legal or economic viability. Key risks include the following: (1) the early termination, suspension or restriction of the right of subsoil use of the Elga coal deposit in case of any violation of the requirements of the deposit development technical plan; (2) the project requires significant capital expenditures to develop the required production and washing facilities and infrastructure, and increases in planned capital and operating costs could make the project uneconomical because of the project's sensitivity to these costs; (3) the economic viability of the project is dependent upon the full use of the rail line; (4) the project is very sensitive to market prices for coal because of the high initial capital costs; and (5) the insufficient capacity of ports in the Russian Far East where the Elga deposit is located may limit the distribution of coal mined at the Elga deposit. In addition, capital expenditures for the rail line were not considered in the calculation of reserves estimates as we do not plan to use the rail line solely for delivery of coal from the Elga deposit. The realization of any of these risks could have a material adverse effect on our business, financial condition, results of operations and prospects. While we have already invested approximately RUB 76.7 billion in the development of the Elga coal deposit (out of which approximately RUB 64.5 billion was invested in the construction of the rail line) as of December 31, 2018, its further development requires a substantial amount of investment. Based on the expected financial capabilities of the group in view of the current and projected market conditions for our main products, we plan to invest in Elga from our own funds approximately RUB 7.9 billion in 2019-2021. In 2013 and 2014, our subsidiary Elgaugol and

State Corporation “Bank for Development and Foreign Economic Affairs (Vnesheconombank)” (“**Vnesheconombank**”) signed a \$150.0 million bridge loan agreement and a \$2.5 billion main project financing loan agreements for the development of the Elga coal deposit. Disbursement under the main project financing loan agreements was subject to fulfillment of conditions precedent. Elgaugol has not fulfilled these conditions and Vnesheconombank has suspended and subsequently terminated the financing. In September 2017, our debt obligations in a total amount of approximately \$183.1 million were refinanced by Vnesheconombank.

Successful implementation of our strategy to expand our coal sales depends on our ability to increase our export sales.

Our strategy to expand our coal sales, particularly high-grade coking coal and pulverized, or finely crushed, coal for injection (“**PCT**”), is substantially dependent on our ability to increase our production and exports of these products through ports in the Russian Far East to other countries, particularly Japan, China, South Korea and other Pacific Rim countries. We face a number of obstacles to this strategy, including oversupply and low demand, trade barriers and sales and distribution challenges, as well as restrictions imposed by antimonopoly legislation.

Currently, key ports in the Russian Far East have limited cargo-handling capacity, lack adequate port facilities and aging equipment. In particular, the limited capacity of the railways connecting to these ports 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 program, 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, an open joint-stock company wholly owned by the Russian government, must be better coordinated. In addition, the shortage and poor condition of the locomotive fleet of Russian Railways, as well as major railway track repairs by Russian Railways in the summer months, result in restrictions on cargo volumes and increases in delivery times. 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.

Although the total annual capacity of the Baikal-Amur Mainline to which our Elga deposit is connected by our private rail line is gradually increasing upon implementation of a set of actions set forth in the State Program of the Russian Federation “Development of Transport System,” its capacity will need to be further expanded in order to comply with the general declared volumes for cargo transportation on the Baikal-Amur Mainline. Furthermore, in 2016, Russian Railways increased the capacity of the Komsomolsk-on-Amur-to-Sovetskaya Gavan segment, which connects the Baikal-Amur Mainline to Port Vanino. However, this increase may not be sufficient as other cargo shippers may also substantially increase their cargo volumes on the Baikal-Amur and Trans-Siberian Mainlines and further in the direction from Komsomolsk-on-Amur to the Sovetskaya Gavan transportation hub. 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 existing port capacity. In light of this shortage, Russian coal producers have endeavored to acquire ports or separate terminals to ensure the export of their products.

Our ability to increase coking coal export volumes is also limited by requirements to first satisfy Russian domestic coal demand, pursuant to a FAS directive issued to us in August 2008. See “— Antimonopoly regulation could lead to sanctions with respect to the subsidiaries we have acquired or established or our prices, sales volumes and business practices.” Failure to successfully manage the obstacles and tasks involved in the implementation of our export sales strategy could have a material adverse effect on our business, financial condition, results of operations and prospects.

In the event the title to the shares of any company we acquired is successfully challenged, we risk losing our ownership interest in that company or its assets.

Almost all of our Russian assets consist of companies formed during the course of Russian privatizations in the 1990s and early 2000s and generally we acquired shares in these companies from third parties after their respective privatizations. Many privatizations are arguably deficient and, therefore, vulnerable to challenge because the relevant privatization legislation is vague, inconsistent or in conflict with other legislation. In the event that the privatization of any of our companies is successfully challenged, we could risk losing our ownership interest in that company or its assets, which could materially adversely affect our business, financial condition and results of operations.

In addition, under Russian law transactions in shares may be invalidated on many grounds, including a sale of shares by a person without the right to dispose of such shares, breach of interested party and/or major transaction rules and/or the terms of transaction approvals issued by governmental authorities, or failure to register the share transfer in the securities register. As a result, defects in earlier transactions with shares of our subsidiaries (where such shares were acquired from third parties) may cause our title to such shares to be subject to challenge.

Our business could be adversely affected if we fail to obtain or extend necessary subsoil licenses and permits or fail to comply with the terms of our subsoil licenses and permits.

Our business depends on the continuing validity of our subsoil licenses and the issuance of new and extended subsoil licenses and our compliance with the terms thereof. In particular, in estimating our reserves, we have assumed that we will be able to renew our Russian subsoil licenses as and when necessary in the ordinary course of business so that we will be able to exploit the resources under such licenses for the operational life of the relevant subsoil plot. See “Item 4. Information on the Company — Regulatory Matters — Subsoil Licensing in Russia — Extension of licenses” and “— Mining Segment — Mineral reserves.” However, license extension is subject to the licensee being in compliance with the terms of the license. Our experience with license extensions and publicly available information about current market practice and available court practice suggest that regulatory authorities tend to focus on such terms of the license as production levels, operational milestones and license payments, which are considered to be material terms of the license. Nevertheless, there is no assurance that this approach will be consistently applied by the regulatory authorities and the courts, or that this approach will not change in the future. Regulatory authorities exercise considerable discretion in the timing of license issuance, extension of licenses and monitoring licensees’ compliance with license terms. Subsoil licenses and related agreements typically contain certain environmental, safety and production commitments. See “Item 4. Information on the Company — Regulatory Matters — Subsoil Licensing in Russia — Maintenance and termination of licenses.” If regulatory authorities determine that we have violated the material terms of our licenses, it could lead to rejection of our license extensions or suspension or termination of our subsoil licenses, and to administrative and civil liability. In addition, requirements imposed by relevant authorities may be costly to implement and result in delays in production. Our subsoil licenses expire on dates falling in 2020 through 2037. See the tables setting forth expiry dates of our Russian subsoil licenses in “Item 4. Information on the Company — Mining Segment” and reserves information. Accordingly, these factors may seriously impair our ability to operate our business and realize our reserves which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We currently do not comply with the material terms of certain Russian subsoil licenses. In particular, we failed to commence commercial coal production at the Rapsadsk license area (part of Olzherassky Open Pit) in 2009 as required by the license due to unfavorable mine economics, but expect to commence such production in the fourth quarter of 2019. In addition, we commenced preparation for the commercial development of the Yerunakovsk-1, Yerunakovsk-2 and Yerunakovsk-3 license areas, but failed to commence commercial production at these subsoil areas in 2011 as required by the licenses due to unfavorable mine economics. As a result, in April 2017, the subsoil use right for the Yerunakovsk-2 license area was early terminated by Rosnedra.

Moreover, we cannot fully develop the deposit at the Yerunakovsk-3 license area due to the presence of a third-party sludge pond in this area. Furthermore, we failed to commence commercial coal production at the Olzherassk license area (Olzherasskaya-Glubokaya Underground) in 2012 due to unfavorable mine economics and the significant capital investments required to develop this license area. In addition, we did not meet the deadlines of exploration completion and preparation for the commercial development of the Pionerskoye and the Sivaglinskoye iron ore deposits due to lack of financing. The Yerunakovsk-1, Yerunakovsk-3 and Olzherassk (Olzherasskaya-Glubokaya Underground) license areas are not counted for the purposes of our coal reserves.

Increasing costs of electricity, natural gas, diesel fuel and labor could materially adversely affect our operating margins.

In 2018, our Russian operations purchased through Mechel Energo approximately 3.3 billion kilowatt-hours (“kWh”) of electricity at a total cost of approximately RUB 9.1 billion, implying an average cost of RUB 2.8 per kWh. According to the Ministry of Economic Development of the Russian Federation estimates, the average increase in market prices in the wholesale electricity market was 7% in 2018, and is expected to be 11% in 2019. Further price increases for electricity may also occur in the future due to the increase in fuel prices.

Our Russian operations also purchase significant amounts of natural gas, primarily for the production of power resources at our own co-generation facilities, from Novatek PAO (“**Novatek**”), Russia’s largest independent producer of natural gas, Rosneft Oil Company (“**Rosneft**”), the government-controlled leader of Russia’s petroleum industry, and Gazprom PAO (“**Gazprom**”), the government-controlled dominant gas producer and the owner of the unified gas supply system of Russia. Domestic natural gas prices are regulated by the Russian government. In 2018, we purchased approximately 1.9 billion cubic meters of gas at a total cost of approximately RUB 7.5 billion. Russian domestic natural gas prices are significantly below Western European levels, which provides us with a cost advantage over our competitors, an advantage which may diminish as Russian domestic gas prices approach Western European levels. Starting from August 21, 2018, the FAS set wholesale prices of gas produced by Gazprom for domestic consumers on the territory of the Russian Federation, except for households, in the range of RUB 2,574 to RUB 5,097 per thousand cubic meters, as compared to prices set for the previous period which were set starting from July 1, 2017 in the range of RUB 2,489 to RUB 5,097 per thousand cubic meters, depending on the region of the Russian Federation where the gas is purchased.

We use petroleum products, in particular diesel fuel, as fuel for technological transport in our mining operations. In 2018, our Russian operations purchased approximately 171.8 thousand tonnes of diesel fuel at a total cost of approximately RUB 7.8 billion. The Russian diesel fuel market is controlled by a limited number of oil companies, including our major suppliers such as Rosneft, Gazprom Neft PJSC, TATNEFT PJSC and LUKOIL PJSC. There is a free pricing regime for commercial consumers of petroleum products in Russia.

Following raw materials used in the production process and energy-related costs, our labor costs are the next most significant operational cost. Labor costs in Russia have historically been significantly lower than those in the more developed market economies of North America and Western Europe for similarly skilled employees. However, the average wage in the Russian Federation has increased in recent years, for example, by 0.8% and 2.9% in 2016 and 2017, respectively, according to Rosstat. Labor costs in Russia are indexed to and adjusted for inflation, which means that in the future labor costs may rise and our advantage with respect to our competitors with foreign operations that have historically had to pay higher average wages than those paid in Russia may be reduced.

Higher costs of electricity, natural gas, diesel fuel and labor could negatively impact our operating margins, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

A limited capacity of the railway infrastructure and an increase in railway tariffs expose us to uncertainties regarding transportation costs of raw materials and steel products.

Railway transportation is our principal means of transporting raw materials and steel products to our facilities and to customers in Russia and abroad. The Russian rail system is controlled by Russian Railways, which is a state-sanctioned monopoly responsible for the management of all Russian railroads. 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 the applicable tariff. These rail freight prices are subject to annual adjustment based on, among other factors, inflation and the funding requirements of Russian Railways' capital investment program, which is in turn affected by the acute need to upgrade track infrastructure and passenger- and cargo-handling facilities.

Our cargoes are currently transported in the railcars owned by our subsidiary Mecheltrans or third-party railcar owners, mainly to transport coal products and iron ore concentrate. Mecheltrans works with third-party railcar owners to arrange for transportation and forwarding cargoes with their railcars. The most significant railcar owners used by Mecheltrans for rail transportation include Federal Freight JSC, NefteTransService and TFM-Operator. In 2018, our freight volume transported by third-party railcar owners amounted to 18.4 million tonnes, for which we paid RUB 9.8 billion.

In 2018, railway tariffs were indexed by 5.4%. Starting from January 1, 2019, railway tariffs have increased by an additional 3.6%. Along with the growth of tariff levels, a disruption in the transportation of our raw materials and products may occur. In recent years, the ban to extend the service life of railcars, the shortage of spare parts for their repair, as well as the deficit of the railcar fleet as a result of scheduled railway track repairs have led to a significant increase in prices of rolling stock operators' services and a reduction in volume of transported cargo, including our cargo. All of the above factors may continue in the future and negatively impact our operating margins, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We face certain trade restrictions in the export of ferrosilicon to the European Union.

In February 2008, an antidumping duty in the amount of 17.8% was imposed on exports to the European Union of ferrosilicon produced by our subsidiary Bratsk Ferroalloy Plant for a period of five years. In February 2013, the European Commission initiated an expiry review of the antidumping measures applicable to imports of ferrosilicon. In April 2014, the antidumping duty was extended for another five years. In July 2018, the European Commission issued a notice of the impending expiry of certain antidumping measures stating that the antidumping duty will expire in April 2019 unless EU ferrosilicon producers submitted a written request for review which contains sufficient evidence that the expiry of the measures would be likely to result in a continuation or recurrence of dumping and injury. Currently, we cannot predict whether the antidumping duty will expire as scheduled. However, even if this antidumping measure expires, we may face additional antidumping duties and other trade restrictions in the European Union, the United States and other markets in the future. See "Item 4. Information on the Company — Steel Segment — Trade restrictions."

We benefit from Russia's tariffs and duties on imported steel, many of which have been reduced upon Russia's WTO membership and may be eliminated in the future.

Russia has in place import tariffs with respect to certain imported steel products that are generally advantageous to our business. These tariffs generally amount to 5% of the value of the imports. Almost all of our sales of steel products in Russia were protected by these import tariffs in 2018. The Republic of Belarus, the Republic of Kazakhstan and the Russian Federation entered into a Customs Union and implemented a Common Customs Tariff, which came into force on January 1, 2010, reducing import duties on stainless rolled products from 15% to 5%. Further, the Republic of Belarus, the Republic of Kazakhstan and the Russian Federation

established the Eurasian Economic Union which was enlarged in 2015 to include the Republic of Armenia and the Kyrgyz Republic. Creation of the Customs Union, as well as other actions and decisions of the Russian authorities in respect of tariffs and duties, can lead to further reduction of import duties.

On November 20, 2013, the Eurasian Economic Commission initiated an antidumping investigation against imports of steel bars originating in Ukraine. In March 2016, the investigation was completed resulting in the imposition of antidumping duties for a period of five years. Therefore, we benefit from protection of the Eurasian Economic Union's market from low-priced import of steel bars.

Upon Russia's entry into the World Trade Organization ("WTO"), the import tariffs and duties of Russia were reduced or eliminated, depending on the type of steel products. In particular, according to the WTO accession terms Russian import duties on most types of steel products have been reduced to 5%, causing increased competition in the Russian steel market from foreign producers and exporters. A further reduction in such protective tariffs could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our exports to the European Union are subject to REACH regulations.

Chemical substances contained in some of our products, as well as by-products and waste, which we export to or produce in the European Union are subject to regulation (EC) No 1907/2006 on registration, evaluation, authorization and restrictions of use of chemicals ("REACH"). Under REACH, we must provide a registration dossier for such substances to the European Chemicals Agency ("ECHA"). In addition, we must provide the information about the registered substances usage and utilization to the competent authorities of the EU Member States and downstream users upon request. Beginning on January 1, 2019, ECHA will check the compliance of all relevant dossiers for a given substance and will address its decisions to all registrants with non-compliant dossiers. We believe that we are in compliance with current REACH requirements, and we will have to maintain certain resources to ensure compliance with further developing REACH requirements.

REACH provides for a special authorization regime for substances of high concern, including those that are identified from scientific evidence as causing probable serious effects to humans or the environment on a case-by-case basis. To obtain authorization, a manufacturer of substances of high concern is generally required to demonstrate that the risk from the use of the substance is adequately controlled. All substances under the authorization regime are subject to restrictions with respect to manufacture, placing on the market or use. The European Commission may amend or withdraw the authorization, even one given for adequate control, if suitable substitutes have become available. Currently, we do not believe that any of our products contain substances which may be subject to the authorization regime. There is no assurance that our products will not be subject to further restrictions or bans if any substance of high concern is detected in our products in excess of statutory thresholds, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

The European Commission amends the REACH regulation on an ongoing basis. Compliance with changes may lead to increased costs, modifications in operating practices and/or further restrictions affecting our products, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We are subject to mining and steelmaking operational risks.

Our operations, like those of other mining and steel companies, are subject to all of the hazards and risks normally associated with the exploration, development and production of natural resources, as well as the process of steelmaking, any of which could result in production shortfalls or damage to persons or property.

In particular, hazards associated with our open pit mining operations include, but are not limited to: (1) flooding of the open pit; (2) collapses of the open pit wall; (3) accidents associated with the operation of large

open pit mining and rock transportation equipment; (4) accidents associated with the preparation and ignition of large-scale open pit blasting operations; (5) deterioration of production quality due to weather; and (6) hazards associated with the disposal of mineralized waste water, such as groundwater and waterway contamination.

Hazards associated with our underground mining operations include, but are not limited to: (1) underground fires and explosions, including those caused by flammable gas; (2) cave-ins or ground falls; (3) emissions of gases and toxic chemicals; (4) flooding; (5) sinkhole formation and ground subsidence; and (6) other accidents and conditions resulting from drilling, blasting and removing and processing material from an underground mine, including due to human error.

Hazards associated with our steelmaking operations include, but are not limited to: (1) accidents associated with the transportation of molten metal; (2) emissions of flammable gases and toxic chemicals; (3) accidents caused by the interaction of wet materials (charge) with molten metal; and (4) other accidents associated with high melting points of metal, including due to human error.

We are at risk of experiencing any and all of these hazards. The occurrence of such hazards could delay production, increase production costs, result in injury to persons or death, and damage to property, as well as liability for us. In 2018, production accidents at our steelmaking operations resulted in three fatalities. Also, there was a spontaneous ignition of coal, which caused the temporary suspension of mining operations in 2018, but had no significant effect on our business. We implemented measures to cure the causes of these production accidents and occasions and we are implementing measures aimed at preventing accidents and occasions in the future and we are cooperating with the competent governmental authorities, in particular, the Russian Federal Service for Ecological, Technological and Nuclear Supervision (“**Rostekhnadzor**”).

The risk of occurrence of these hazards is also exacerbated by the significant level of age and use of the equipment of our enterprises. We are conducting a program of phased replacement and refurbishment of obsolete equipment in order to meet industrial safety requirements at our most hazardous facilities.

Abnormal weather conditions and natural hazards could negatively impact our business.

Our production facilities are located in different climate and weather conditions, and abnormal weather changes and natural hazards could affect their operations. Interruptions in electricity supply and transport communication could lead to delays in deliveries of raw materials to our production facilities and finished products to consumers, as well as a suspension of production. For example, in July 2017, an approximately 50 meters long wash-out of railway track on the Ulak-Elga rail line occurred as a result of heavy rains. Coal transportation from the Elga deposit was interrupted for 9 days until the full restoration of the railway. In August 2017, due to the typhoon Noru which came to Primorsky Krai, there was a power outage and wash-out of roads and a railway track towards Port Posiet, and as a result, all loading and unloading operations in the port were suspended for 10 days. The railway repair and restoration works lasted approximately two months, during which the transportation of goods to Port Posiet was limited. In addition, the existence of abnormally low temperatures for a long period of time may limit the work of the port infrastructure, crane equipment and mining-and-transport equipment. The negative impact of such abnormal or extreme climate and weather conditions may have an adverse effect on our business, financial condition, results of operations and prospects.

More stringent environmental laws and regulations or more stringent enforcement or findings that we have violated environmental laws and regulations could result in higher compliance costs and significant fines and penalties, or require significant capital investment, or even result in the suspension of our operations, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our operations and properties are subject to extensive environmental control and regulation in the jurisdictions in which we operate. For instance, our operations generate large amounts of pollutants and waste, some of which are hazardous, such as benzapiren, sulfur oxide, sulfuric acid, nitrogen ammonium, sulfates,

nitrites and phenicols. Some of our operations result in the creation of sludges, including sludges containing base elements such as chromium, copper, nickel, mercury and zinc. The creation, storage and disposal of such hazardous waste is subject to environmental regulations, including the requirement to perform decontamination and reclamation, such as cleaning up highly hazardous waste oil and iron slag. In addition, pollution risks and related costs are often impossible to assess unless environmental audits have been performed and the extent of liability under environmental and civil laws is clearly determinable. Furthermore, new and more stringent regulations have been introduced in a number of countries in response to the impacts of climate change. See “— Increased regulations associated with climate change and greenhouse gas emissions may give rise to increased costs and may adversely impact our business and markets.”

Environmental legislation in Russia is generally weaker and less stringently enforced than in the European Union or the United States. However, environmental laws and regulations are continually changing and are generally becoming more restrictive. New laws and regulations, the imposition of more stringent requirements for licenses, increasingly strict enforcement or new interpretations of existing environmental laws, regulations or licenses, or the discovery of previously unknown contamination, may require further expenditures to modify operations, install pollution control equipment or perform site clean-ups, the curtailment of operations or the payment of fees, fines and other penalties. Moreover, the introduction of more stringent environmental laws and regulations could lead to the need for new or additional rehabilitation and decommissioning reserves or to an increase in our environmental liabilities, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Based on the current regulatory environment in Russia and elsewhere where we conduct our operations, as of December 31, 2018, we have not created any reserves for environmental liabilities and compliance costs, other than an accrual in the amount of RUB 3,908 million for rehabilitation provision. Any change in this regulatory environment could result in actual costs and liabilities for which we have not provided.

In the course, or as a result, of an environmental investigation by the Russian governmental authorities, courts can issue decisions requiring part or all of the production at a facility that has violated environmental standards to be halted for a period of up to 90 days. We have been cited in Russia for various violations of environmental regulations in the past and we have paid certain fines levied by regulatory authorities in connection with these infractions. In June 2013, the Russian Federal Service for the Supervision of Natural Resources (“**Rosprirodnadzor**”) claimed RUB 398.6 million from Beloretsk Metallurgical Plant as compensation for damages caused by discharging waste water into the river Belaya and Beloretsk storage reservoir. This claim was resolved by means of a settlement agreement according to which Beloretsk Metallurgical Plant is obliged to reconstruct a waste treatment facilities system by December 31, 2023. See “Item 8. Financial Information — Litigation — Environmental and safety.” In February 2015, Rosprirodnadzor filed a similar claim in the amount of RUB 195.3 million against Beloretsk Metallurgical Plant. In accordance with the court’s decision, Beloretsk Metallurgical Plant was obliged to perform a set of measures for equipment modernization until July 1, 2017, instead of paying a fine. Beloretsk Metallurgical Plant carried out part of the prescribed measures which allowed to reduce discharge of polluted waste water into the environment and to reach the statutory standards. Currently, Beloretsk Metallurgical Plant has performed measures prescribed by the court. In addition, in November 2017, Rosprirodnadzor conducted an inspection of Port Posiet and ordered it to equip the port area with a rainwater sewage system by October 1, 2018. In October 2018, Rosprirodnadzor extended the implementation date of this order until September 30, 2019. In February 2018, the Khasansky District Court in Primorsky Krai also obliged Port Posiet to remedy violations of environmental and sanitary-epidemiological legislation until April 2019. Port Posiet has implemented preparatory works for commencement of construction of the required treatment facilities, and plans to apply for a stay of execution.

Though our production facilities have not been ordered to suspend operations due to environmental violations during the respective periods since we acquired or established them, there are no assurances that environmental protection authorities will not seek such suspensions in the future. In 2017, the Department of Rosprirodnadzor for the Chelyabinsk region cancelled the permit for emissions of pollutants into the atmosphere

issued to Mechel Coke. However, Mechel Coke challenged the cancellation, and, in February 2018, the cancellation was invalidated by a court. In general, the emission of pollutants into the atmosphere in the absence of an emissions permit is an administrative violation that may lead to the imposition of a fine or suspension of operations for up to 90 days. In addition, in the absence of the permit, much higher fee tariffs apply. In the event that production at any of our facilities is partially or wholly suspended due to this type of sanction, our business, financial condition, results of operations and prospects could be materially adversely affected.

Increased regulations associated with climate change and greenhouse gas emissions may give rise to increased costs and may adversely impact our business and markets.

Through our mining segment, we are a major producer of carbon-related products such as coal and coal concentrate. A major by-product of the underground mining of coal is methane (CH₄) and a major by-product of coal burning is carbon dioxide (CO₂), both of which are considered to be greenhouse gases and generally a source of concern in connection with global warming and climate change.

The December 1997 Kyoto Protocol established a set of greenhouse gas emission targets for developed countries that have ratified the Kyoto Protocol. In order to give the countries a certain degree of flexibility in meeting their emission reduction targets, the Kyoto Protocol developed mechanisms allowing participating countries to earn and trade emissions credits by way of implementing projects aimed at meeting the Kyoto Protocol targets. The European Union has established greenhouse gas regulations and many other countries are in the process of doing so. The European Union Emissions Trading System (“EU ETS”) has had an impact on greenhouse gas and energy-intensive businesses based in the European Union. Our operations in Lithuania are currently subject to the EU ETS, as are our EU-based customers.

The Russian Federation ratified the Kyoto Protocol in 2005 and, since October 2009, Russia has established a legal procedure for implementing trading mechanisms provided under the Kyoto Protocol. However, in 2012, Russia refused to sign up for the second period of limits set to begin in 2013 and remain in effect until 2020.

In December 2015 at the Paris climate conference, 196 countries adopted the United Nations Framework Convention on Climate Change which is due to enter into force in 2020. The agreement sets out a global action plan to avoid climate change. 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 Ecology of the Russian Federation has approved a number of methodology guidelines for the quantification of the amount of greenhouse gas emissions by organizations conducting business and other activities in Russia. In 2018, the Ministry of Economic Development of the Russian Federation proposed a draft law on state regulation of greenhouse gas emissions. This draft law, if enacted, would establish target limits for greenhouse gas emissions, general rules and guidelines for emitters and introduce permits for greenhouse gas emissions. The draft law is at an early stage of development, and it is hard to predict if or when it would be adopted into a law.

Further Russia’s steps on implementation of the United Nations Framework Convention on Climate Change could restrict our operations and/or impose significant costs or obligations on us, including requiring additional capital expenditures, modifications in operating practices, and additional reporting obligations. These regulatory programs may also have a negative effect on our production levels, profit and cash flows and on our suppliers and customers, which could result in higher costs and lower sales. Finally, we note 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 steel manufacturing industry could harm our reputation and reduce customer demand for our products.

Failure to comply with existing laws and regulations could result in substantial additional compliance costs or various sanctions which could materially adversely affect our business, financial condition, results of operations and prospects.

Our operations and properties are subject to regulation by various government entities and agencies in connection with obtaining and renewing various licenses, permits, approvals and authorizations, as well as with ongoing compliance with existing laws, regulations and standards. See “Item 4. Information on the Company — Regulatory Matters — Licensing of Operations in Russia.” Governmental authorities in countries where we operate exercise considerable discretion in matters of enforcement and interpretation of applicable laws, regulations and standards, the issuance and renewal of licenses, permits, approvals and authorizations, and in monitoring licensees’ compliance with the terms thereof which may result in unexpected audits, criminal prosecutions, civil actions and expropriation of property. For example, in November 2015, the Ministry for Investment and Development of the Republic of Kazakhstan unilaterally terminated the contract for the silicate nickel ore production at the Shevchenko deposit in Kazakhstan’s Kostanay region entered into in connection with the subsoil license for the Shevchenko deposit due to non-compliance with the terms of the contract. Governmental authorities have the right to, and frequently do, conduct periodic inspections of our operations and properties throughout the year.

Our failure to comply with existing laws and regulations or to obtain and comply with all approvals, authorizations and permits required for our operations or findings of governmental inspections may result in the imposition of fines or penalties or more severe sanctions including the suspension, amendment or termination of our licenses, permits, approvals and authorizations or in requirements that we cease certain of our business activities, or in criminal and administrative penalties applicable to our officers. Any such actions, decisions, requirements or sanctions could increase our costs and materially adversely affect our business, financial condition, results of operations and prospects.

The concentration of our shares with our largest shareholders will limit your ability to influence corporate matters and transactions with largest shareholders may present conflicts of interest, potentially resulting in the conclusion of transactions on less favorable terms than could be obtained in arm’s length transactions.

Our Chairman, Igor Zyuzin may be deemed to be the beneficial owner of approximately 26.67% of our common shares. Our Chairman’s wife Mrs. Irina Zyuzina and their son Mr. Kirill Zyuzin together may be deemed to be the beneficial owners of approximately 18.70% of our common shares each separately. Ms. Ksenia Zyuzina, daughter of Mr. Igor Zyuzin and Mrs. Irina Zyuzina, may be deemed to be the beneficial owner of approximately 23.87% of our common shares. Therefore, Mr. Igor Zyuzin and Mrs. Irina Zyuzina together beneficially own 45.37% of our common shares. See “Item 7. Major Shareholders and Related Party Transactions.” Except in certain cases as provided by the Federal Law “On Joint-Stock Companies,” dated December 26, 1995, as amended (the “**Joint-Stock Companies Law**”), resolutions at a general shareholders’ meeting are adopted by a majority of the voting stock at a meeting where shareholders holding more than half of the voting shares are present or represented. Accordingly, Mr. Zyuzin and his family members have the power to control the outcome of most matters to be decided by a majority of the voting stock present at a general shareholders’ meeting and can control the appointment of the majority of directors and the removal of all of the elected directors if they act in concert. In addition, our largest shareholders are likely to be able to take actions, which require a three-quarters supermajority of the voting stock present at such a general shareholders’ meeting, such as amendments to our charter, reorganization, significant sales of assets and other major transactions, if other shareholders do not participate in such meeting. Thus, our largest shareholders can take actions that you may not view as beneficial or prevent actions that you may view as beneficial, and as a result, the value of our common shares and ADSs could be materially adversely affected.

We have also engaged and will likely continue to engage in transactions with related parties, including our largest shareholder, which may present conflicts of interest, potentially resulting in the conclusion of transactions on less favorable terms than could be obtained in arm’s length transactions. See “Item 7. Major Shareholders and Related Party Transactions — Related Party Transactions.”

Our competitive position and future prospects depend on our senior management team.

Our ability to maintain our competitive position and to implement our business strategy is dependent on the performance of our senior management team and, in particular, Mr. Zyuzin, our Chairman and largest shareholder. Competition in Russia, and in the other countries where we operate, for senior management personnel with relevant expertise is intense due to the limited number of qualified individuals. The loss or decline in the services of members of our senior management team or an inability to attract, retain and motivate qualified senior management personnel could have a material adverse effect on our business, financial condition, results of operations and prospects.

Antimonopoly regulation could lead to sanctions with respect to the subsidiaries we have acquired or established or our prices, sales volumes and business practices.

Our business has grown substantially through the acquisition and founding of companies, many of which required the prior approval or subsequent notification of the FAS or its predecessor agencies. Relevant legislation restricts the acquisition or founding of companies by legal entities or individuals acting alone or jointly with their group of persons without such approval or notification. This legislation is vague in certain parts and subject to varying interpretations. If the FAS were to conclude that a company was acquired or created in contravention of applicable legislation and that competition has been or could be limited as a result, it could seek redress, including invalidating the transactions that led to or could lead to the limitation of competition, obliging the acquirer or founder to perform activities to restore competition, and seeking the dissolution of the new company created as a result of reorganization. Any of these actions could materially adversely affect our business, financial condition, results of operations and prospects.

In 2008, the FAS issued a number of directives to our companies placing certain restrictions on our business practices. On May 13, 2008, the FAS issued a directive ordering Mechel and Southern Kuzbass Coal Company, as a group of companies holding a dominant position in the Russian coking coal market, to fulfill the following requirements:

- to avoid the unjustified reduction of production volumes and product range at Southern Kuzbass Coal Company;
- to provide, to the extent possible, equal supply terms to all customers without discrimination against companies not forming part of this group of companies;
- not to restrict other companies from supplying coking coal to the same geographical area of operations; and
- to notify the FAS prior to any increase in domestic prices of coking coal and coking coal concentrate, if such increase amounts to more than 10% of the relevant price used 180 days before the date such increase is planned to take place, with submission to the FAS of the financial and economic reasoning for the planned increase of prices.

In connection with the establishment of Mechel Mining, the subsidiary into which we consolidated certain of our mining assets, we received a directive from the FAS dated June 23, 2008, which contains requirements as to the activities of Mechel Mining and its subsidiaries Yakutugol and Southern Kuzbass Coal Company, as a group of companies holding a dominant position in the Russian coking coal market. The requirements are the same as those described above.

In August 2008, as a result of an antimonopoly investigation into the business of our subsidiaries Mechel Trading House, Southern Kuzbass Coal Company, Yakutugol and Mechel Trading, the FAS found them to have abused their dominant position in the Russian market for certain grades of coking coal concentrate. The FAS issued a directive requiring these subsidiaries and their successors to, among others, refrain from taking any action in the Russian market for certain grades of coking coal concentrate which would or may preclude, limit or

eliminate competition and/or violate third parties' interests, including fixing and maintaining a monopolistically high or low price, refusing or avoiding to enter into an agreement with certain buyers without good economic or technological reasons where the production or supply of the relevant grades of coking coal concentrate is possible and creating discriminatory conditions for buyers. Furthermore, material fines were imposed on Mechel Trading House, Southern Kuzbass Coal Company and Yakutugol.

In the event of a breach of the terms of business conduct set forth by the FAS, the FAS may seek to impose fines for violations of antimonopoly and administrative legislation. Such fines may include an administrative fine of an amount from RUB 300,000 to RUB 1 million or, if such violation has led or may lead to the prevention, limitation or elimination of competition, an administrative fine of up to 15% of the proceeds from sale of all goods, works and services in the market where such violation was committed, but not more than 2% of the aggregate amount of proceeds from sale of all goods, works and services in case of abuse of a dominant position and not more than 4% of the aggregate amount of proceeds from sale of all goods, works and services in case of conclusion of an inadmissible agreement according to the law. Russian legislation also provides for criminal liability for violations of antimonopoly legislation in certain cases. Furthermore, for systematic violations, a court may order, pursuant to a suit filed by the FAS, a compulsory split-up or spin-off of the violating company, and no affiliation can be preserved between the new entities established as result of such a mandatory reorganization. The imposition of any such liability on us or our subsidiaries could materially adversely affect our business, financial condition, results of operations and prospects.

In 2016 and 2017, the FAS conducted large-scale inspections of companies engaged in loading, unloading and storage of cargoes in ports of the Russian Federation concerning justification of applied tariffs for services. Based on the findings, a number of companies were found to have violated antimonopoly legislation in part of setting monopolistically high prices for services and were required to pay significant funds to the state budget. Our group companies which provide services of loading, unloading and storage of cargoes in ports were not subject to proceedings for violation of antimonopoly legislation in part of setting monopolistically high prices, however a possibility of new inspections remains. In addition, the FAS has considered and, in the future, may consider repeated introduction of government regulation of tariffs for services of loading, unloading and storage of cargoes in ports which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Negative publicity associated with any antimonopoly, administrative, criminal or other investigation or prosecution carried out with respect to our business practices, regardless of the outcome, could damage our reputation and result in a significant drop in the price of our shares and ADSs and could materially adversely affect our business, financial condition, results of operations and prospects.

In the event that the minority shareholders of our subsidiaries were to successfully challenge past interested party transactions or do not approve interested party transactions in the future, we could be limited in our operational flexibility.

We own less than 100% of the equity interests in some of our subsidiaries. In addition, certain of our wholly-owned subsidiaries have previously had other shareholders. We and our subsidiaries have carried out, and continue to carry out, transactions among our companies which may be deemed controlling or controlled entities in relation to each other, as well as transactions with other parties which may be considered to be "interested party transactions" under Russian law. Since 2017, such transactions, generally, do not require prior consent of disinterested directors, disinterested independent directors or disinterested shareholders. However upon request of a sole executive body, a member of the collegial executive body, a member of the board of directors or a shareholder or group of shareholders holding in aggregate at least 1% of the voting shares, such prior consent must be obtained. The provisions of Russian law defining for which transactions a consent must be obtained are subject to different interpretations, and these transactions may not always be properly approved, including by former shareholders. We cannot make any assurances that our and our subsidiaries' applications of these rules will not be subject to challenge by shareholders. Any such challenges, if successful, could result in the

invalidation of transactions, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, Russian law requires a three-quarters majority of the voting stock present at a general shareholders' meeting to approve certain matters, including, for example, charter amendments, reorganizations, major transactions involving property in excess of 50% of the balance sheet value of the company's assets, acquisition by the company of outstanding shares and certain share issuances. In some cases, minority shareholders may not give prior consent to interested party transactions requiring their approval or other matters requiring approval of minority shareholders or supermajority approval. In the event that these minority shareholders or a shareholder holding at least 1% of the voting shares were to successfully challenge past interested party transactions, or do not approve or give prior consent to interested party transactions or other matters in the future, we could be limited in our operational flexibility and our business, financial condition, results of operations and prospects could be materially adversely affected.

A majority of our employees are represented by trade unions, and our operations depend on good labor relations.

As of December 31, 2018, approximately 55% of all our employees were represented by trade unions. Although we have not experienced any business interruption at any of our companies as a result of labor disputes from the dates of their respective acquisition by us, and we consider our relations with our employees to be good. Under Russian law, unions have the legal right to strike and other Russian companies with large union representation periodically face interruptions due to strikes, lockouts or delays in renegotiations of collective bargaining agreements. Our businesses could also be affected by similar events if our relationships with our labor force and trade unions worsen in the future. We have extended the industry agreements for coal and ore mining and smelting industries and have renegotiated most related collective bargaining agreements. If we are unable to prolong collective bargaining agreements on similar conditions in the future or our employees are dissatisfied with the terms of the collective bargaining agreements and undertake any industrial action, it could have material adverse effects on our business, financial condition, results of operations and prospects.

We do not carry the types of insurance coverage customary in more economically developed countries for a business of our size and nature, and a significant adverse event could result in substantial property loss and inability to rebuild in a timely manner or at all.

The insurance industry is still developing in Russia, and many forms of insurance protection common in more economically developed countries are not available in Russia on comparable terms, including coverage for business interruption. At present, most of our Russian production facilities are not insured, and we have no coverage for business interruption or for third-party liability, other than insurance required under Russian law, collective bargaining agreements, loan agreements or other undertakings. Some of our international production facilities are not covered by comprehensive insurance typical for such operations in Western countries. We cannot assure you that the insurance we have in place is adequate for the potential losses and liabilities we may suffer.

Since most of our production facilities lack insurance covering their property, if a significant event were to affect one of our facilities, we could experience substantial financial and property losses, as well as significant disruptions in our production activity, for which we would not be compensated by business interruption insurance.

Since we do not maintain separate funds or otherwise set aside reserves for these types of events, in case of any such loss or third-party claim for damages we may be unable to seek any recovery for lost or damaged property or compensate losses due to disruption of production activity. Any such uninsured loss or event may have a material adverse effect on our business, financial condition, results of operations and prospects.

If transactions, corporate decisions or other actions of members of our group and their predecessors-in-interest were to be successfully challenged on the basis of non-compliance with applicable legal requirements, the consequences could include the invalidation of such transactions, corporate decisions or other actions or the imposition of other liabilities on such group members.

Businesses of our group, or their predecessors-in-interest at different times, have taken a variety of actions relating to the incorporation of entities, share issuances, share disposals and acquisitions, mandatory buy-out offers, acquisition and valuation of property, including land plots, interested party transactions, major transactions, decisions to transfer licenses, meetings of governing bodies, other corporate matters and antimonopoly issues that, if successfully challenged on the basis of non-compliance with applicable legal requirements by competent state authorities, counterparties in such transactions or shareholders of the relevant members of our group or their predecessors-in-interest, could result in the invalidation of such actions, transactions and corporate decisions, restrictions on voting rights or the imposition of other liabilities. As applicable laws of the jurisdictions where our group companies are located are subject to varying interpretations, we may not be able to defend successfully any challenge brought against such actions, decisions or transactions, and the invalidation of any such actions, transactions and corporate decisions or imposition of any restriction or liability could have a material adverse effect on our business, financial condition, results of operations and prospects.

Terrorist attacks and threats, outbreaks or escalations of armed hostilities, as well as massive cyber attacks or incidents, and government regulation in response to such attacks or acts of war may negatively affect our business, financial condition, results of operations and prospects.

We may be subject, directly or indirectly, to terrorist attacks and threats, outbreaks or escalations of armed hostilities, as well as massive cyber attacks or incidents, and an increase in government regulation in response to such attacks or acts of war. These events could cause delays or losses in transportation and deliveries of our products to our customers, increased government regulation, decreased sales due to disruptions in the businesses of our customers, harm to people, the environment and our assets, and the loss or misuse of data, intellectual property or other sensitive information. Any such occurrences could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our operations may be adversely affected by disruptions to our information technology systems, including disruptions from cybersecurity incidents.

As is typical of modern businesses, Mechel is reliant on the continuous and uninterrupted operation of its information technology (“IT”) systems. User access and security of all our sites and IT systems can be critical elements to our operations. In particular, we depend on our IT systems for a variety of functions, including automated machinery, financial reporting, data management and email communications. Any IT failure pertaining to availability, access or system security could potentially result in disruption of our activities and personnel, and could adversely affect our reputation, business, financial condition, results of operations and prospects.

Potential risks to IT systems could include unauthorized attempts to extract business sensitive, confidential or personal information, denial of access extortion, corruption of information or disruption of business processes, or inadvertent or intentional actions by our employees or vendors. A cybersecurity incident resulting in a security breach or failure to identify a security threat could disrupt our business or operations and could result in the loss of sensitive, confidential or personal information or other assets, as well as litigation, regulatory enforcement, violation of privacy or securities laws and regulations, and remediation costs, all of which could materially impact our business or reputation.

We have used certain information in this document that has been sourced from third parties and may not be reliable.

We have sourced certain information contained in this document from independent third parties, including private companies, government agencies and other publicly available sources. We believe these sources of information are reliable and that the information fairly and reasonably characterizes the industry in countries where we operate. However, although we take responsibility for compiling and extracting the data, we have not independently verified this information. In addition, the official data published by Russian federal, regional and local governments may substantially differ from those of Western countries. Official statistics may also be produced on different bases than those used in Western countries.

Risks Relating to Our Shares and ADSs and the Trading Market

The price of our shares and ADSs could be volatile and could drop unexpectedly, making it difficult for investors to resell our shares or ADSs at or above the price paid.

The price at which our shares and ADSs trade is influenced by a large number of factors, some of which are specific to us and our operations and some of which are related to the mining and steel industries and equity markets in general. As a result of these factors, investors may not be able to resell their shares or ADSs at or above the price paid for them. In particular, the following factors, in addition to other risk factors described in this section, may have a material impact on the market price of our shares and ADSs:

- investor perception of us as a company;
- actual or anticipated fluctuations in our revenues or operating results;
- announcement of intended acquisitions, disposals or financings, or speculation about such acquisitions, disposals or financings;
- changes in our dividend policy, which could result from changes in our cash flow and capital position;
- sales of blocks of our common shares, common ADSs, preferred shares or preferred ADSs by significant shareholders, including the Justice Persons (as defined below);
- price and timing of any refinancing of our indebtedness;
- actual or potential litigation involving us;
- changes in financial estimates and recommendations by securities research analysts;
- fluctuations in Russian and international capital markets, including those due to events in other emerging markets;
- the performance of other companies operating in similar industries;
- regulatory developments in the markets where we operate, especially Russia and the European Union;
- international political and economic conditions, including the effects of fluctuations in foreign exchange rates, interest rates and oil prices and other events such as terrorist attacks, military operations, changes in governments and relations between countries, international sanctions, in particular against Russian companies and individuals, natural disasters and the uncertainty related to these developments;
- news or analyst reports related to markets or industries in which we operate; and
- general investor perception of investing in Russia.

On August 19, 2015, we received an official notice from the New York Stock Exchange (“NYSE”) stating that the price for Mechel ADSs had fallen below the \$1.00 threshold and we were required to bring our share price and average share price back above one U.S. dollar within six months from the date of receipt of the notice.

In order to regain compliance with the NYSE requirements, we changed the ratio of our ADSs from one ADS per one common share to one ADS per two common shares, which became effective on January 12, 2016. As a result, we received official notice from the NYSE on February 1, 2016 that our ADSs came back into compliance with the listing standards. If our shares or ADSs cease to trade on their respective securities exchanges in the future, including due to non-compliance with applicable listing standards, it may have a material adverse impact on the market price and liquidity of the shares and ADSs.

Our ability to pay dividends depends primarily upon receipt of sufficient funds from our subsidiaries.

Because we are a holding company, our ability to pay dividends depends primarily upon receipt of sufficient funds from our subsidiaries. Under Russian law, dividends may be declared and paid only out of net profits calculated under the Russian accounting standards and as long as certain conditions have been met, including if the value of the net assets, calculated under the Russian accounting standards, is not less (and would not become less as a result of the proposed dividend payment) than the sum of the charter capital, the reserve fund and the difference between the liquidation value and the par value of the issued and outstanding preferred shares. See “Item 10. Additional Information — Charter and Certain Requirements of Russian Legislation — Description of Capital Stock — Dividends.” Currently, some of our subsidiaries do not meet this criteria and cannot approve payment of, or pay dividends. See “— Risks Relating to the Russian Federation — One or more of our subsidiaries could be forced into liquidation on the basis of formal non-compliance with certain requirements of Russian law, which could materially adversely affect our business, financial condition, results of operations and prospects.”

Furthermore, the payment of dividends by our subsidiaries and/or our ability to repatriate such dividends may, in certain instances, be subject to taxes, statutory restrictions, retained earnings criteria, and covenants in our subsidiaries’ financing arrangements and are contingent upon the earnings and cash flow of those subsidiaries. See note 24 to the consolidated financial statements. In addition, our loan agreements contain restrictions on the payment of dividends on our common and preferred shares. See “Item 8. Financial Information — Dividend Distribution Policy.”

Some of our shares are represented by ADSs and GDSs, which may impede our ability to implement important business decisions.

Pursuant to applicable Russian law, our depositary may vote the shares underlying our ADSs and GDSs on behalf of their holders if certain information of the ADS and GDS holders (such as the identity of and the corresponding number of shares attributable to each holder, as well as voting instructions) has been disclosed to the depositary in compliance with Russian legal requirements. If the required information is not disclosed to the depositary (e.g., due to multi-layered ADS or GDS ownership chains or otherwise) or if the depositary bank fails to provide such information to us in a prompt manner, ADS and GDS holders may be unable to vote the shares underlying their ADSs and GDSs, accordingly.

If any of these events were to occur, our ADS and GDS holders could be restricted or hindered from voting at Mechel’s shareholder meetings, which could impede our ability to implement business decisions and, in turn, materially and adversely affect our business, financial condition and results of operations.

The depositary may be required to take certain actions due to Russian law requirements which could adversely impact the liquidity and the value of the shares and ADSs.

If at any time the depositary believes that the shares deposited with it against the issuance of ADSs represent (or, upon accepting any additional shares for deposit, would represent) a percentage of shares which exceeds any threshold or limit established by any applicable law, directive, regulation or permit, or satisfies any condition for making any filing, application, notification or registration or obtaining any approval, license or permit under any applicable law, directive or regulation, or taking any other action, the depositary may (1) close its books to

deposits of additional shares in order to prevent such thresholds or limits being exceeded or conditions being satisfied or (2) take such steps as are, in the depositary's opinion, necessary or desirable to remedy the consequences of such thresholds or limits being exceeded or conditions being satisfied and to comply with any such law, directive or regulation, including, causing *pro rata* cancellation of ADSs and withdrawal of underlying shares from the depositary receipt program to the extent necessary or desirable to so comply. Any such circumstances may affect the liquidity and the value of the shares and ADSs.

Voting rights with respect to the shares represented by our ADSs are limited by the terms of the relevant deposit agreement for the ADSs and relevant requirements of Russian law.

ADS holders have no direct voting rights with respect to the shares represented by the ADSs. They can only exercise voting rights with respect to the shares represented by ADSs in accordance with the provisions of the deposit agreements relating to the ADSs and relevant requirements of Russian law. Therefore, there are practical limitations upon the ability of ADS holders to exercise their voting rights due to the additional procedural steps which are involved. Our charter require us to notify shareholders not less than 30 days prior to the date of any meeting of shareholders and at least 50 days prior to the date of an extraordinary meeting to elect our board of directors. Within specified time limits, a notice of the general shareholders' meeting shall be published on our website www.mechel.ru. It also may be brought to the attention of persons entitled to participate in the general shareholders' meeting and registered in the register of shareholders by other means, including by post or delivery to each of the above persons against signature or via publishing in the newspaper *Rossiyskaya Gazeta*. As an additional way of notification, other mass media (television, radio) can be used. Our common shareholders, as well as our preferred shareholders in cases when they have voting rights, are able to exercise their voting rights by either attending the meeting in person or voting by power of attorney.

For ADS holders, in accordance with the deposit agreements, we will provide the notice to the depositary. The depositary has in turn undertaken, as soon as practicable thereafter, to mail to ADS holders notice of any such meeting of shareholders, copies of voting materials (if and as received by the depositary from us) and a statement as to the manner in which instructions may be given by ADS holders. To exercise their voting rights, ADS holders must then timely instruct the depositary how to vote their shares. As a result of this extra procedural step involving the depositary, the process for exercising voting rights may take longer for ADS holders than for holders of shares. ADSs for which the depositary does not receive timely voting instructions will not be voted at any meeting.

In addition, although securities regulations expressly permit the depositary to split the votes with respect to shares underlying the ADSs in accordance with instructions from ADS holders, there is little court or regulatory guidance on the application of such regulations, and the depositary may choose to refrain from voting at all unless it receives instructions from all ADS holders to vote the shares in the same manner. Holders of ADSs may thus have significant difficulty in exercising voting rights with respect to the shares underlying the ADSs. There can be no assurance that holders and beneficial owners of ADSs will: (1) receive notice of shareholder meetings to enable the timely return of voting instructions to the depositary; (2) receive notice to enable the timely cancellation of ADSs in respect of shareholder actions; or (3) be given the benefit of dissenting or minority shareholders' rights in respect of an event or action in which the holder or beneficial owner has voted against, abstained from voting or not given voting instructions.

ADS holders may be unable to repatriate their earnings.

Dividends that we may pay in the future on the shares represented by the ADSs will be declared and paid to the depositary in rubles. Such dividends will be converted into U.S. dollars by the depositary and distributed to holders of ADSs, net of the fees and charges of, and expenses incurred by, the depositary, together with taxes withheld and any other governmental charges. The ability to convert rubles into U.S. dollars is subject to the currency markets. Although there is an active market for the conversion of rubles into U.S. dollars, including the interbank currency exchange and over-the-counter and currency futures markets, the functioning of this market in

the future is not guaranteed and, in particular may be negatively impacted by any future imposition of exchange controls imposed by the Russian authorities in an effort to stabilize the value of the ruble.

ADS holders may not be able to benefit from the United States-Russia income tax treaty.

Under Russian tax legislation, dividends paid to a non-resident holder of shares of a Russian company generally will be subject to a 15% withholding tax. This tax rate may potentially be reduced to 10% or 5% for U.S. holders of the shares that are legal entities and organizations and to 10% for U.S. holders of the shares that are individuals under the Convention between the United States of America and the Russian Federation for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and Capital (the “**United States-Russia income tax treaty**”), provided a number of conditions are satisfied. Pursuant to existing Russian tax legislation, the reduced tax rate of 5% established in accordance with certain provisions of the United States-Russia income tax treaty does not apply on dividend payments under ADSs. The general rate of 10% which is established by the treaty and does not account for benefits applies, subject to the submission of certain information to the tax agent. If such information has not been submitted to the tax agent in the prescribed manner and in a certain period of time, a tax rate of 30% is applied. Thus, the tax agent may be obliged to withhold tax at higher non-treaty rates when paying out dividends, and U.S. ADS holders may be unable to benefit from the United States-Russia income tax treaty. ADS holders may apply for a refund of a portion of the tax withheld under an applicable tax treaty, however, this process may be time-consuming and no assurance can be given that the Russian tax authorities will grant a refund. See “Item 10. Additional Information — Taxation — Russian Income and Withholding Tax Considerations” for additional information.

Capital gains from the sale of ADSs may be subject to withholding tax in Russia.

Under Russian tax legislation, gains realized by foreign organizations from the disposition of Russian shares and securities, as well as financial instruments derived from such shares, with the exception of shares that are traded on an organized securities market, may be subject to withholding tax in Russia if more than 50% of our assets directly or indirectly consist of immovable property located in Russia. Gains arising from the sale on foreign exchanges (foreign market operators) of securities or derivatives circulated on such exchanges are not considered Russian source income.

However, no procedural mechanism currently exists to withhold and remit this tax with respect to sales made to persons other than Russian companies and foreign companies with a registered permanent establishment in Russia. Gains arising from the disposition on foreign stock exchanges of the foregoing types of securities listed on these exchanges are not subject to taxation in Russia.

Gains arising from the disposition of the foregoing types of securities and derivatives outside of Russia by U.S. holders who are individuals not resident in Russia for tax purposes will not be considered Russian source income and will not be taxable in Russia. Gains arising from the disposition of the foregoing types of securities and derivatives in Russia by U.S. holders who are individuals not resident in Russia for tax purposes may be subject to personal income tax withheld at source of income in Russia based on an annual tax return, which they may be required to submit with the Russian tax authorities.

Holders of ADSs may have limited recourse against us and our directors and executive officers because most of our operations are conducted outside the United States and all of our directors and executive officers reside outside the United States.

Our presence outside the United States may limit ADS holders’ legal recourse against us. Mechel is incorporated under the laws of the Russian Federation. Our directors and executive officers reside outside the United States, principally in Russia. A substantial portion of our assets and the assets of most of our directors and executive officers are located outside the United States. As a result, holders of our ADSs may be limited in their ability to effect service of process within the United States upon us or our directors and executive officers or to

enforce in a U.S. court a judgment obtained against us or our directors and executive officers in jurisdictions outside the United States, including actions under the civil liability provisions of U.S. securities laws. In addition, it may be difficult for holders of ADSs to enforce, in original actions brought in courts in jurisdictions outside the United States, liabilities predicated upon U.S. securities laws.

There is no treaty between the United States and the Russian Federation providing for reciprocal recognition and enforcement of foreign court judgments in civil and commercial matters. These limitations may deprive investors of effective legal recourse for claims related to investments in the ADSs. The deposit agreements provide for actions brought by any party thereto against us to be settled by arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association, provided that any action under the U.S. federal securities laws or the rules or regulations promulgated thereunder may, but need not, be submitted to arbitration. The Russian Federation is a party to the United Nations (New York) Convention on the Recognition and Enforcement of Foreign Arbitral Awards, but it may be difficult to enforce arbitral awards in the Russian Federation due to a number of factors, including the inexperience of Russian courts in international commercial transactions, official and unofficial political resistance to enforcement of awards against Russian companies in favor of foreign investors and Russian courts' inability to enforce such orders.

We and the Justice Persons may offer additional preferred shares and preferred ADSs in the future, and these and other sales may adversely affect the market price of the preferred shares and preferred ADSs.

As of December 31, 2018, out of the 138,756,915 issued preferred shares, 40% are held by our wholly-owned subsidiary Skyblock Limited, the remaining preferred shares are held by the public and may be held by James C. Justice II, James C. Justice III, James C. Justice Companies Inc. and Jillean L. Justice (collectively, the “**Justice Persons**”). The Justice Persons disposed or may dispose of all or part of the remaining preferred shares they held through one or more offerings or broker trades. It is also possible that we may decide to offer additional preferred shares and preferred ADSs through public offering or broker trades in the future, including preferred shares held by Skyblock Limited. Additional offerings or sales of preferred shares and preferred ADSs by us or the Justice Persons, or the public perception that such offerings or sales may occur, could have an adverse effect on the market price of our preferred shares and preferred ADSs.

Risks Relating to the Russian Federation

Emerging markets such as Russia are subject to greater risks than more developed markets, and financial turmoil in developed or other emerging markets could have a material adverse effect on our business and could cause the value of our shares and ADSs to fluctuate widely.

Investors in emerging markets such as the Russian Federation 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 also note that the value of securities of Russian companies is subject to rapid and wide fluctuations due to various factors. The emergence of new tensions between Russia and other countries, sanctions imposed by the Russian Federation on some countries and vice versa may lead to outflow of the investors from the market, as well as rapid, significant sales of Russian assets, which could result in reductions in the price of Russian securities. We cannot assure you that any such developments will not have a material adverse effect on our business, financial condition, results of operations and prospects, and the value of our shares and ADSs is expected to be highly volatile while tension between Russia and other countries remains unresolved and/or the Russian economy continues to deteriorate.

Investors should also note that emerging markets such as the Russian Federation are subject to rapid change and that the information set forth in this document may become outdated relatively quickly. Moreover, financial turmoil in any emerging market country tends to adversely affect the value of investments in all emerging market countries as investors move their money to more stable, developed markets. As has happened in the past, financial problems or an increase in the perceived risks associated with investing in emerging economies could

dampen foreign investment in the Russian Federation and adversely affect the Russian economy. In addition, during such times, companies that operate in emerging markets can face liquidity constraints as foreign funding sources become less available. Accordingly, investors should exercise particular care in evaluating the risks involved and must decide for themselves whether, in light of those risks, their investment is appropriate. Generally, investment in emerging markets is only suitable for sophisticated investors who fully appreciate the significance of the risks involved.

Domestic, regional and international political and diplomatic conflicts could create an uncertain operating environment that could adversely affect our business and hinder our long-term planning ability.

Emerging markets such as Russia are subject to heightened volatility based on economic, military and political conflicts. For example, a military conflict in August 2008 between Russia and Georgia involving South Ossetia and Abkhazia, the accession of Crimea to Russia in March 2014, the ongoing crisis in Eastern Ukraine and the subsequent economic sanctions imposed on certain Russian companies and individuals by the United States, the European Union, Canada and other countries resulted in significant overall price declines in the Russian stock exchanges. See “— Risks Relating to the Russian Federation — Sanctions imposed by the United States and the European Union, as well as other politically related disagreements and allegations between Russia and other countries, may have a material adverse effect on our business, liquidity and financial condition, as well as the trading market for and value of our shares and ADSs.” The reaction of those countries, resulting geopolitical tensions and ensuing sanctions programs have had and could continue to have an adverse effect on the Russian economy, accelerating capital flight from Russia and resulting in foreign exchange rate fluctuations and volatility on the Russian markets. There is no assurance that Russia will not introduce measures to address capital outflow from Russia, including by adopting regulations imposing restrictions on transactions on capital and debt markets or otherwise, any of which could adversely affect investor interest and the Russian economy generally. The emergence or escalation of any tensions in Russia or neighboring regions could negatively affect the economy of Russia and other countries that may be involved. Such tensions or conflicts may lead to reduced liquidity, trading volatility and significant reductions in the price of listed Russian securities, with a resulting negative effect on the liquidity, stability and trading price of our shares and ADSs.

Partly as a result of political tensions, international sanctions, ruble volatility and a drop in oil prices, Standard & Poor’s, Moody’s and Fitch downgraded the credit ratings of the Russian Federation in 2015. The ratings agencies have subsequently upgraded the credit ratings and/or outlooks of the Russian Federation between 2016 and 2018. As of the date hereof, the Russian Federation’s sovereign credit rating was “BBB-” (with a stable outlook) by Standard & Poor’s, “Baa3” (with a stable outlook) by Moody’s and “BBB-” (with a positive outlook) by Fitch. However, there can be no assurance that further downgrades of Russia’s sovereign credit rating will not occur.

The risks associated with these events or potential future events could materially and adversely affect the business and investment environment, overall consumer confidence and economy in the Russian Federation, which in turn could have a material adverse effect on our business, financial condition, results of operations and prospects.

Sanctions imposed by the United States and the European Union, as well as other politically related disagreements and allegations between Russia and other countries, may have a material adverse effect on our business, liquidity and financial condition, as well as the trading market for and value of our shares and ADSs.

The U.S. government imposes economic sanctions and trade embargoes, as well as export control restrictions with respect to certain countries in support of its foreign policy and national security goals. These laws and regulations are administered by the U.S. Treasury Department’s Office of Foreign Assets Control (“OFAC”), the U.S. Department of State and the U.S. Department of Commerce as a matter of U.S. law and foreign policy, which is subject to change over time. U.S. economic sanctions impose restrictions on U.S. persons and, in certain circumstances, non-U.S. persons with respect to activities or transactions with certain

countries and territories, governments, entities or individuals that are the target of the relevant U.S. economic sanctions. Under applicable U.S. economic sanctions, U.S. persons also are prohibited from facilitating such activities or transactions, and non-U.S. persons are prohibited from causing other persons to violate applicable prohibitions. The Member States of the European Union have also implemented measures aimed at prohibiting or restricting engagements in financial and other dealings with sanctioned countries and territories, entities and individuals. U.S. export controls regulate and may restrict the transfer or use of U.S. origin goods and technology globally, regardless of location or how long such items have been outside of the United States, and whether or not such items are within the control of non-U.S. persons.

The United States and the European Union (as well as certain other countries) have imposed sanctions and export control restrictions on certain Russian persons and entities and taken other actions in response to the ongoing situation in Ukraine and Crimea, alleged Russian cyber attacks, election interference, activities in Syria and nerve gas incident in the United Kingdom. See “— Domestic, regional and international political and diplomatic conflicts could create an uncertain operating environment that could adversely affect our business and hinder our long-term planning ability.”

In particular, the United States and the European Union have imposed (i) sanctions that block the property of certain designated businesses, organizations and individuals and restrict travel (“**Blocking Sanctions**”), (ii) sectoral sanctions that prohibit certain types of transactions with companies operating in the Russian energy, financial and defense sectors, including limitations on provision of debt and/or equity financing (“**Sectoral Sanctions**”), and (iii) territorial sanctions restricting investment in and trade with Crimea which, subject to some exemptions, prohibit virtually all investments into, imports from, and exports to, the territory of the Crimea, aiming at severely restraining any U.S. or EU-related business contacts with this territory. The U.S. and EU sanctions (including the Sectoral Sanctions) apply to entities owned and/or controlled by sanctions-designated entities and individuals and, accordingly, may extend beyond Russia.

To date, the Blocking Sanctions have been imposed against prominent Russian politicians, executive branch officials, members of the Russian Parliament, public figures, certain owners of large businesses in Russia, as well as their assets and enterprises, and major defense and other Russian companies. In addition, the United States and the European Union have introduced Sectoral Sanctions against (a) major Russian banks, such as Gazprombank, Vnesheconombank, VTB Bank (PJSC), Russian Agricultural Bank and Sberbank, (b) Transneft, Gazprom Neft, Rosneft and Novatek, and (c) State Corporation Rostec and other military industrial corporations. Mechel has business relations with certain Russian persons and their controlled entities that are identified as targets of U.S. and EU sanctions, including certain of the banks mentioned. We believe that our dealings with such persons do not violate applicable U.S. or EU sanctions programs. However, to the extent that we engage in transactions with any relevant sanctions-designated persons, U.S. sanctions could have potential adverse effects on such transactions. Moreover, we could be limited in sources of financing for such dealings and/or be subject to related scrutiny by relevant authorities.

Further, the U.S. State Department in August 2018 imposed the first of two rounds of sanctions on Russia under the Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (“**CBW Act**”). Under the CBW Act, a second round of sanctions is required and could include, among other things, a prohibition on U.S. financial institutions to provide financing to the Russian state, additional bans on exports of goods and technologies and/or a possible suspension or revocation of the authority of Russian state-owned or controlled air carriers to provide transportation to or from the United States, subject to certain waivers.

Although no individual or entity within our group has been designated with U.S. or EU sanctions to date, there can be no assurance that further or more restrictive sanctions and/or export controls will not be introduced by the United States, the European Union or other countries which could affect such persons and increase the adverse effects above. For example, among other provisions, Section 223 of the Countering America’s Adversaries Through Sanctions Act (“**CAATSA**”) gives the U.S. President discretionary authority to impose potential future Sectoral Sanctions on state-owned entities operating in the railway sector of Russia. Moreover,

Section 228 of CAATSA mandates in relevant part that the U.S. President can impose Blocking Sanctions on a non-U.S. person determined to knowingly facilitate a significant transaction or transactions for or on behalf of any person subject to U.S. sanctions or the relatives of such sanctioned persons. Mechel, like a large number of Russian companies, has commercial relationships with entities that are subject to U.S. sanctions. To the extent the relevant authorities determine that we are engaged in the projects or transactions referred to in CAATSA, we may be subject to sanctions.

In addition, in mid-January 2018, proposed new legislation titled the “Defending Elections from Threats by Establishing Redlines” Act (the “**DETER Act**”) was introduced in both houses of the U.S. Congress. The DETER Act, if enacted into law in its initial form, would require the U.S. President to block the property of and prohibit U.S. persons from engaging in transactions with any entity in the railway or metals and mining sector of the economy of the Russian Federation, if the U.S. Director of National Intelligence makes a determination that the Russian government, or any person acting as an agent of or on behalf of the Russian Federation, knowingly engages in interference in a U.S. federal election that occurs after enactment of the legislation. Under the proposed legislation, such a determination would trigger other sanctions as well, including Blocking Sanctions on “oligarchs and parastatal entities” in Russia identified in the Section 241 report issued under CAATSA which the U.S. Department of the Treasury released in January 2018. If OFAC were to list a Russian railway or metals and mining company as a Specially Designated National, that company’s property interests in the United States or in the possession or control of a U.S. person (wherever located), including any debts owed by a U.S. person to such company, would be blocked, and neither U.S. financial institutions nor any other U.S. persons could engage in any further dealings with that company or any entity directly or indirectly owned 50% or more by that company, or involving its debt (including receiving or processing payments on or transferring the debt) unless licensed to do so by OFAC. There can be no assurance that the DETER Act, or another sanctions bill, will or will not be approved by the U.S. Congress and ultimately signed by the U.S. President and enacted into law. If enacted, the DETER Act in its current or a modified form, or other sanctions legislation, could have a material adverse effect on the Russian financial markets and investment climate and the Russian economy generally.

Furthermore, certain entities within our group are EU persons. These entities are therefore required to comply with the EU sanctions regime, including not conducting business with any sanctioned persons. Most of the group’s entities, however, are neither U.S. persons nor EU persons, and therefore are restricted in dealings with sanctioned persons only to the extent those dealings are subject to U.S. and/or EU jurisdiction. However, the United States takes a broad view with respect to its sanctions jurisdiction, and there can be no assurance that compliance issues under applicable U.S. and/or EU sanctions laws and regulations will not arise with respect to us or our personnel. In particular, sanctions against Russia and Russian subjects are recent, their scope and consequences remain subject to interpretation by competent authorities and courts in the United States and the European Union, and no assurance can be given that a broader interpretation may not affect any of the group entities. Non-compliance with applicable sanctions could result in, among other things, the inability of the relevant group entities to contract with U.S. and/or EU governments or their agencies, civil or criminal liability of such entities and/or their personnel under U.S. and/or EU law, the imposition of significant fines, and negative publicity and reputational damage. In addition, should our dealings with sanctioned counterparties become material, our ability to transact with U.S. or EU persons could be affected.

An expansion of sanctions as set forth above (including measures that target our company, shareholders, suppliers, business partners, affiliates and financial institutions and/or the Russian mining or steel sectors specifically, or that may restrict access to international capital markets, activities with specific entities or persons or the ability to acquire certain goods, services or technologies) could result in greater financial difficulties for such persons, or the suspension or potential curtailment of business operations between our company and the designated persons could occur. The introduction of additional large-scale sanctions on Russian companies or sectors of the Russian economy (including as contemplated in sanctions bills that have been introduced into U.S. Congress) may further negatively affect the Russian economy, the credit ratings of Russia and Russian companies and the general business and investment climate, and lead to an acceleration of capital flight from Russia, weakening of the ruble and further deterioration of the Russian financial and other markets. We or our

counterparties and business partners may be forced to revisit our existing relationships because of compliance, political, reputation or other reasons, and our contracts with them may be terminated, and substantial legal and other compliance costs and risks on our business operations could emerge. In addition, we may become unable to transact in U.S. dollars and our assets in European and other countries may be blocked as a result of new sanctions. Any of the foregoing would likely have a material adverse impact on our business, financial condition, results of operations or prospects.

If Mechel or any of its subsidiaries or significant shareholders, or any sector in which we operate, become subject to expanded sanctions, relevant clearing systems, brokers and other market participants, as well as the NYSE, may refuse to permit trading in or otherwise facilitate transfers of the ADSs. Furthermore, investors in our shares or ADSs may be restricted in their ability to sell, transfer or otherwise deal in or receive distributions with respect to our shares or ADSs, either because the investor or (in the case of ADSs) the depositary is subject to the jurisdiction of an applicable sanctions regime, which could make such shares or ADSs partially or completely illiquid and have a material adverse effect on their market value. Any of the aforementioned could reduce the trading market for the ADSs or may otherwise materially impact the value of the ADSs.

Economic risks

Economic instability in Russia could adversely affect our business and the value of our shares and ADSs.

The Russian economy has been subject to abrupt downturns in the past. However, since 2000, it experienced positive trends, such as annual increases in the gross domestic product (“GDP”), a relatively stable ruble, strong domestic demand, rising real wages and reduced rates of inflation. Nevertheless, the positive trends were interrupted by the global financial crisis in late 2008, which led to a substantial decrease in the growth rate of GDP, ruble depreciation and a decline in domestic demand. The Russian government took certain anti-crisis measures using the “stabilization fund” and hard currency reserves in order to soften the impact of the economic crisis on the Russian economy and support the value of the ruble. The emerging market economies, including Russia, began to experience a new economic slowdown in 2013, which together with political and other disturbances in emerging markets have introduced additional uncertainty in the overall outlook for growth of the global economy. According to Rosstat, the Russian economy recorded GDP decline of 0.2% in 2016 and GDP growth of 1.5% in 2017 and 2.3% in 2018. The deterioration of the Russian economy in recent years resulted from an array of factors, including negative investor sentiment arising from the disturbances in Eastern Ukraine, international sanctions imposed on Russian companies and individuals, substantial depreciation of the ruble against major world currencies and the precipitous drop in oil prices. See “— Risks Relating to the Russian Federation — Sanctions imposed by the United States and the European Union, as well as other politically related disagreements and allegations between Russia and other countries, may have a material adverse effect on our business, liquidity and financial condition, as well as the trading market for and value of our shares and ADSs.” Further economic instability in Russia could have a material adverse effect on our business, financial condition, results of operations and prospects and the value of our shares and ADSs.

The Russian banking system is still developing, and another banking crisis or international sanctions could place severe liquidity constraints on our business.

A substantial portion of our loans are from Russian banks, including state-owned banks such as Sberbank, VTB Bank and Gazprombank, who in recent years have extended the maturity of our loans, waived breaches of financial covenants and reset our financial covenants to give us more flexibility to operate our business. Such banks may not exhibit the same degree of flexibility with respect to our financings as they have in the past due to the imposition of international sanctions against them. Moreover, we rely on the Russian banking system to complete various day-to-day fund transfers and other actions required to conduct our business with customers, suppliers, lenders and other counterparties.

Despite progress achieved in recent years, the Russian banking system suffers from international sanctions imposed against state-owned banks, weak depositor confidence, high concentration of exposure to certain

borrowers and their affiliates, poor credit quality of borrowers and related party transactions. Specifically, sanctions have been imposed by a number of countries against certain Russian banks, financial institutions and companies, as well as certain Russian individuals who hold interests or positions in such banks, financial institutions and companies. Among other measures, the United States and the European Union have imposed Sectoral Sanctions on certain major Russian financial institutions. It is difficult to predict the impact of sanctions on the Russian banking sector as this may continue to evolve over time and whether such sanctions will be expanded in the future; however, there is a risk that Russian banks could be unable to refinance their existing debt or that such refinancing may become more expensive, and/or that Russian banks could be unable to issue loans in amounts necessary for borrowers, and/or that the cost of borrowing could increase significantly for borrowers.

In response to ruble depreciation and decline in Russian economy, the CBR progressively increased its key rate in 2014 from 5.5% to 17%, which resulted in substantial volatility and liquidity shortages on the domestic financial and interbank market. The CBR gradually reduced the key rate to 7.25% between 2015 and early 2018 and introduced other measures aimed at supporting Russian banking system, before increasing the key rate to 7.75% in late 2018 to mitigate the risk of inflation. Although these measures resulted in partial stabilization of the banking system and assisted some Russian banks in withstanding the recent volatility on the currency and financial markets, the Russian banking system continues to experience financial difficulties and could continue to worsen in the near future due to the impact of international sanctions and general instability of global and Russian economy and domestic financial market. Certain Russian banks have in the past experienced difficulties that have caused them to become insolvent and have their licenses revoked, such as Yugra Bank, or to recognize large loan loss provisions that required steps to replenish their capital, as in the cases of the Promsvyazbank, Bin Bank and Otkritie Bank.

A banking or liquidity crisis or the bankruptcy or insolvency of the banks which lend to us or which we use for banking transactions could have a material adverse effect on our business, results of operations, financial condition and prospects.

Russia's physical infrastructure is not as well developed or maintained as the infrastructure in more developed countries, which could disrupt normal business activity.

Russia's physical infrastructure is not as well developed or maintained as the infrastructure in more developed countries. Such physical infrastructure includes the road networks, railroad system, power generation and transmission systems, communication systems and building stock. The Russian government has implemented in the past, and may further implement, infrastructure improvements and reorganizations of the nation's rail, road and power systems. These reorganizations may result in increased charges and tariffs and may not generate sufficient capital investment to repair, maintain and improve these systems. A prolonged or major disruption in normal business activity due to a deterioration of Russia's infrastructure, especially as it relates to transportation, and significant increases in charges and tariffs, could harm the national economy, disrupt the transportation of goods and supplies, add costs to doing business in Russia and may interrupt business operations in Russia, any or all of these factors could have a material adverse effect on our business, financial condition, results of operations and prospects.

The Russian economy and the value of our shares and ADSs could be materially adversely affected by fluctuations in the global economy.

The global economic crisis, social and political instability in some Middle Eastern countries and in Ukraine, the Chinese economic slowdown followed by the Chinese market's crash and decline in demand, as well as the dramatic fall in oil prices and other negative developments in various countries have resulted in increased volatility in the capital markets in many countries, including Russia. As has happened in the past, financial problems in emerging market economies or an increase in the perceived risks associated with investing in emerging market economies could dampen foreign investment in Russia, and Russian businesses could face

severe liquidity constraints, further materially adversely affecting the Russian economy. In addition, because Russia produces and exports large amounts of oil, the Russian economy is especially vulnerable to the price of oil on the world market, and a decline in the price of oil or international sanctions against the Russian oil industry could slow or disrupt the Russian economy or weaken the value of the ruble against foreign currencies. Although the average price for Urals crude oil rose by 47.3% from December 15, 2015 to December 14, 2016 and by 19.0% from December 15, 2016 to December 14, 2017, prices for petroleum feedstock remain volatile, and the average price for Urals crude oil decreased by 9.1% from December 15, 2017 to December 14, 2018. In addition, the ruble has fluctuated significantly against major world currencies over the past five years, from an average of RUB 38.42 per U.S. dollar in 2014 to RUB 62.71 per U.S. dollar in 2018. See “Item 3. Key Information — Exchange Rates.” Russia is also one of the world’s largest producers and exporters of metal products and its economy is vulnerable to fluctuations in world commodity prices and the imposition of international sanctions, tariffs and/or antidumping measures by any of its principal export markets.

As many of the factors that affect the Russian and global economies affect our business and the business of many of our domestic and international customers, our business could be materially adversely affected by a downturn in the Russian economy or the global economy. In addition to a reduction in demand for our products, we may experience increases in overdue accounts receivable from our customers, some of whom may face liquidity problems and potential bankruptcy. Our suppliers may raise their prices, eliminate or reduce trade financing or reduce their output. A decline in product demand, a decrease in collectability of accounts receivable or substantial changes in the terms of our suppliers’ pricing policies or financing terms, or the potential bankruptcy of our customers or contract counterparties may have a material adverse effect on our business, financial condition, results of operations and prospects.

In June 2016, a majority of voters in the United Kingdom elected to withdraw from the European Union in a national referendum, marking the beginning of a process whose consequences are uncertain. In February 2017, the UK parliament voted in favor of advancing legislation that would give the Prime Minister the authority to initiate the formal process of leaving the European Union, and, in March 2017, the UK Prime Minister signed the letter that gives an official notice to European Council in accordance with Article 50 of the Treaty on European Union of the United Kingdom’s intention to withdraw from the European Union, beginning a legal process of leaving the European Union. The terms of withdrawal have not been established, and the United Kingdom will remain a member of the European Union until conclusion of the withdrawal agreement. If no agreement is concluded within two years of formal notification of withdrawal, however, then the United Kingdom may leave the European Union without further action. As a result, there remains significant uncertainty about the future relationship between the United Kingdom and the European Union.

With respect to the United States, the presidential administration of Donald Trump has led to greater uncertainty on the status of trade relations between the United States and some of its largest trade partners, including the United States’ existing trade agreements, and impacted financial markets.

In addition, the Chinese government’s unpredictable regulation of coal imports, including the implementation of stringent port restrictions, the rise of import duties and the setting of import quotas, may adversely impact our results of operations. For example, in November 2018, the Chinese government imposed a strict quota on 2018 coal imports in order to keep total coal import volumes at a level of 2017. As a result, coal imports into China in December 2018 declined by 55% year-on-year (however, total 2018 coal imports into China increased by 3.9% compared to 2017), according to the General Administration of Customs of China. According to industry analyst, CRU, China is using such import controls primarily as a policy instrument to maintain the price and profitability of domestic coal. Relatedly, CRU anticipates that the Chinese government will continue to apply import restrictions unpredictably in order to maintain domestic coal prices above a certain threshold level.

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 and commodities markets, as well as restrict access to capital, which could result in the deterioration of global economic conditions.

In addition, a deterioration in macroeconomic conditions could require us to reassess the value of goodwill on certain of our assets, recorded as the difference between the fair value of the net assets of business acquired and its purchase price. This goodwill is subject to impairment tests on an annual basis. The weakening macroeconomic conditions in the countries in which we operate and/or a significant difference between the performance of an acquired company and the business case assumed at the time of acquisition could require us to write down the value of the goodwill or portion of such value. See note 18 to the consolidated financial statements.

Political and social risks

Political and governmental instability could materially adversely affect our business, financial condition, results of operations and prospects and the value of our shares and ADSs.

Tensions in Russia's relations with other countries and world bodies or conflicts between the government and powerful business groups or among such business groups, as well as the continuation of and the development of international sanctions imposed on Russian institutions, organizations and individuals could disrupt or reverse political, economic and regulatory reforms and also lead to restrictions on our business and a negative impact on Russia's economy and investment climate. Any disruption or reversal of reform policies or economic downturn could lead to social, political or governmental instability or the occurrence of conflicts between various groups, which could have a material adverse effect on our business, financial condition, results of operations and prospects and the value of our shares and ADSs and impede our efforts to restructure our indebtedness.

Corruption and negative publicity could negatively impact our business and the value of our shares and ADSs.

The local press and international press have reported high levels of corruption in Russia, including unlawful demands by government officials and the bribery of government officials for the purpose of initiating investigations by government agencies. Press reports have also described instances in which government officials engaged in selective investigations and prosecutions to further the commercial interests of certain government officials or certain companies or individuals. In addition, there are reports of the Russian media publishing disparaging articles in return for payment. From time to time, we are the subject of press reports that we believe contain false information about our business and financial condition, as well as our largest shareholder. If we or our managers, largest shareholder or counterparties are accused of involvement in government corruption or are otherwise the subject of libelous reports in the press, the resulting negative publicity could disrupt our ability to conduct our business and impair our relationships with customers, suppliers, creditors and other parties, which could have a material adverse effect on our business, financial condition and results of operations and the value of our shares and ADSs and impede our efforts to restructure our indebtedness.

Shortage of skilled Russian labor could materially adversely affect our business, financial condition, results of operations and prospects.

Currently the Russian labor market suffers from a general shortage of skilled and trained workers, and we compete with other Russian companies to hire and retain such workers. In Russia, the working age population has declined due to a relatively low birth rate from the end of the 1980s through the early 1990s. As of January 1, 2019, Rosstat estimated Russia's population at 146.8 million, a decline of 1.7 million from 1992. In recent years, declines in population levels slowed down as a result of an increase in migration and a reduction in the natural decline of the population; in 2014-2017, the population level increased. However, the birth rate remains relatively low, which together with the aging and high mortality of the population, are the main challenges for

Russia's demographic development. According to World Bank, Russia's working age population is predicted to decline by an estimated 11 million by 2030. In this context, Russia has recently increased the working age for both men and women. A shortage of skilled Russian labor combined with restrictive immigration policies could materially adversely affect our business, financial condition, results of operations and prospects.

Legal risks and uncertainties

Weaknesses relating to the Russian legal system and legislation create an uncertain investment climate.

Russia is still developing the legal framework required to support a market economy. The following weaknesses relating to the Russian legal system create an uncertain investment climate and result in risks with respect to our legal and business decisions:

- inconsistencies among federal laws, including among decrees, orders and regulations issued by the Russian President, the Russian government, federal ministries and regulatory authorities and among regional and local laws, rules and regulations;
- limited judicial and administrative guidance on interpreting Russian legislation;
- gaps in the regulatory structure due to the delay or absence of implementing legislation;
- uncertainties in interpretation of Russian legislation and corporate law generally by Russian courts;
- a high degree of discretion or arbitrariness on the part of governmental authorities; and
- still-developing bankruptcy procedures that are subject to abuse. See “— Risks Relating to Our Financial Condition and Financial Reporting — We may become subject to bankruptcy procedures, which may result in the inability of holders of our shares and ADSs to recover some or all of their investments.”

All of these weaknesses could affect our ability to protect our rights under our licenses and under our contracts, or to defend ourselves against claims by others. We make no assurances that regulators, judicial authorities or third parties will not challenge our compliance with applicable laws, decrees and regulations.

One or more of our subsidiaries could be forced into liquidation on the basis of formal non-compliance with certain requirements of Russian law, which could materially adversely affect our business, financial condition, results of operations and prospects.

Certain provisions of Russian law may allow a court to order liquidation of a Russian legal entity on the basis of its formal non-compliance with certain requirements during formation, reorganization or during its operation. There have been cases in the past in which formal deficiencies in the establishment process of a Russian legal entity or non-compliance with provisions of Russian law have been used by Russian courts as a basis for liquidation of a legal entity. For example, under Russian corporate law, if a Russian company's net assets calculated on the basis of the Russian accounting standards at the end of its third or any subsequent financial year, fall below its share capital, the company must decrease its share capital to the level of its net assets value or initiate a voluntary liquidation. In addition, if a Russian company's net assets calculated on the basis of the Russian accounting standards at the end of its second or any subsequent financial year, fall below the minimum share capital required by law, the company must initiate voluntary liquidation not later than six months after the end of such financial year. If the company fails to comply with either of the requirements stated above within the prescribed time limits, the company's creditors may accelerate their claims and demand reimbursement of applicable damages, and governmental authorities may seek involuntary liquidation of the company. Currently, we have the following subsidiaries with negative net assets in accordance with the Russian accounting standards: Mechel-Steel Management, Kaslinsky Architectural Art Casting Plant, Port Kambarka, Metallurgshakhtspetsstroy, Southern Kuzbass Coal Company, Mechel Mining Management, Shakhtspetsstroy, Mechel-Remservice, Maritime Cargo Shipping, Mecheltrans Management, MecheltransVostok, Izhstal, Mecheltrans Auto, Vyartsilya Metal Products Plant and Southern Kuzbass Power Plant.

If involuntary liquidation were to occur, then we may be forced to reorganize the operations we currently conduct through the affected subsidiaries. Any such liquidation could lead to additional costs, which could materially adversely affect our business, financial condition, results of operations and prospects.

Selective government action could have a material adverse effect on the investment climate in Russia and on our business, financial condition, results of operations and prospects and the value of our shares and ADSs.

Governmental authorities in Russia have a high degree of discretion. Press reports have cited instances of Russian companies and their major shareholders being subjected to government pressure through prosecutions of violations of regulations and legislation which are either politically motivated or triggered by competing business groups.

In mid-2008, Mechel came under public criticism by the Russian government with repeated statements accusing Mechel of using tax avoidance schemes and other improprieties. Ultimately the allegations regarding tax avoidance were not confirmed by the tax authorities, but the antimonopoly investigation resulted in imposition of a fine and issuance of an FAS directive regarding our business practices. See “— Risks Relating to Our Business and Industry — Antimonopoly regulation could lead to sanctions with respect to the subsidiaries we have acquired or established or our prices, sales volumes and business practices.”

Selective government action, if directed at us or our largest shareholder, could have a material adverse effect on our business, financial condition, results of operations and prospects and the value of our shares and ADSs.

Due to still-developing law and practice related to minority shareholder protection in Russia, the ability of holders of our shares and ADSs to bring, or recover in, an action against us may be limited.

In general, minority shareholder protection under Russian law derives from supermajority shareholder approval requirements for certain corporate actions, as well as from the ability of a shareholder to demand that the company purchase the shares held by that shareholder if that shareholder voted against or did not participate in voting on certain types of actions. Russian law does not expressly require obtaining prior consent for interested party transactions, unless persons specified by the law do not require it. See “Item 10. Additional Information — Description of Capital Stock — Rights attaching to common shares.” Disclosure and reporting requirements have also been enacted in Russia. Concepts similar to the fiduciary duties of directors and officers to their companies and shareholders are also expected to be further developed in Russian legislation; for example, amendments to the Russian Code of Administrative Offenses imposing administrative liability on members of a company’s board of directors or management board for violations committed in the maintenance of shareholder registers and the convening of general shareholders’ meetings. While these protections are similar to the types of protections available to minority shareholders in U.S. corporations, in practice, the enforcement of these and other protections has not been effective.

The supermajority shareholder approval requirement is met by a vote of 75% of all voting shares that are present at a general shareholders’ meeting. Thus, controlling shareholders owning less than 75% of the outstanding shares of a company may hold 75% or more of the voting power if enough minority shareholders are not present at the meeting. In situations where controlling shareholders effectively have 75% or more of the voting power at a general shareholders’ meeting, they are in a position to approve amendments to a company’s charter, reorganizations, significant sales of assets and other major transactions, which could be prejudicial to the interests of minority shareholders. See “— Risks Relating to Our Business and Industry — The concentration of our shares with our largest shareholders will limit your ability to influence corporate matters and transactions with largest shareholders may present conflicts of interest, potentially resulting in the conclusion of transactions on less favorable terms than could be obtained in arm’s length transactions.”

Shareholder liability under Russian legislation could cause us to become liable for the obligations of our subsidiaries.

The Civil Code and the Joint-Stock Companies Law generally provide that shareholders in a Russian joint-stock company are not liable for the obligations of the joint-stock company and bear only the risk of loss of their investment. This may not be the case, however, when one entity is capable of determining decisions made by another entity. The entity capable of determining such decisions is deemed an “effective parent.” The entity whose decisions are capable of being so determined is deemed an “effective subsidiary.” Under the Joint-Stock Companies Law, an effective parent bears joint and several responsibility for transactions concluded by the effective subsidiary in carrying out these decisions if:

- this decision-making capability is provided for in the charter of the effective subsidiary or in a contract between such entities; and
- the effective parent gives obligatory directions to the effective subsidiary based on the above-mentioned decision-making capability.

In addition, an effective parent is secondarily liable for an effective subsidiary’s debts if an effective subsidiary becomes insolvent or bankrupt due to the fault of an effective parent resulting from its action or inaction. This is the case no matter how the effective parent’s ability to determine decisions of the effective subsidiary arises. For example, this liability could arise through ownership of voting securities or by contract. Other shareholders of the effective subsidiary may claim compensation for the effective subsidiary’s losses from the effective parent which caused the effective subsidiary to take action or fail to take action knowing that such action or failure to take action would result in losses. Accordingly, we could be liable in some cases for the debts of our subsidiaries. This liability could have a material adverse effect on our business, financial condition, results of operations and prospects.

Shareholder rights provisions under Russian law could result in significant additional obligations on us.

As a general rule, Russian law provides that shareholders that vote against or do not participate in voting on certain matters have the right to request that the company redeem their shares at value determined in accordance with Russian law. The decisions of a general shareholders’ meeting that trigger this right include:

- decisions with respect to a reorganization;
- consent or subsequent approval by shareholders of a “major transaction,” which involves property in excess of 50% of the balance sheet value of the company’s assets calculated according to the Russian accounting standards, regardless of whether the transaction is actually consummated (including those which are simultaneously interested party transactions), except for transactions undertaken in the ordinary course of business;
- the amendment of the company’s charter or approval of a new version of the company’s charter that limits shareholder rights; and
- the amendment of the public company’s charter which eliminates indication that the company is public, simultaneously with the decision on applying to the CBR on release from obligation to disclose information under the laws of the Russian Federation on securities and the decision on applying for delisting of shares and securities convertible into shares.

Our and our Russian subsidiaries’ obligation to purchase shares in these circumstances, which is limited to 10% of our or the subsidiary’s net assets, respectively, calculated in accordance with the Russian accounting standards at the time the matter at issue is voted upon, could have a material adverse effect on our business, financial condition, results of operations and prospects due to the need to expend cash on such obligatory share purchases.

The lack of a central and rigorously regulated share registration system in Russia may result in improper record ownership of our shares and ADSs.

Ownership of Russian joint-stock company shares (or, if the shares are held through a nominee or custodian, then the holding of such nominee or custodian) is determined by entries in a share register and is evidenced by extracts from that register. Currently, there is no single central registration system in Russia. Share registers can be maintained only by licensed registrars located throughout Russia. Regulations have been adopted regarding the licensing conditions for such registrars, as well as the procedures to be followed by licensed registrars when performing the functions of registrar. In practice, however, these regulations have not been strictly enforced, and registrars generally have relatively low levels of capitalization and inadequate insurance coverage. Moreover, registrars are not necessarily subject to effective governmental supervision. Due to the lack of a central and rigorously regulated share registration system in Russia, transactions in respect of a company's shares could be improperly or inaccurately recorded, and share registration could be lost through fraud, negligence or oversight by registrars incapable of compensating shareholders for their misconduct. This creates risks of loss not normally associated with investments in other securities markets. Furthermore, the depositary, under the terms of the deposit agreements governing record keeping and custody of our ADSs, is not liable for the unavailability of shares or for the failure to make any distribution of cash or property with respect thereto due to the unavailability of the shares. See "Item 10. Additional Information — Description of Capital Stock — Registration and transfer of shares."

Characteristics of and changes in the Russian tax system could materially adversely affect our business, financial condition, results of operations and prospects and the value of our shares and ADSs.

Generally, Russian companies are subject to numerous taxes. These taxes include, among others:

- income tax;
- value-added tax ("VAT");
- mineral extraction tax; and
- property and land taxes.

Laws related to these taxes have been in force for a short period relative to tax laws in more developed market economies and few precedents with regard to the interpretation of these laws have been established. Global tax reforms commenced in 1999 with the introduction of Part One of the Tax Code of the Russian Federation, as amended (the "**Russian Tax Code**"), which sets general taxation guidelines. Since then, Russia has been in the process of replacing legislation regulating the application of major taxes such as the corporate income tax, VAT and property tax with new chapters of the Russian Tax Code.

In practice, the Russian tax authorities generally interpret the tax laws in ways that rarely favor taxpayers, who often have to resort to court proceedings to defend their position against the tax authorities. Events within the Russian Federation suggest that the tax authorities may be taking a more assertive position in their interpretations of the legislation and assessments. Contradictory interpretations of tax regulations exist within government ministries and organizations at the federal, regional and local levels, creating uncertainties and inconsistent enforcement. Tax declarations and documentation such as customs declarations, are subject to review and investigation by relevant authorities, which may impose severe fines, penalties and interest charges. Generally, in a tax audit, taxpayers are subject to inspection with respect to the three calendar years which immediately preceded the year in which the audit is carried out. Previous audits do not completely exclude subsequent claims relating to the audited period because Russian tax law authorizes upper-level tax inspectorates to re-audit taxpayers which were audited by subordinate tax inspectorates. In addition, on July 14, 2005, the Russian Constitutional Court issued a decision that allows the statute of limitations for tax liabilities to be extended beyond the three-year term set forth in the tax laws if a court determines that a taxpayer has obstructed or hindered a tax audit. As a result of the fact that none of the relevant terms are defined, tax authorities may

have broad discretion to argue that a taxpayer has “obstructed” or “hindered” a tax audit and ultimately seek back taxes and penalties beyond the three year term. In some instances, new tax regulations have been given retroactive effect.

In November 2014, Russian legislation was significantly revised in order to prevent the misuse of low-tax jurisdictions for tax evasion in the Russian Federation. Changes in the legislation set out the rules for the taxation of income of a foreign organization recognized as a controlled foreign company. Such foreign organization is recognized as a controlled foreign company if it is not a tax resident of the Russian Federation, and the participation interest of the controlling Russian legal entities or individuals in the organization is more than 25% (in some cases, more than 10%). Starting with the calculation of the profits of controlled foreign companies for 2017 and thereafter, profits in the amount of not more than RUB 10 million are not subject to income tax. Russian tax law also provides for certain conditions under which the income of controlled companies qualifies as tax exempt. Starting in 2016, the taxable income of the controlling party is increased by the profits of the controlled foreign company earned in the financial year ended prior to the reporting year. In addition, Russian companies are required to disclose information about controlled foreign companies to the Russian tax authorities. All of these measures are intended to ensure the transparency of economic transactions, including foreign trade transactions. Disclosure of beneficial ownership, beneficial recipients of income and tax residence of legal entities at their actual place of business is, according to the new legislation, a prerequisite for the application of tax preferences, including reduced tax rates under international double tax treaties. In July 2015, the Convention on Mutual Administrative Assistance in Tax Matters became effective. The Convention provides for the potential exchange of tax information, including simultaneous tax inspections with Member States of the Council of Europe and member countries of the Organization for Economic Co-operation and Development (“OECD”), which signed the convention, as well as for assistance in the collection of taxes on their territories. Furthermore, starting from June 30, 2014, the Federal Law No. 173-FZ entered into force, which regulates the procedure of interaction of financial market entities with foreign tax authorities, primarily within the bounds of the U.S. law Foreign Account Tax Compliance Act (“FATCA”).

On November 16, 2011, the Russian President signed the Law on Amendment of Part One and Part Two of the Tax Code of the Russian Federation in Connection with the Formation of a Consolidated Group of Taxpayers. The main provisions of the law came into force on January 1, 2012. The law provides for formation of a consolidated group of taxpayers for the purposes of income tax calculation and payment on the basis of the combined business performance of the members of such group. However, the law sets forth a number of requirements for the formation of a consolidated group of taxpayers. Starting from 2013, 16 companies of our group have formed a consolidated group of taxpayers, with Mechel being a responsible party. The formation of the consolidated group of taxpayers allowed us to determine the taxable income with profit and loss offset of all the companies included in the consolidated group of taxpayers and to pay income tax from total aggregate income under the consolidated group of taxpayers, starting from January 1, 2013. In 2014, there have been some changes in the composition of the consolidated group of taxpayers as a result the number of members has increased to 20 companies. Under current Russian tax legislation, the consolidated tax base does not include any profit received from controlled foreign companies by a member of the consolidated group of taxpayers (such member being the controlling entity of such controlled foreign companies and the responsible party for paying income tax in respect of the profits of controlled foreign companies irrespective of the income tax of the consolidated group of taxpayers).

However, regardless of being a member of the consolidated group of taxpayers or not, Mechel and our Russian subsidiaries pay Russian taxes on dividends they receive from other companies in our group. The tax rate on dividend income amounts to 0% or 13% (depending on whether the recipient of dividends qualifies for Russian participation exemption rules) if being distributed to Russian companies, and 15% (or lower, subject to benefits provided by relevant double tax treaties) if being distributed to foreign companies. Dividends from foreign companies to Russian companies are subject to a tax of 13%. Taxes paid in foreign countries by Russian companies may be offset against payment of these taxes in the Russian Federation up to the maximum amount of the Russian tax liability. In order to apply the offset, the company is required to confirm the payment of taxes in

the foreign country. The confirmations must be authorized by the tax authority of the foreign country if taxes were paid by the company itself, and the confirmation must be authorized by the tax agent if taxes were withheld by the tax agent under foreign tax law or an international tax agreement.

In 2017, due to changes in Russian tax legislation, the order of set-off of tax loss accumulated by Russian companies, including companies within the consolidated group of taxpayers significantly changed. Such changes have led to an increase in the Mechel's tax burden. During the period from 2017 to 2020, the amount of recognized loss for previous tax periods cannot exceed 50% of the tax base of the current period. In 2021, this limitation will cease to apply and the recognition of accumulated losses in full will be possible again. At the same time, the previously existing 10-year limit on the transfer of losses was cancelled.

The limitation in the amount of recognized loss is also applied to the members of the consolidated group of taxpayers with respect to current year loss of its members. Such limitation equals to 50% of the consolidated tax base of the consolidated group of taxpayers for the current reporting (tax) period. In respect of losses incurred in previous tax periods (before January 1, 2017), the consolidated tax base of the current tax period may be reduced by the amount of such losses, but also by no more than 50%. These changes in accounting the loss of the consolidated group of taxpayers have increased the tax burden on companies included in the consolidated group of taxpayers.

In 2018, Russian tax law introduced an indefinite ban on the registration by the tax authorities of agreements on the formation of a consolidated group of taxpayers, the extension of their validity and the introduction of changes related to the accession of new members or withdrawal from the consolidated group of taxpayers, unless such member ceases to comply with tax legislation requirements. In addition, January 1, 2023 is the expiration date of all agreements on the formation of a consolidated group of taxpayers.

In addition, application of current Russian thin capitalization rules and the developing negative court practice on such disputes, especially at the level of the Presidium of the Supreme Court of the Russian Federation, may require us to withhold dividend taxes in Russia upon payment of interest on loans. In particular, taking into account the requirements of Russian law and negative court practice on thin capitalization, part of the interest on borrowings of our subsidiaries which are either received from Mechel or received from independent banks and guaranteed by Mechel may be classified as dividends and may not be treated as expenses for tax purposes under certain conditions provided by thin capitalization rules. In February 2016, a law which significantly changes the current approach to thin capitalization rules application was adopted. We believe that thin capitalization rules are not applicable to Mechel's loans starting from May 2016. However, there can be no assurance that in case of a change of the existing thin capitalization rules and the applicable practice, we will not be subject to the risks specified above.

In accordance with amendments to the Russian Tax Code which entered into force on November 30, 2016, the tax authorities are entitled to seek in court payment of taxes by the company's dependent persons, including dependent individuals, for example, the owners, founders or shareholders of such company, if these persons received cash or property from the company which has outstanding tax amounts within the amounts received by them. Taking into account the requirements of Russian law and negative court practice at the level of the Constitutional Court of the Russian Federation, there can be no assurance that we will not be subject to the risks specified above.

The foregoing conditions create tax risks in Russia that are more significant than typically found in countries with more developed tax systems, imposing additional burdens and costs on our operations, including management resources. In addition to our tax burden, these risks and uncertainties complicate our tax planning and related business decisions, potentially exposing us to significant fines and penalties and enforcement measures despite our best efforts at compliance. See also “— Risks Relating to the Russian Federation — Legal risks and uncertainties — Selective government action could have a material adverse effect on the investment climate in Russia and on our business, financial condition, results of operations and prospects and the value of our shares and ADSs.”

Differences in interpretation of transfer pricing rules in the jurisdictions in which we operate, as well as the lack of developed law enforcement practice with regard to the Russian transfer pricing rules expose our business to the risk of significant additional liabilities.

Transfer pricing rules control related party transactions pricing. The fundamental principle of the rules is the ‘arm’s length’ principle, according to which organizations must enter into transactions with related parties on the same terms as they would enter into transactions with independent parties.

Transfer pricing rules apply in most countries in which we operate. Many countries participating in the OECD employ a unified approach to transfer pricing, however in certain jurisdictions, including Russia, transfer pricing rules have some specifics. As such, the tax authorities of different countries can take advantage of the ambiguous interpretation of transfer pricing rules which can lead to claims on their part or additional tax inspections. The Russian transfer pricing rules that entered into force on January 1, 2012 should help to achieve consistency between domestic rules and the OECD principles.

The Russian transfer pricing rules require taxpayers to notify the tax authorities on controlled transactions that are performed from January 1, 2012. Controlled transactions mean any transactions between related parties both domestic and cross-border, as well as certain transactions between unrelated parties, subject to certain conditions, including the size of profit received under such transactions within a calendar year. The rules introduce specific pricing methods, and documentation requirements for proving market prices. Currently established practice in applying the rules has only started to develop and in some cases decisions are being pronounced not in favor of taxpayers, therefore we cannot predict what effect the transfer pricing rules will have on our business. If the tax authorities impose significant additional tax assessments as a result of changes in transfer pricing regulation and we are unable to successfully challenge them in court or make symmetrical adjustments provided by these rules, it could have a material adverse effect on our business, financial condition, results of operations and prospects.

Expansion of limitations on foreign investment in strategic sectors could affect our ability to attract and/or retain foreign investments.

Our group is subject to limitations imposed by Russian legislation that restricts the rights of foreign entities to invest in certain Russian companies and in the subsoil sector under the Strategic Investment Laws of the Russian Federation, including the Federal Law “On the Procedure for Foreign Investment in Companies with Strategic Impact on the National Defense and Security of the Russian Federation” (the “**Strategic Industries Law**”). As at the date hereof, our subsidiaries Southern Urals Nickel Plant, which holds the subsoil license on land plots with nickel and cobalt ore deposits, Urals Stampings Plant and Port Posiet which are included in the register of natural monopolies and our subsidiaries Yakutugol, Elgaugol, Vzryvprom and Korshunov Mining Plant which hold licenses to carry out activities related to the handling of industrial explosives are considered Strategic Companies.

Therefore, any transfer, directly or indirectly, to a foreign investor or its group of entities (except for the transfer to a foreign investor controlled by the Russian Federation, the constituent entity of the Russian Federation and/or Russian nationals provided such Russian nationals are Russian tax residents and do not have other nationality) of a stake or certain rights in or fixed assets (equal to 25% or more of the balance sheet value of the relevant entity) of Southern Urals Nickel Plant, Yakutugol, Elgaugol, Vzryvprom, Korshunov Mining Plant, Urals Stampings Plant and Port Posiet, which, according to the Strategic Industries Law, is deemed to transfer control, as described in “Item 4. Information on the Company — Regulatory Matters — The Strategic Industries Law,” will be subject to prior approval from the state authorities. Likewise, a sale to a foreign investor or its group of entities of a stake in Mechel which provides control (as defined in the Strategic Industries Law) over Southern Urals Nickel Plant, Yakutugol, Elgaugol, Vzryvprom, Korshunov Mining Plant, Urals Stampings Plant and Port Posiet, will also be subject to prior approval in accordance with the Strategic Industries Law.

In addition, in case a foreign investor or its group of entities which is a holder of securities of Southern Urals Nickel Plant, Yakutugol, Elgaugol, Vzryvprom, Korshunov Mining Plant, Urals Stampings Plant and Port

Posiet, becomes a holder of voting shares in amount which is considered to give them direct or indirect control over these companies in accordance with the Strategic Industries Law due to the allocation of voting shares as a result of certain corporate procedures provided by Russian law (e.g., as a result of a buy-back by the relevant company of its shares, conversion of preferred shares into common shares, or holders of preferred shares becoming entitled to vote at a general shareholders' meeting in cases provided under Russian law), such shareholders will have to apply for approval within three months after they acquired such control.

Furthermore, starting from July 2017 the Strategic Industries Law was amended so that production and sale of metals, alloys with special features or raw materials that are used in production of weapons and military equipment is also deemed a strategic activity. Considering the fact that the amendments are vague and ambiguous and may be construed broadly, certain other our group companies may be qualified as Strategic Companies.

In this connection, there is a risk that the requirement to receive prior or subsequent approvals and the risk of not being granted such approvals might affect our ability to attract foreign investments, create joint ventures with foreign partners with respect to our companies that qualify as Strategic Companies or effect restructuring of our group which might, in turn, materially adversely affect our business, financial condition, results of operations and prospects.

For a more detailed discussion of implications of the Strategic Investment Laws, see “Item 4. Information on the Company — Regulatory Matters — The Strategic Industries Law.”

Land use rights regulation in Russia is subject to uncertainty and contradiction.

The main law governing the title to land is the Land Code of the Russian Federation introduced by the Federal Law “On Introduction of the Land Code,” dated October 25, 2001, as amended (the “**Land Code**”), which establishes the principles of land legislation and determines relations governed by land legislation.

Starting from 2015, the Land Code and a number of other legislative acts regulating the land use have been significantly amended in part concerning the procedure for allotment of land plots by public authorities to citizens and legal entities. Law enforcement practice, taking into account changes in the applicable legislation, is currently under development; therefore, risks associated with uncertainty of regulatory aspects of the allotment of land plots by public authorities exist.

In addition, there is a general risk of seizure of land plots for state needs for the implementation of governmental programs and projects, which means creation and construction of complexes within the framework of such federal programs. Moreover, if the land plots owned or leased by us are found not to be in compliance with all applicable approvals, consents, registrations or other regulations, we may lose the use of such land plots.

The ambiguous interpretation of land law and/or a potential seizure of our land plots for state needs or for other reasons may have a material adverse effect on our business, financial condition, results of operations and prospects.

Item 4. Information on the Company

Overview

We are a vertically integrated group with revenues of RUB 312,574 million in 2018, RUB 299,113 million in 2017 and RUB 276,009 million in 2016, with operations organized into three industrial segments: mining, steel and power, each of which has a management company that performs the functions of respective executive management bodies of the companies within the segment, as described below.

Our group includes a number of logistical and marketing companies that help us to deliver and market our products. We have freight seaports in Russia on the Sea of Japan (Port Posiet) and on the Sea of Azov (Port Temryuk), as well as a freight river port on the Kama River, a tributary of the Volga River in central Russia (Port Kambarka). We have a fleet of freight railcars, locomotives and long-haul trucks, and operate a rail line to our Elga coal deposit in the Sakha Republic.

We have a network of overseas subsidiaries, branches, warehouses, service centers and agents to market our products internationally, and we have a Russian domestic steel retail and service subsidiary with regional offices in 41 cities throughout Russia.

Mechel PAO is a public joint-stock company incorporated under the laws of the Russian Federation. From the date of our incorporation on March 19, 2003 until July 19, 2005, our corporate name was Mechel Steel Group OAO. We conduct our business through a number of subsidiaries. We are registered with the Federal Tax Service of the Russian Federation under the main state registration number (OGRN) 1037703012896. Our principal executive offices are located at Krasnoarmeyskaya Street, 1, Moscow 125167, Russian Federation. Our telephone number is +7 495 221 8888. Our Internet addresses are www.mechel.com and www.mechel.ru. Information posted on our website is not a part of this document. We have appointed CT Corporation System, located at 28 Liberty Street, New York, New York 10005, as our authorized agent upon which process may be served for any suit or proceeding arising out of or relating to our shares, ADSs or the deposit agreements.

Mining Segment

Our mining segment produces metallurgical coal (coking coal, PCI and anthracite), steam coal, iron ore and iron ore concentrate, coke and chemical products.

The segment primarily consists of our coal, iron ore and coke production facilities in Russia. It also includes certain transportation and logistics facilities and engineering operations.

Our subsidiary Southern Kuzbass Coal Company and its subsidiaries operate coal mines located in the Kuznetsky basin, near Mezhdurechensk in Western Siberia. These mines include four open pit mines and three underground mines. Another of our subsidiaries, Yakutugol, operates coal mines located in the Sakha Republic in Eastern Siberia, consisting of three open pit mines. Yakutugol also holds subsoil licenses for three iron ore deposits, located in close proximity to its coal mining operations. In August 2013, we established Elgaugol which holds the subsoil license for the Elga coal deposit, located in the Sakha Republic in Eastern Siberia. Our mining segment also provides coal washing services to our coal mining subsidiaries.

Korshunov Mining Plant operates two open pit iron ore mines and a concentrating plant located near Zheleznogorsk-Ilimsky, a town in the Irkutsk region in Eastern Siberia.

The mining segment also produces significant amounts of coke, both for use by our subsidiaries in the steel segment and for sales to third parties. We have the flexibility to supply our own steel mills with our mining products or to sell such mining products to third parties, depending on price differentials between local suppliers and foreign and domestic customers.

In April 2008, we established Mechel Mining, a wholly-owned subsidiary, in which we consolidated coal, iron ore and coke assets of our mining segment (Southern Kuzbass Coal Company, Korshunov Mining Plant, Yakutugol, Moscow Coke and Gas Plant and Mechel Coke and certain other companies).

Mechel Mining Management, a wholly-owned subsidiary of Mechel Mining, acts as the sole executive body of our subsidiaries in the mining segment.

Steel Segment

Our steel segment produces and sells semi-finished steel products, long products of a wide range of steel grades, carbon and stainless flat steel products and high value-added metal products, including wire products, stampings and forgings, structural shapes, beams and rails.

Our steel segment production facilities in Russia include one integrated steel mill, one steelmaking mill, a wire products plant and stampings and forgings mill in the southern part of Ural Mountains, a wire products plant in northwestern Russia near the border with Finland and a ferrosilicon plant in Eastern Siberia. We also have a wire products plant in Lithuania.

Mechel-Steel Management, a wholly-owned subsidiary of Mechel, acts as the sole executive body of our main subsidiaries in the steel segment.

Our steel segment also includes our distribution network in Russia and abroad, which consists of Mechel Service and Mechel Service Global.

Power Segment

The power segment was formed in April 2007, when we acquired a controlling interest in Southern Kuzbass Power Plant located in Kaltan in the Kemerovo region, which sells electricity and capacity to the wholesale market. In June 2007, we acquired a controlling interest in Kuzbass Power Sales Company, the largest power distribution company in the Kemerovo region. Our power segment enables us to market electricity and heat energy, and to maintain the power self-sufficiency of our mining and steel segments. Mechel Energo acts as the sole executive body of Southern Kuzbass Power Plant in our power segment.

Mechel Production Facilities



Competitive Strengths

Our main competitive strengths are the following:

Leading mining and metals group by production volume with strong positions in key businesses

We are the second largest coking coal producer and the third largest coking coal concentrate exporter by volume in Russia.

In 2018, we were the second largest coking coal producer in Russia, with a 13.9% share of total coking coal production by volume, according to the Central Dispatching Department of Fuel and Energy Complex (the “**Central Dispatching Department**”), a Russian information agency reporting on the fuel and energy industry. In 2018, our export sales of coking coal concentrate were the third largest by volume among Russian companies, according to MMI.

We have a large coal reserve base and a broad-range offering of high-quality metallurgical coals, as well as steam coals of various grades.

Our total coal reserves amounted to 2,953.5 million tonnes as of December 31, 2018, as accounted pursuant to SEC Industry Guide 7.

Our coal reserves allow us to supply steel producers and coke makers globally with a wide range of coal grades to make quality metallurgical coke or to use in PCI-assisted and sintering-assisted steel manufacturing. In addition to metallurgical coals, we supply steam coals of various grades. In particular, Southern Kuzbass Coal Company produces semi-soft and semi-hard coking coal, PCI, anthracite and steam coal. Most of the coal grades of Southern Kuzbass Coal Company are exported. Yakutugol produces low-volatile hard coking coal used by customers both in the Asia-Pacific region and in Russia, as well as steam coal which is sold domestically to local municipal services and electric power stations and for export. Elgaugol produces high-quality hard coking coal of high-volatile content and steam coal which are primarily supplied for export. The ability to serve our customers with a broad range of metallurgical and steam coal grades gives us a competitive advantage in entering the new markets and establishing long-term relationships with the customers.

By production volume we are Russia’s second largest producer of long steel products and Russia’s largest producer of wire products.

According to Metal Expert, a source for global steel and raw materials market news and analytics, in 2018 by production volume we were Russia’s second largest producer of long steel products (excluding square billets), fourth largest producer of reinforcement bars (rebar) and largest producer of wire rod. Our long steel products business has particularly benefited from the increased infrastructure and construction activity in Russia. Our share of Russia’s total production volume of rebar in 2018 was 16.2%, according to Metal Expert. According to Metal Expert and Chermet, a Russian ferrous metals industry association (“**Chermet**”), we are Russia’s fourth largest producer of special steel by production volume, accounting for 11.2% of Russia’s total special steel output in 2018. Our product range in special steel is broader and more comprehensive than other Russian producers, giving us an added advantage in our markets. According to Metal Expert, we are Russia’s largest producer of wire products by production volume, accounting for 20.9% of Russia’s total wire products output in 2018.

High degree of vertical integration

Our steel segment is able to source most of its raw materials from our group companies, which provides a hedge against supply interruptions and market volatility.

We believe that our internal supplies of coke, iron ore concentrate and ferrosilicon give us advantages over other steel producers, such as higher stability of operations, better quality control of end products, reduced

production costs, improved flexibility and planning latitude in the production of our steel and value-added steel products and the ability to respond quickly to market demands and cycles. In 2018, we were fully self-sufficient with respect to coke and ferrosilicon; we were approximately 54% self-sufficient with respect to iron ore concentrate; and we satisfied approximately 31% of our electricity needs internally. We believe that the level of our self-sufficiency in raw materials gives our steel business a competitive advantage.

We view our ability to source most of our inputs internally not only as a hedge against potential supply interruptions, but as a hedge against market volatility. From an operational perspective, since our mining and power assets produce the same type of inputs that our manufacturing facilities use, we are less dependent on third-party vendors and less susceptible to supply bottlenecks. From a financial perspective, this also means that if the market prices of our steel segment's inputs rise, putting pressure on steel segment margins, the margins of our mining segment will tend to increase. Similarly, while decreases in commodity prices tend to reduce revenues in our mining segment, they also create an opportunity for increased margins in our steel business.

Furthermore, we work on improving the quality of our steel products and reducing the costs for raw materials. Depending on prevailing market conditions, we evaluate the efficiency of use of our own raw materials and the raw materials purchased from third parties to be able to generate additional income.

The ability to internally source our materials also gives us better market insight when we negotiate with our outside suppliers, and improves our ability to manage our raw materials costs.

Our logistics capability allows us to better manage infrastructure bottlenecks, to market our products to a broader range of customers and to reduce our reliance on trade intermediaries.

We are committed to maximum efficiency in delivering goods to consumers and have been actively developing our own logistics network. Using our own transportation capacity enables us to save costs as we are less exposed to market fluctuations in transportation prices and are able to establish flexible delivery schedules that are convenient for our customers. Our logistics capacities are currently comprised of two seaports (Port Posiet and Port Temryuk) and a river port (Port Kambarka), as well as freight forwarding companies (Mecheltrans, MecheltransVostok and Mecheltrans Auto) which manage rail and motor transportation of our products and carry out the overall coordination of our sea, rail and motor transportation logistics. These companies not only transport our products but also provide transportation services to third parties.

We own two seaports and a river port and we have our own rail rolling stock. Port Posiet in the Russian Far East, on the Sea of Japan, gives us easy access to the Asia-Pacific seaborne market and provides a delivery terminal for the coal mined by our subsidiaries Yakutugol and Elgaugol in Yakutia. We are in the process of the Port Posiet's modernization, which will enable us to expand the cargo-handling capacity of the port up to 9.0 million tonnes per annum. Port Temryuk on the Sea of Azov, an inlet of the Black Sea basin, is primarily used for coal and metal transshipment and provides us access to the emerging market economies of the Black Sea and Mediterranean basins. Port Kambarka on the Kama River in the Republic of Udmurtia (a Russian administrative region also known as Udmurtia) is connected to the Volga River basin and the Caspian Sea, by canal to the Don River and the Sea of Azov, as well as by the Volga-Baltic Route to the Baltic Sea. As part of our railcar fleet upgrade program, Mecheltrans acquired 142 new open cars through both purchases and financial leasing in late 2018. As of December 31, 2018, our subsidiaries Mecheltrans and Mecheltrans Auto owned and leased 11,165 freight transportation units, including 11,120 railcars and 45 long-haul trucks that we use to ship our products. In order to enhance transportation security in conditions of a shortage of railcars, which negatively affects the volumes of transportation of our cargoes, we plan to acquire additional open cars in 2019.

In June 2008, pursuant to the terms of our subsoil license for the Elga coal deposit we began construction of a private rail line, which we own and control subject to applicable regulation. In December 2011, we finished laying track for the rail line in accordance with the terms of the license. The 321 kilometer-long rail line is now in operation and we are able to use it for transportation of coal currently produced at the Elga deposit. The rail

line connects the Elga coal deposit with the Baikal-Amur Mainline (at the Ulak railway station), which, in turn, provides access to the Russian rail network generally and access to Pacific Ocean ports, in particular. We will further develop the rail line to increase its capacity in line with our coal production plans. We anticipate that the Elga rail line will not only provide an avenue for delivery of coal produced at the Elga coal deposit, but will eventually serve as the transport route for coal, iron ore and other raw materials mined in the adjacent deposits.

Strategically positioned to supply key growth markets

Our mining and logistical assets are well-positioned to expand sales to the Asia-Pacific seaborne market.

Eastern Siberian coal mines of Yakutugol and Elga coal deposit, which are part of our mining segment, are strategically located and will enable us to expand exports of our products to key Asian markets. Yakutugol and Elgaugol are located within the shortest distance among Russian coking coal producers to Port Posiet and Port Vanino in the Russian Far East. We view the proximity of these mining and logistical assets to the Asian economies as one of the key competitive advantages which allow us to diversify our sales, provides us with additional growth opportunities and acts as a hedge in the event of a decrease in demand from customers in Russia. Moreover, due to our integration, experience and location in Russia, which has some of the largest deposits of coal and iron ore in the world, we believe we are better positioned than many of our international peers to secure future production growth.

Our steel mills are well-positioned to supply Russian infrastructure projects.

Russia is our core steel market and we have significant domestic market shares in main types of carbon and special steel long products. We believe we have established a strong reputation and brand image for Mechel within Russia, just as we have with our international customers. The location of a number of our core steel segment assets in the southern Urals positions us advantageously, from a geographical and logistical perspective, to serve the areas in the west of the Urals as this region is a large consumer of long steel products in Russia, according to Metal Expert. The construction industry has been a major source of our revenue and we have captured a large portion of the market. According to Metal Expert, our share of Russia's total production volume of rebar in 2018 was 16.2%.

Established distribution and sales platform

Our sales and distribution activities in relation to exports of mining products are conducted by our Swiss subsidiary Mechel Carbon. Mechel Carbon is customer oriented and experienced in the trade of metallurgical coals, steam coal, coke and chemical products. Mechel Carbon sales accounted for 76.1% of our mining segment sales and 23.6% of our total sales in 2018.

We also have a distribution network consisting of Mechel Service and Mechel Service Global which conduct sales of our steel products in Russia, the CIS and Europe. Through our distribution network in Russia and the CIS we sell a whole range of steel products manufactured by our plants. In case of sales to the European Union, we focus on sales of high value-added products, primarily high-quality rolled steel products, forgings and structural shapes produced by our Urals plants, through Mechel Service Belgium. Our companies in Germany, Austria and the Czech Republic provide customers with a wide range of services for metal processing. Mechel Service and Mechel Service Global sales accounted for 50.5% of our steel segment sales and 30.3% of our total sales in 2018.

Our direct access to end customers allows us to obtain real-time market intelligence and improve production planning at our steel facilities, which in turn allows us to improve the efficiency of our existing operations through the optimization of our sales structure.

Strong and focused management team

Our current management team has significant experience in all aspects of our businesses. Mr. Zyuzin, one of the founders of our group and our Chairman and largest shareholder, has led our successful transformation from a

small coal trading operation to a large integrated mining and metals group. Mr. Zyuzin has over 30 years of experience in the coal mining industry and holds a Ph.D. in technical sciences in the coal mining field. Our divisional management also has long-tenured experience in the mining and metals industry. See “Item 6. Directors, Senior Management and Employees — Directors and Executive Officers.”

Business Strategy

Our goal is to become one of the largest producers of metallurgical coal and steel products by realizing potential of the vertical integration and maximizing synergies between our performing assets underlying our business model.

Our strategy is aimed at extracting the maximum value from our mining and steel assets. We intend to concentrate on efficiency improvements and modernization of the business lines, which we expect will increase the business’ overall profitability.

In the mining segment, we will continue to develop our existing coal reserves, particularly in order to sell more high-quality metallurgical coal and coal products to third parties. We intend to prioritize the development of the Elga coal deposit, one of the largest global metallurgical coal reserves. Our coking coal and iron ore production form a solid platform for our steel business. Steam coal is used to feed our power generating business which enables us to market electricity and heat energy, and to maintain the power self-sufficiency of our mining and steel segments. However, even as we develop our internal sourcing capability, we intend to adhere to our long-standing approach of purchasing inputs from third-party suppliers and selling products, including raw materials, to domestic and international customers to create the most advantageous profit opportunities for our group.

In the steel segment, we plan to focus on the Russian rail, engineering and construction markets. The launch of the universal rail and structural rolling mill at Chelyabinsk Metallurgical Plant allowed us to widen our portfolio of high value-added products such as structural shapes and rails, as well as significantly improve our competitive advantage as a full product range supplier to the construction sector and as an important supplier to Russian Railways. In 2015 and 2018, we successfully went through the certification of rail products in accordance with technical regulations of the Customs Union resulting in the issuance of five certificates of conformity. The certificates allow free circulation of rail products imported into the territory of the Customs Union. The increase in sales volume of the universal rolling mill products will occur along with the development and certification of new types of products and will enable us to realize the import substitution strategy. We intend to increase our group’s output and improve the quality of high value-added metal products in order to preserve our leadership in special and stainless steels and wire products in Russia.

Our sales and distribution network provides us with a strong platform for further development of our sales. In the current economic situation, we are able to quickly respond to changing market conditions and, if necessary, redirect deliveries of our products not only in Russia but also abroad, thereby allowing us to obtain additional profit.

Another strategic priority is development of our logistics capabilities. We own our railcar fleet to maintain a balance between transportation security and cost efficiency. Development of the cargo-handling capacity of Port Posiet is crucial for continuous shipments of our coal products in the Asia-Pacific region. Growing production of export-oriented coal in our mining segment will require further expansion of port capacities on our main export routes, as well as the increase in our own railcar fleet.

With a focus on improving the efficiency of our main businesses, we may also consider selective disposal of assets in order to reduce the debt burden and contribute to business development.

Our History and Development

We trace our beginnings to a small coal-trading operation in Mezhdurechensk in the southwestern part of Siberia in the early 1990s. See “Item 5. Operating and Financial Review and Prospects — History of Incorporation.” Since that time, through strategic acquisitions in Russia and abroad, Mechel has developed into a leading mining and metals company, comprising producers of coal, iron ore, coke, steel, rolled products, ferrosilicon, heat energy and electricity, with operations and assets in Russia, the CIS and Europe. We intend to retain a controlling voting interest in each of our subsidiary holding companies as we continue to build upon our business model of vertical integration among our assets.

Mining Segment

Our mining segment produces coking coal and other types of metallurgical coal (anthracite and PCI), steam coal, middlings, coking coal and steam coal concentrates, as well as coke and chemical products, iron ore and iron ore concentrate. Our mining segment also includes certain transportation and logistics facilities and engineering operations. Our coal operations consist of Southern Kuzbass Coal Company, Yakutugol and Elgaugol, which together produced 12.3 million tonnes of raw coking coal, 5.0 million tonnes of raw steam coal and 1.5 million tonnes of raw anthracite in 2018. Our coke operations consist of Moscow Coke and Gas Plant and Mechel Coke, which together produced 2.6 million tonnes of coke in 2018. Our iron ore operations consist of Korshunov Mining Plant which produced 6.8 million tonnes of iron ore and 2.0 million tonnes of iron ore concentrate in 2018.

Description of key products

Coking coal and metallurgical coal. Southern Kuzbass Coal Company produces high-quality bituminous coal, which is washed to reduce the ash content. The premier product is a high-quality, low phosphorous, low sulfur semi-soft to semi-hard coking coal used to produce coke for the iron and steel industry. Other products produced by Southern Kuzbass Coal Company include PCI and anthracite. Yakutugol produces hard coking coal of low-volatile content, and Elgaugol produces high-quality hard coking coal of high-volatile content.

Steam coal. Southern Kuzbass Coal Company, Yakutugol and Elgaugol produce high-energy steam coal as part of their product mix. Steam coal is primarily used for the generation of electricity in coal-fired power stations.

Coke. Coke is used in blast furnaces as a main source of heat, as a reducing agent for iron and as a raising agent for charging material in the smelting process. It is a product prepared by pyrolysis (heating in the absence of oxygen) of low-ash, low-phosphorus and low-sulfur coal charging material. We offer customers coke from our Moscow Coke and Gas Plant and Mechel Coke.

Chemical products. Chemical products are hydrocarbon products obtained as a by-product of coke production. We produce chemical products in our subsidiaries Moscow Coke and Gas Plant and Mechel Coke. We offer our customers coal tar, coal benzene and other compounds. Worldwide, coal tar is used in diverse applications, including in the production of electrode pitch, pitch coke, coal-tar oils, naphthalene, as well as boiler fuel. Coal benzene is used by the chemical industry to produce chemical compounds used as raw materials in organic synthesis in the production of synthetic fibers, as well as in the paint and varnish industry.

Iron ore concentrate. From our Korshunov Mining Plant, we offer iron ore concentrate with a standard iron content of 62%. Additionally, Yakutugol holds subsoil licenses for three iron ore deposits located in Yakutia. These deposits contain high-quality iron ore, which will allow production of iron ore concentrate with 65% iron content.

Mining process

Coal. At our Russian mines, coal is mined using open pit or underground mining methods. Following a drilling and blasting stage, a combination of shovels and draglines is used for moving coal and waste at our open

pit mines. Production at the underground mines is predominantly from longwall mining, a form of underground coal mining where a long wall of coal in a seam is mined in a single slice. After mining, depending upon the amount of impurities in the coal, the coal is processed in a washing plant, where it is crushed and impurities are removed by gravity methods. Coking coal concentrate is then transported to coking plants for conversion to coke for use in pig iron smelting at steel plants. Steam coal is then shipped to power utilities, which use it in furnaces for steam generation to produce electricity. The advantages of our mining business include the high quality of our coking coal and the low level of volatile matter in our steam coal.

Iron ore. At our Korshunov Mining Plant, ore is mined using the open pit mining method. Following a drilling and blasting stage, ore is hauled by dump trucks and dumping cars to the concentrating plant. At the concentrating plant, the ore is crushed and ground to a fine particle size, then separated into an iron ore concentrate slurry and a waste stream using wet magnetic separators. The iron ore is upgraded to a concentrate that contains approximately 62% elemental iron. Tailings are pumped to a tailings dam facility located adjacent to the concentrating plant. The concentrate is sent to disk vacuum filters which remove the water from the concentrate to reduce the moisture level, enabling shipment to customers by rail during warmer months, while, in colder periods, the concentrate must be dried further to prevent freezing in railcars. The Korshunov Mining Plant operates its own drying facility with a dry concentrate production capacity of up to 16,000 tonnes per day. In 2011-2012, Yakutugol obtained subsoil licenses for the Pionerskoye iron ore deposit, the Sutamskaya iron ore area and the Sivaglinskoye iron ore deposit in Yakutia.

Coal production

Our coal production consists of the following mines in Russia:

Subsidiary (Location)	Surface	Underground
Yakutugol (Sakha Republic, Russia)	Neryungrinsky Open Pit Kangalassky Open Pit Dzhebariki-Khaya Open Pit	
Elgaugol (Sakha Republic, Russia)	Elga Open Pit	
Southern Kuzbass Coal Company (Kuzbass, Russia)	Sibirginsky Open Pit Tomusinsky Open Pit Olzherassky Open Pit Krasnogorsky Open Pit	V.I. Lenina Underground Sibirginskaya Underground Olzherasskaya- Novaya Underground

Our coal mines are primarily located in the Kuznetsky basin, a major Russian coal-producing region, and in the Sakha Republic in Eastern Siberia.

The table below summarizes our run-of-mine (“**ROM**”) coal production by type of coal and location of mines for the periods indicated.

	2018		2017		2016	
	<u>Tonnes</u>	<u>% of Production</u>	<u>Tonnes</u>	<u>% of Production</u>	<u>Tonnes</u>	<u>% of Production</u>
	(In millions of tonnes) ⁽¹⁾					
Coking Coal						
Yakutugol	6.4		7.3		8.9	
Elgaugol	3.4		3.5		2.8	
Southern Kuzbass Coal Company	<u>2.5</u>		<u>1.9</u>		<u>2.5</u>	
Total Coking Coal	12.3	65.4%	12.7	61.6%	14.2	62.7%
Steam Coal						
Yakutugol	0.6		1.0		1.0	
Elgaugol	1.5		0.7		0.9	
Southern Kuzbass Coal Company	<u>2.9</u>		<u>4.0</u>		<u>4.2</u>	
Total Steam Coal	5.0	26.6%	5.7	27.7%	6.1	26.8%
Anthracite						
Yakutugol	—		—		—	
Elgaugol	—		—		—	
Southern Kuzbass Coal Company	<u>1.5</u>		<u>2.2</u>		<u>2.4</u>	
Total Anthracite	<u>1.5</u>	<u>8.0%</u>	<u>2.2</u>	<u>10.7%</u>	<u>2.4</u>	<u>10.5%</u>
Total Coal	<u>18.8</u>	<u>100%</u>	<u>20.6</u>	<u>100%</u>	<u>22.7</u>	<u>100%</u>

(1) Volumes are reported on a wet basis.

The coking coal produced by our Russian mines is predominately low-sulfur (0.3%) bituminous coal. Heating values for coking coal range from 6,861 to 8,488 kcal/kg on a moisture- and ash-free basis. Heating values for steam coal range from 6,627 to 8,286 kcal/kg on a moisture- and ash-free basis.

The table below summarizes our saleable coal production by type of coal and location of mines for the periods indicated.

	2018		2017		2016	
	Tonnes	% of Production	Tonnes	% of Production	Tonnes	% of Production
	(In millions of tonnes)					
Coking Coal						
Yakutugol	3.7	25%	4.6	28%	5.9	30%
Elgaugol	1.7	12%	1.6	10%	1.6	8%
Southern Kuzbass Coal Company	1.9	13%	1.8	11%	3.1	16%
Total Coking Coal	7.3	50%	8.0	49%	10.6	54%
PCI						
Yakutugol	—	—	—	—	—	—
Elgaugol	—	—	—	—	—	—
Southern Kuzbass Coal Company	1.2	8%	1.3	8%	1.4	7%
Total PCI	1.2	8%	1.3	8%	1.4	7%
Anthracite						
Yakutugol	—	—	—	—	—	—
Elgaugol	—	—	—	—	—	—
Southern Kuzbass Coal Company	1.1	8%	1.5	9%	1.8	9%
Total Anthracite	1.1	8%	1.5	9%	1.8	9%
Steam Coal						
Yakutugol	2.4	16%	2.7	17%	3.2	17%
Elgaugol	1.5	10%	1.2	7%	1.3	7%
Southern Kuzbass Coal Company	1.2	8%	1.7	10%	1.2	6%
Total Steam Coal	5.1	34%	5.6	34%	5.7	30%
Total Coal	14.7	100%	16.4	100%	19.5	100%

Yakutugol mines

Our Yakutugol coal mines are located in the Sakha Republic. The Sakha Republic is located in Eastern Siberia and covers an area of 3.1 million square kilometers. It has a population of fewer than one million inhabitants. Its capital, Yakutsk, is located on the Lena River in south central Yakutia.

Our Yakutugol mines include three open pit mines: Neryungrinsky Open Pit, Kangalassky Open Pit and Dzhebariki-Khaya Open Pit. Neryungrinsky Open Pit is located in the South-Yakutsky basin which covers an area of 25,000 square kilometers and lies near the southern border of Yakutia. Neryungrinsky Open Pit is located near the town of Neryungri, one of the main industrial centers of Yakutia and its second largest city. Kangalassky Open Pit and Dzhebariki-Khaya Open Pit are located in the Lensky basin which covers an area of 750,000 square kilometers and lies near Yakutsk.

The table below sets forth certain information regarding the subsoil licenses for our Yakutugol coal mines.

Mine	License (plot)	Area (sq. km)	Mining Method	Life of Mine	License Expiry Date	Status ⁽¹⁾	Year Production Commenced	Surface Land Use Rights
Neryungrinsky Open Pit	ЯКУ 12336 ТЭ (Moshchny seam)	15.3	Open pit	2029	Dec 2024	In production	1979	Ownership
Kangalassky Open Pit	ЯКУ 15017 ТЭ (Kangalassk)	7.7	Open pit	2100	Dec 2027	In production	1962	Ownership
Dzhebariki-Khaya Open Pit	ЯКУ 15061 ТЭ (Dzhebariki- Khaya)	1.1	Open pit	2024	Dec 2023	In production	2017	Ownership

(1) “In production” refers to sites that are currently producing coal.

The earliest production at our Yakutugol mines was in 1962, although we acquired these mines and license areas in October 2007. Neryungrinsky Open Pit produces low-volatile hard coking coal and steam coal which are sold primarily in the Asia-Pacific region and domestically. Neryungrinsky Open Pit has a railway spur connected to the Russian rail system, which is controlled by Russian Railways. Kangalassky Open Pit produces steam coal that is generally sold as fuel for boiler plants in Yakutia. It is accessible through an all-weather road from Kangalassy and through a highway from Yakutsk. Dzhebariki-Khaya Open Pit produces steam coal, most of which is sold to state housing and municipal services. Dzhebariki-Khaya Open Pit is accessible only by means of the Aldan River.

The table below summarizes ROM coal production of our Yakutugol mines by mine and type of coal for the periods indicated.

Mine	2018		2017		2016	
	Tonnes	% of Total Production	Tonnes	% of Total Production	Tonnes	% of Total Production
Coking Coal						
Neryungrinsky Open Pit	6.4		7.3		8.9	
Total Coking Coal	6.4	91.4%	7.3	88.0%	8.9	89.9%
Steam Coal						
Neryungrinsky Open Pit	0.0		0.7		0.4	
Dzhebariki-Khaya Open Pit ⁽²⁾	0.4		0.2		0.4	
Kangalassky Open Pit	0.2		0.1		0.2	
Total Steam Coal	0.6	8.6%	1.0	12.0%	1.0	10.1%
Total Coal	7.0	100%	8.3	100%	9.9	100%

(1) Volumes are reported on a wet basis.

(2) The data included for the year ended December 31, 2016 refers to Dzhebariki-Khaya Underground, mining operations of which were discontinued in August 2016.

The table below sets forth coal sales volumes of our Yakutugol mines by type of coal and destinations for the periods indicated.

<u>Coal Type</u>	<u>Region</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
(In thousands of tonnes)				
Coking coal	Asia	2,694.6	3,307.1	3,942.6
	Russia	509.8	786.2	1,136.1
	CIS	4.1	13.2	22.3
	Europe	0.0	2.2	19.1
Total		3,208.5	4,108.7	5,120.1
Steam coal	Russia	614.2	930.5	703.2
	Asia	51.4	498.1	622.5
Total		665.6	1,428.6	1,325.7
Middlings	Russia	1,512.3	1,087.9	1,758.9
	Asia	394.6	732.1	459.4
Total		1,906.9	1,820.0	2,218.3
Total		5,781.0	7,357.3	8,664.1

Elgaugol mine

Our Elga Open Pit is located in the South-Yakutsky basin of the Toko Coal-Bearing region in the Sakha Republic. This coal region was first discovered and explored in 1952 with the first geological surveys being conducted from 1954 through 1956. The closest inhabited localities are Verkhnezeysk village (located 320 kilometers south of the deposit) and the town of Neryungri (located 415 kilometers to the west). Since 1998, there have been several studies on the Elga coal deposit, including geology and resources, mine planning and feasibility studies. Overburden removal at the Elga deposit commenced in November 2010. Coal mining at Elga Open Pit commenced in August 2011.

Our subsidiary Elgaugol was established on August 14, 2013 under the laws of the Russian Federation for the purpose of raising project financing from Vnesheconombank. Elgaugol holds the subsoil license for the Elga coal deposit.

The table below sets forth certain information regarding the subsoil license for our Elgaugol mine.

<u>Mine</u>	<u>License (plot)</u>	<u>Area (sq. km)</u>	<u>Mining Method</u>	<u>Life of Mine</u>	<u>License Expiry Date</u>	<u>Status⁽¹⁾</u>	<u>Year Production Commenced</u>	<u>Surface Land Use Rights</u>
Elga Open Pit	ЯКУ 03730 ТЭ (Elga)	144.1	Open pit	2100	Dec 2033	In production	2011	Lease

(1) “In production” refers to sites that are currently producing coal.

Elga Open Pit produces two types of coal: high-quality hard coking coal (high-volatile) and steam coal. It also produces middlings (a by-product of the coking coal washing process). Coking coal and steam coal are sold primarily in the Asia-Pacific market with transshipment in ports of the Russian Far East.

The table below summarizes ROM coal production of our Elgaugol mine by type of coal for the periods indicated.

<u>Mine</u>	<u>2018</u>		<u>2017</u>		<u>2016</u>	
	<u>Tonnes</u>	<u>% of Total Production</u>	<u>Tonnes</u>	<u>% of Total Production</u>	<u>Tonnes</u>	<u>% of Total Production</u>
Coking Coal						
Elga Open Pit	<u>3.4</u>		<u>3.5</u>		<u>2.8</u>	
Total Coking Coal	<u>3.4</u>	<u>69.4%</u>	<u>3.5</u>	<u>83.3%</u>	<u>2.8</u>	<u>75.7%</u>
Steam Coal						
Elga Open Pit	<u>1.5</u>		<u>0.7</u>		<u>0.9</u>	
Total Steam Coal	<u>1.5</u>	<u>30.6%</u>	<u>0.7</u>	<u>16.7%</u>	<u>0.9</u>	<u>24.3%</u>
Total Coal	<u>4.9</u>	<u>100%</u>	<u>4.2</u>	<u>100%</u>	<u>3.7</u>	<u>100%</u>

(1) Volumes are reported on a wet basis.

The table below sets forth coal sales volumes of our Elgaugol mine by type of coal and destinations for the periods indicated.

<u>Coal Type</u>	<u>Region</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
(In thousands of tonnes)				
Coking coal	Asia	<u>441.6</u>	<u>426.3</u>	<u>242.6</u>
Total		<u>441.6</u>	<u>426.3</u>	<u>242.6</u>
Steam coal	Asia	<u>1,296.6</u>	<u>1,088.8</u>	<u>1,429.2</u>
	Russia	<u>26.3</u>	<u>1.0</u>	<u>1.2</u>
Total		<u>1,322.9</u>	<u>1,089.8</u>	<u>1,430.4</u>
Total		<u>1,764.5</u>	<u>1,516.1</u>	<u>1,673.0</u>

In 2009, the general scheme of the Elga coal complex development and the plan for initial mine block development were prepared. The plan for initial mine block development was subsequently approved by governmental authorities. In 2011, the project documentation of the first stage of the Elga coal complex construction was prepared and subsequently approved by governmental authorities.

In December 2011, we finished laying track for the rail line to the Elga deposit. This 321 kilometer-long rail line is now in operation, and we are able to use it for transportation of coal produced at Elga Open Pit. The rail line connects Elga Open Pit with the Baikal-Amur Mainline (at the Ulak railway station), which, in turn, provides access to the Russian rail network generally and access to Pacific Ocean ports, in particular. We will further develop the rail line to increase its capacity in line with our production plans. In March 2016, we contributed the Ulak-Elga rail line to the registered capital of the newly established company Elga-road.

In October 2012, we launched a pilot seasonal washing plant for Elga Open Pit with a seasonal capacity of 2.0 million tonnes per annum. In late 2014, we completed the transfer of the pilot seasonal washing plant to year-round operation with an annual capacity of up to 2.7 million tonnes.

Federal Grid Company, the state-owned operator of the unified national electric grid, is installing high-voltage transmission lines to deliver electricity from the Zeysky hydro power plant located 270 kilometers from the site, and we are constructing electricity-receiving infrastructure. We expect to start receiving electricity from this power plant in 2019.

In accordance with the order of the Federal Agency for Subsoil Use (“Rosnedra”) No. 177 dated February 27, 2015 “On the conducting of a one-time updating of subsoil licenses,” we filed an application with the Department for Subsoil Use for the Sakha Republic (Yakutia) regarding conduct of an update procedure relating to the terms of the subsoil license for the Elga coal deposit. In December 2015, the Department for Subsoil Use for the Sakha Republic (Yakutia) made a decision to update the existing terms and issued an amendment to the subsoil license. This amendment provided that the level of coal extraction and deadlines for reaching the design capacity would be determined by the deposit development technical plan. In September 2016, based on the decision of Rosnedra, the subsoil license for the Elga coal deposit was extended until December 31, 2033.

In the event of significant deviations from the design solutions, we can prepare and duly approve the adjustment of the current technical plan in order to avoid violation of the terms of subsoil use. Thus, the amended license terms allow us to manage licensing risks by adjusting the project documentation which significantly reduces the risk of suspension of the subsoil license in the event of a deviation from the design solutions. See also “Item 3. Key Information — Risk Factors — Risks Relating to Our Business and Industry — The development of the Elga coal deposit is subject to certain risks due to the substantial amount of capital costs involved in developing the required infrastructure.”

Southern Kuzbass mines

The Kuznetsky basin, or Kuzbass, is located in the southeastern part of Western Siberia and is one of the largest coal mining areas in the world, covering an area of around 70,000 square kilometers. Coal-bearing seams extend over an area of 26,700 square kilometers and reach a depth of up to 1,800 meters. Coal was discovered in 1721, and systematic mining started in 1851. During the Soviet era, Kuzbass was the second largest regional coal producer. According to the Central Dispatching Department, Kuzbass (Kemerovo region) now accounts for 58% of Russia’s total coal production.

All of our Southern Kuzbass mines are located in southeast Kuzbass around the town of Mezhdurechensk in the Kemerovo region, with the exception of the Yerunakovskaya mine area, which is located about 100 kilometers northwest of Mezhdurechensk.

The earliest production at our Southern Kuzbass mines was in 1953, although we acquired these mines and license areas starting in the 1990s. The Southern Kuzbass mines include four open pit mines and three underground mines: Sibirginsky Open Pit, Tomusinsky Open Pit, Olzherassky Open Pit, Krasnogorsky Open Pit, V.I. Lenina Underground, Sibirginskaya Underground and Olzherasskaya-Novaya Underground.

Our Southern Kuzbass mines and the related washing plants produce semi-soft and semi-hard coking coal, anthracite, PCI and steam coal. Our Kuzbass operations are connected by rail to the Trans-Siberian Mainline and substantially all products are shipped by rail. Products are generally shipped by rail to Russian customers, to northwestern Russian ports for European customers, to Port Posiet and Port Vanino for export to Asia and to Port Temryuk for customers in the Black Sea and Mediterranean basins.

The table below sets forth certain information regarding the subsoil licenses for our coal mines in Kuzbass, all of which are held by our subsidiary Southern Kuzbass Coal Company, unless otherwise noted.

Mine	License (plot)	Area (sq. km)	Mining Method	Life of Mine	License Expiry Date	Status ⁽¹⁾	Year Production Commenced	Surface Land Use Rights
Krasnogorsky Open Pit . . .	KEM 14016 ТЭ (Tomsk, Sibirginsk)	22.4	Open pit	2055	Jan 2021	In production	1954	Lease
	KEM 13367 ТЭ (Sorokinsk, Tomsk, Sibirginsk)	2.8			Nov 2025	In production	2012	Lease
Olzherassky Open Pit	KEM 01374 ТЭ (Raspadsk, Bereзовsk, Sosnovsk)	10.1	Open pit	2050	Dec 2029	In production	1980	Lease
	KEM 12939 ТЭ (Raspadsk) ⁽²⁾	3.5			Dec 2024	Development	n/a	Lease
	KEM 12940 ТЭ (Bereзовsk-2, Bereзовsk, Olzherassk)	4.8			Dec 2024	In production	2007	Lease
	KEM 01917 ТЭ (Bereзовsk Gluboky)	7.4			Aug 2035	Exploration and development	n/a	Lease
Tomusinsky Open Pit	KEM 13312 ТЭ (Tomsk) ⁽³⁾	6.7	Open pit	2028	Dec 2020	In production	1959	Lease
Sibirginsky Open Pit	KEM 13639 ТЭ (Sibirginsk, Kureinsk, Uregolsk)	16.4	Open pit	2055	Dec 2032	In production	1970	Lease
	KEM 01557 ТЭ (New-Uregolsk)	2.4			Apr 2031	In production	2011	Lease
Sibirginskaya Underground	KEM 12917 ТЭ (Sibirginsk, Tomsk)	5.9	Underground	2058	Dec 2024	In production	2002	Lease
	KEM 15463 ТЭ (Sibirginsk-2, Sibirginsk, Kureinsk)	0.9			Dec 2032	In production	2014	Lease
	KEM 01914 ТЭ (Sibirginsk-3)	7.6			Aug 2035	Exploration and development	n/a	Lease
V.I. Lenina Underground	KEM 14060 ТЭ (Olzherassk)	10.0	Underground	2050	Dec 2032	In production	1953	Lease
	KEM 01701 ТЭ (Granichny, Olzherassk)	1.2			Feb 2033	Exploration and development	n/a	Lease, Ownership
Olzherasskaya-Novaya Underground	KEM 14199 ТЭ (Raspadsk)	1.2	Underground	2035	Dec 2021	In production	2008	Lease
	KEM 01471 ТЭ (Olzherassk-2, Raspadsk)	0.2			Jan 2030	In production	2010	Lease
	KEM 13366 ТЭ (Razvedochny, Raspadsk)	14.6			Nov 2025	In production	2010	Lease
Yerunakovskaya-1 Underground (project)	KEM 13237 ТЭ (Yerunakovsk-1, Yerunakovsk) ⁽⁴⁾	8.4	Underground	2033	Jun 2025	Development	n/a	Lease
Yerunakovskaya-3 Underground (prospect)	KEM 13238 ТЭ (Yerunakovsk-3, Yerunakovsk) ⁽⁴⁾	7.1	Underground	2115	Jun 2025	Development	n/a	—
Olzherasskaya-Glubokaya Underground (prospect)	KEM 13365 ТЭ (Olzherassk) ⁽⁵⁾	19.2	Underground	2211	Nov 2025	Development	n/a	—
Usinskaya Underground (prospect)	KEM 14093 ТЭ (Olzherassk)	3.6	Underground	2071	Dec 2033	Conservation	n/a	Ownership

(1) “In production” refers to sites that are currently producing coal. “Development” refers to sites where preliminary work is being carried out. “Exploration and development” refers to sites where preliminary work and drilling for calculation of mineral reserves are being carried out. “Conservation” refers to sites where no mining activity is conducted, but measures for mine conservation are being taken.

- (2) We failed to commence commercial production in 2009 as required by the subsoil license due to unfavorable mine economics. In September 2018, we started stripping works at the Rapsadsk license area and we expect to commence production in the fourth quarter of 2019.
- (3) License held by Tomusinsky Open Pit, a subsidiary of Southern Kuzbass Coal Company.
- (4) We failed to commence commercial production in 2011 as required by the subsoil license due to unfavorable mine economics.
- (5) We failed to commence commercial production in 2012 as required by the subsoil license due to unfavorable mine economics.

The table below summarizes ROM coal production of our Southern Kuzbass mines by mine and type of coal for the periods indicated.

<u>Mine</u>	<u>2018</u>		<u>2017</u>		<u>2016</u>	
	<u>Tonnes</u>	<u>% of Total Production</u>	<u>Tonnes</u>	<u>% of Total Production</u>	<u>Tonnes</u>	<u>% of Total Production</u>
Coking Coal						
Sibirginsky Open Pit	0.3		0.2		0.2	
Tomusinsky Open Pit	0.4		0.4		0.8	
V.I. Lenina Underground	0.6		0.5		0.8	
Sibirginskaya Underground	0.5		0.4		0.2	
Olzherassky Open Pit	0.7		0.4		0.5	
Total Coking Coal	<u>2.5</u>	<u>36.2%</u>	<u>1.9</u>	<u>23.5%</u>	<u>2.5</u>	<u>27.5%</u>
Steam Coal						
Krasnogorsky Open Pit	1.6		1.7		1.8	
Sibirginsky Open Pit	0.1		0.3		0.3	
Olzherassky Open Pit	0.0		0.0		0.0	
Olzherasskaya-Novaya Underground	0.8		1.5		1.5	
Tomusinsky Open Pit	0.4		0.5		0.6	
Total Steam Coal	<u>2.9</u>	<u>42.0%</u>	<u>4.0</u>	<u>49.4%</u>	<u>4.2</u>	<u>46.1%</u>
Anthracite						
Krasnogorsky Open Pit	1.5		2.2		2.4	
Sibirginsky Open Pit	—		—		—	
Olzherassky Open Pit	—		—		—	
Olzherasskaya-Novaya Underground	—		—		—	
Tomusinsky Open Pit	—		—		—	
Total Anthracite	<u>1.5</u>	<u>21.8%</u>	<u>2.2</u>	<u>27.1%</u>	<u>2.4</u>	<u>26.4%</u>
Total Coal	<u>6.9</u>	<u>100%</u>	<u>8.1</u>	<u>100%</u>	<u>9.1</u>	<u>100%</u>

(1) Volumes are reported on a wet basis.

The table below sets forth Southern Kuzbass mines' coal sales volumes by type of coal and destinations for the periods indicated.

<u>Coal Type</u>	<u>Region</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
(In thousands of tonnes)				
Coking coal	Asia	461.4	261.7	179.3
	Russia	146.4	0.0	242.0
Total		607.8	261.7	421.3
Anthracite	Europe	729.3	971.4	892.6
	Asia	177.9	256.3	224.9
	Russia	46.4	52.1	32.6
	CIS	11.1	54.6	108.6
	Other	0.0	61.2	255.9
Total		964.7	1,395.6	1,514.6
PCI	Asia	1,217.3	1,433.6	1,571.9
	Middle East ⁽¹⁾	20.2	31.2	10.4
	Europe	0.0	0.0	37.8
Total		1,237.5	1,464.8	1,620.1
Steam coal	Asia	598.9	1,001.9	845.6
	Europe	22.8	36.7	4.6
	Russia	13.3	12.2	12.7
	Middle East ⁽¹⁾	0.0	8.9	44.9
Total		635.0	1,059.7	907.8
Total		3,445.0	4,181.8	4,463.8

(1) Includes Turkey only.

Coal washing plants

We operate six coal washing plants and one processing unit in Russia. Four of these coal washing plants and one processing unit are located near our coal mines in Southern Kuzbass. Additionally, one coal washing plant is located near Neryungrinsky Open Pit, and one coal washing plant is at Elga Open Pit.

Our four coal washing plants and one processing unit located near our coal mines in Southern Kuzbass have an aggregate annual capacity of approximately 17.3 million tonnes of ROM coal. These are Krasnogorskaya Washing Plant, Sibir Washing Plant, Tomusinskaya Washing Plant, Kuzbasskaya Washing Plant and Sibirginskaya Processing Unit. These washing plants have aggregate storage capacity for saleable products of 142,700 tonnes, of which 34% is covered storage.

Neryungrinskaya Washing Plant located near Neryungrinsky Open Pit has an annual capacity of 9.0 million tonnes. The plant produces coking coal concentrate and middlings.

In October 2012, we launched a pilot seasonal washing plant for Elga Open Pit, which operated in the warmer months of April to October only, with a seasonal capacity of 2.0 million tonnes per annum. In late 2014, we completed the transfer of the pilot seasonal washing plant to year-round operation with an annual capacity of up to 2.7 million tonnes.

In 2018, our washing plants enriched 17.0 million tonnes of our coal feedstock.

Coke and chemical products production

The following table lists the various types and grades of coke and chemical products we produce and sell. We also produce and sell coke gas.

Plant	Products
Moscow Coke and Gas Plant . .	Coke +60 mm, Coke +40 mm, Coke 25-40 mm, Coke nut 10-25 mm, Coke breeze 0-10 mm, Coal benzene, Coal tar, Coke gas
Mechel Coke	Coke +40 mm, Coke +25 mm, Coke 25-40 mm, Coke nut 10-25 mm, Coke breeze 0-10 mm, Coal benzene, Coal tar, Ammonium sulfate, Coke gas

We have two coke plants, one of which is located in the city of Chelyabinsk and the other in the Moscow region. Coke is prepared by pyrolysis (heating in the absence of oxygen) of low-ash, low-phosphorus and low-sulfur coal. Coke is used in the blast furnace as a main source of heat, a reducing agent for iron and a raising agent for charging material in the smelting process.

In addition, we produce coke nut, which is smaller in size than metallurgical coke and is principally used as a reducing agent in ferroalloys production and for other purposes, and coke breeze, which is even smaller in size and is principally used for sintering iron ore concentrate prior to its use in blast furnaces or as fuel. Coke production and sales volumes figures presented herein include, among others, coke nut and coke breeze. Additional chemical products, such as coal benzene, coal tar and ammonium sulfate, are obtained as by-products in the coke production process.

The table below summarizes our production of coke, chemical products and coke gas for the periods indicated.

	2018	2017	2016
	(Coke and chemical products in thousands of tonnes)		
	(Coke gas in millions of cubic meters)		
Mechel Coke			
Coke (6% moisture)	2,040	2,269	2,244
Chemical products	109	121	110
Coke gas	744	798	824
Moscow Coke and Gas Plant			
Coke (6% moisture)	542	561	742
Chemical products	29	29	38
Coke gas	235	237	328
Total			
Coke (6% moisture)	<u>2,582</u>	<u>2,830</u>	<u>2,986</u>
Chemical products	<u>138</u>	<u>150</u>	<u>148</u>
Coke gas	<u>979</u>	<u>1,035</u>	<u>1,152</u>

The table below summarizes our sales volumes of coke and chemical products for the periods indicated.

	2018	2017	2016
	(In thousands of tonnes)		
Coke	697	771	894
Chemical products	131	140	146

The following table sets forth the capacity, the capacity utilization rate and the planned increase in capacity for Moscow Coke and Gas Plant's principal production area.

<u>Production Area</u>	<u>Capacity in 2018</u>	<u>Capacity Utilization Rate in 2018</u>	<u>Planned Increase (2019-2021)</u>
		(In thousands of tonnes)	
Coke (6% moisture)	625	86.7%	—

The following table sets forth the capacity, the capacity utilization rate and the planned increase in capacity for Mechel Coke's principal production area.

<u>Production Area</u>	<u>Capacity in 2018</u>	<u>Capacity Utilization Rate in 2018</u>	<u>Planned Increase (2019-2021)</u>
		(In thousands of tonnes)	
Coke (6% moisture)	2,939	69.4%	—

Our own production facilities purchase a substantial majority of our coke production. For the years ended December 31, 2018, 2017 and 2016, purchases of our coke by our own production facilities amounted to 1.7 million tonnes, 1.9 million tonnes and 1.9 million tonnes, respectively, which represented 71%, 71% and 68% of our total coke sales volumes (including intra-group sales) for those periods.

We purchase some coking coal from other producers in order to produce coke. Our need to purchase coking coal from third parties for coke production varies from period to period, depending on customer demand for particular products and the availability of suitable coal grades from our own mines.

Iron ore and concentrate production

Our iron ore operations consist of Korshunov Mining Plant, which operates Korshunovsky Open Pit, Rudnogorsky Open Pit and the Korshunovsky concentrating plant, as well as the three subsoil licenses held by Yakutugol for the Pionerskoye iron ore deposit, the Sivaglinskoye iron ore deposit and the Sutamskaya iron ore area in Yakutia.

The Korshunovsky concentrating plant is located outside of the town of Zheleznogorsk-Ilmsky, 120 kilometers east of Bratsk in the Irkutsk region. Korshunovsky Open Pit is located near the concentrating plant, and Rudnogorsky Open Pit is located about 85 kilometers to the northwest of the concentrating plant. We have operated these iron ore mines and the concentrating plant since 2003 when we acquired Korshunov Mining Plant. Both mines produce a magnetite ore (Fe_3O_4), and the concentrating plant produces iron ore concentrate with a standard iron content of 62%. Product is shipped by rail to our customers. All of the sites are served by regional public highways and a nearby federal motorway. The area is served by the Baikal-Amur Mainline, which connects the Trans-Siberian Mainline with China and Yakutia.

The table below sets forth certain information regarding the subsoil licenses for our iron ore mines, all of which are held by our subsidiary Korshunov Mining Plant.

<u>Mine</u>	<u>License (plot)</u>	<u>Area (sq. km)</u>	<u>Mining Method</u>	<u>License Expiry Date</u>	<u>Status⁽¹⁾</u>	<u>Year Production Commenced</u>	<u>Surface Land Use Rights</u>
Korshunovsky Open Pit	ИПК 03333 ТЭ (Korshunovsk)	4.3	Open pit	Dec 2026	In production	1965	Lease
Rudnogorsky Open Pit	ИПК 03334 ТЭ (Rudnogorsk)	5.3	Open pit	Jan 2028	In production	1984	Ownership

(1) "In production" refers to sites that are currently producing iron ore.

The table below summarizes our ROM iron ore and iron ore concentrate production for the periods indicated.

<u>Mine</u>	<u>2018</u>		<u>2017</u>		<u>2016</u>	
	<u>Tonnes</u>	<u>Grade (% Fe)</u>	<u>Tonnes</u>	<u>Grade (% Fe)</u>	<u>Tonnes</u>	<u>Grade (% Fe)</u>
(In millions of tonnes) ⁽¹⁾						
Korshunovsky Open Pit	3.6	23.4%	3.6	23.2%	4.1	23.6%
Rudnogorsky Open Pit	3.2	27.8%	4.4	26.2%	4.1	27.9%
Total ore production	<u>6.8</u>	<u>25.5%</u>	<u>8.0</u>	<u>24.8%</u>	<u>8.2</u>	<u>25.8%</u>
Iron ore concentrate production	<u>2.0</u>	<u>62.8%</u>	<u>2.5</u>	<u>62.8%</u>	<u>2.7</u>	<u>62.8%</u>

(1) Volumes are reported on a wet basis.

In 2011-2012, we obtained subsoil licenses for three iron ore deposits: the Pionerskoye deposit, the Sivaglinskoye deposit and the Sutamskaya area which are held by Yakutugol. The Pionerskoye deposit is located in Yakutia about 127 kilometers from the town of Neryungri. This area is well connected to the regional transportation network with a federal motorway located 5 kilometers to the east of the deposit. The Sivaglinskoye deposit is 120 kilometers away from Neryungri and located close to the Pionerskoye deposit. The Sutamskaya area is located 210 kilometers south-east of Neryungri. These deposits contain high-quality iron ore, which will allow production of iron ore concentrate with 65% iron content.

The table below sets forth certain information regarding the subsoil licenses for our iron ore deposits, all of which are held by our subsidiary Yakutugol.

<u>Deposit</u>	<u>License (plot)</u>	<u>Area (sq. km)</u>	<u>Mining Method</u>	<u>License Expiry Date</u>	<u>Status⁽¹⁾</u>	<u>Year Production Commenced</u>	<u>Surface Land Use Rights</u>
Pionerskoye	ЯКУ 03034 ТЭ (Pionersk)	9.95	Open pit	Aug 2031	Exploration	n/a	Lease
Sivaglinskoye	ЯКУ 03153 ТЭ (Sivaglinsk)	2.23	Open pit	Mar 2022	Exploration	n/a	Lease
Sutamskaya area	ЯКУ 03158 ТЭ (Sutamskaya area)	731.32	Open pit	Mar 2037	No activity	n/a	—

(1) “Exploration” refers to sites where drilling for calculation of mineral reserves is being carried out.

Sales of mining segment products

The following table sets forth sales of mining segment products (by volume) and as a percentage of total sales of these products (including intra-group sales) for the periods indicated.

<u>Product</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
	(In thousands of tonnes) ⁽¹⁾			(% of total sales, including intra-group)		
Coking coal concentrate	4,257.7	4,796.8	5,784.0	59.6%	60.4%	66.8%
Steam coal and middlings	4,537.9	5,403.9	5,927.2	85.8%	88.0%	84.7%
PCI and Anthracite	2,205.5	2,865.0	3,139.0	91.7%	93.1%	92.6%
Iron ore concentrate	139.8	30.2	26.3	7.1%	1.2%	1.0%
Coke	696.6	770.6	893.5	28.5%	28.7%	31.5%
Chemical products	130.8	140.0	146.3	95.8%	93.3%	96.4%

(1) Includes resale of mining segment products purchased from third parties.

The following table sets forth revenues by product, as further divided between domestic sales and exports (including as a percentage of total mining segment revenues) for the periods indicated. We define exports as sales by our Russian and foreign subsidiaries to customers located outside their respective countries. We define domestic sales as sales by our Russian and foreign subsidiaries to customers located within their respective countries. See note 26 to the consolidated financial statements.

Product	2018		2017		2016	
	Amount	% of Revenues	Amount	% of Revenues	Amount	% of Revenues
(In millions of Russian rubles, except for percentages)						
Coking coal concentrate	43,633.3	45.0%	43,656.4	43.6%	38,743.9	43.2%
Domestic Sales	17.8%		20.4%		21.6%	
Export	82.2%		79.6%		78.4%	
Steam coal	9,935.0	10.2%	13,446.7	13.4%	12,587.3	14.1%
Domestic Sales	13.7%		15.2%		17.1%	
Export	86.3%		84.8%		82.9%	
PCI and Anthracite	19,687.1	20.3%	21,436.7	21.4%	18,737.1	20.9%
Domestic Sales	2.3%		2.3%		1.3%	
Export	97.7%		97.7%		98.7%	
Middlings	6,766.9	7.0%	5,800.9	5.8%	5,189.8	5.8%
Domestic Sales	68.6%		43.2%		68.0%	
Export	31.4%		56.8%		32.0%	
Coke	11,243.6	11.6%	11,379.3	11.4%	9,341.5	10.4%
Domestic Sales	22.3%		47.8%		64.1%	
Export	77.7%		52.2%		35.9%	
Chemical products	2,961.5	3.1%	2,367.9	2.4%	1,988.0	2.2%
Domestic Sales	65.8%		59.6%		54.8%	
Export	34.2%		40.4%		45.2%	
Iron ore concentrate	838.9	0.9%	220.2	0.2%	125.9	0.1%
Domestic Sales	100.0%		100.0%		100.0%	
Export	0.0%		0.0%		0.0%	
Other ⁽¹⁾	1,816.0	1.9%	1,821.2	1.8%	2,934.6	3.3%
Total	96,882.3	100.0%	100,129.3	100.0%	89,648.1	100.0%
Domestic Sales	21.0%		22.2%		25.4%	
Export	79.0%		77.8%		74.6%	

(1) Includes revenues from transportation, distribution, construction and other miscellaneous services provided to local customers.

Marketing and distribution

In 2018, our Russian domestic sales were conducted directly by our own production facilities, and our export sales were conducted by Mechel Carbon, based in Baar, Switzerland. We generally do not involve traders in the sales and distribution of our mining products and we have had long-standing relationships with end users of our mining products.

The following table sets forth percentage of sales revenue by the regions in which our mining segment products were sold for the periods indicated.

Region⁽¹⁾	2018	2017	2016
Asia	60.8%	61.3%	58.2%
Russia	21.0%	22.2%	25.4%
Europe	12.9%	11.6%	11.3%
CIS	2.3%	2.5%	2.1%
Middle East ⁽²⁾	3.0%	2.0%	0.8%
United States	0.0%	0.0%	0.3%
Other	0.0%	0.4%	1.9%
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

(1) The regional breakdown of sales is based on the geographic location of our customers, and not on the location of the end users of our products, as our customers are often distributors that resell and, in some cases, further export our products.

(2) Includes Turkey only.

The following table sets forth information about the five largest customers of our mining segment, which together accounted for approximately 40.4% of our total mining segment sales in 2018.

Customer	% of Total Mining Segment Sales	Product	% of Total Products Sales
POSCO	14.7%	Coking coal concentrate	19.5%
		PCI and Anthracite	26.4%
		Middlings	7.2%
Sojitz Corporation	10.1%	Coking coal concentrate	17.2%
		PCI and Anthracite	11.9%
MMK	6.5%	Coking coal concentrate	14.1%
		Iron ore concentrate	11.6%
Batek Resources	4.7%	Steam coal	39.4%
		Middlings	9.0%
Far-Eastern Generating Company JSC	4.5%	Middlings	63.4%
		Steam coal	0.6%

Domestic sales

We ship our coking coal concentrate from our coal washing facilities, located near our coal mines, by rail directly to our customers, including steel producers. In 2018, our largest domestic customer for our coking coal concentrate was MMK, accounting for 14.1% of our total coking coal concentrate sales and 6.4% of our total mining segment sales.

We sell coking coal concentrate domestically on the basis of annual framework contracts with monthly or quarterly adjustments to price and quantity.

We ship our steam coal from our warehouses by rail directly to our customers, which are predominantly local municipal services and electric power stations. Our supply contracts for steam coal are generally concluded with customers on a long-term basis with quantities and prices either fixed for the whole term or adjusted monthly. Some of our steam coal is consumed within our group; for example, sales of steam coal and middlings from our Southern Kuzbass Coal Company to our Southern Kuzbass Power Plant were RUB 516.4 million in 2018. In total, 122.0 thousand tonnes of steam coal was sold within our group in 2018. SUE HCS Sakha Republic

(Yakutia) is our largest domestic customer of steam coal, accounting for 8.2% of our total steam coal sales and 0.8% of our total mining segment sales in 2018.

We ship our iron ore concentrate by rail directly from our Korshunov Mining Plant to customers. In 2018, iron ore concentrate was sold primarily within our group. We set our prices on a monthly basis, which is in line with the current practice in the Russian market of iron ore feed.

The majority of coke is sold domestically to our subsidiaries Chelyabinsk Metallurgical Plant and Bratsk Ferroalloy Plant, which accounted for 71.4% of our total coke sales (including intra-group sales) by volume in 2018. Major third-party customers include pig iron, steel and ferroalloy producers located in the Central Region and in the Urals of Russia. Generally, sales in Russia are conducted pursuant to framework agreements with monthly adjustments of quantities and prices.

Our subsidiary Mecheltrans is a railway freight forwarding company, which owns its own rail rolling stock, consisting of 1,785 open cars and 57 pellet cars, and leases 3,923 open cars and 272 dumpcars under operating leases and 5,083 open cars under finance leases. In 2018, Mecheltrans transported domestically approximately 21.1 million tonnes of our cargo, approximately 72.2% of which was comprised of coal and iron ore feed.

Export sales

We export coking coal concentrate, PCI and anthracite, steam coal and coke and chemical products.

In 2018, the largest foreign customer of our mining segment was POSCO, accounting for 14.7% of our total mining segment sales. POSCO purchases consisted of PCI, coking coal concentrate and middlings.

We were Russia's third largest exporter of coking coal concentrate in 2018, according to MMI. Our exports of coking coal concentrate went primarily to China, Japan and South Korea in 2018. In 2018, Sojitz Corporation, POSCO, Xiamen Xiangyu Logistics Group Corporation, Yancheng Materials Group Co., Ltd. and Kobe Steel, Ltd. were our largest foreign customers of coking coal concentrate, accounting for 54.8% of our total coking coal concentrate sales and 24.7% of our total mining segment sales. Shipments are generally made by rail to seaports and further by sea, except for certain shipments to Eastern Europe and northeast China that are made only by rail.

In 2018, our exports of PCI and anthracite were primarily to Europe, South Korea, Japan and China, which together accounted for 96.4% of our total PCI and anthracite sales and 19.6% of our total mining segment sales. In 2018, our largest foreign customers of PCI and anthracite were POSCO, ArcelorMittal, Sojitz Corporation, Sumitomo Corporation and Mitsui & Co.

In 2018, our exports of steam coal were primarily to China, Vietnam and Japan, which together accounted for 72.2% of our total steam coal sales and 7.4% of our total mining segment sales. In 2018, our largest foreign customers of steam coal were Batek Resources Limited, Creative Centre International Group Limited, Shandong Zikuang Coal Transportation and Marketing Co., Ltd, Itochu Corporation and Galaxy Energy and Resources Co. Pte. Ltd.

PCI, anthracite and steam coal are shipped to customers from our warehouses by rail and further by sea.

In 2018, we used annual contracts for export sales of coal. Coal not shipped under annual contracts was sold on the spot market.

In 2018, we exported coke, including coke breeze, and chemical products primarily to Europe, which accounted for 35.2% of our total coke and chemical products sales and 5.2% of our total mining segment sales.

From Port Posiet, we shipped primarily coking coal concentrate, steam coal and PCI to Japan, South Korea and China in 2018. In 2018, our Port Posiet processed 5.3 million tonnes of coal with its warehousing capacity

limited to 200 thousand tonnes per month for one-time storage of no more than four grades of coal. In order to expand the cargo-handling capacity of the port, we constructed a modern transshipment complex and put into operation a mechanized coal loosening complex. The first stage of the Port Posiet's modernization enabled us to expand the cargo-handling capacity of the port up to 7.0 million tonnes per annum in 2016. We further envisage the construction of a deepwater berth and an approach channel, as well as the installation of a shiploader. The port's proximity to roads and rail links to key product destinations and transshipment points in China and Russia make it a cost-effective link in the logistical chain for bringing our coal products to the market.

In 2018, Mecheltrans transported for export approximately 9.2 million tonnes of our cargo, approximately 86.6% of which was comprised of coal.

Market share and competition

Coal

According to the Central Dispatching Department, in 2018, the Russian coal mining industry was represented by 176 companies, which operated 57 underground mines and 119 open pit mines. As a result of the privatization of 1990s and subsequent mergers and acquisitions, the Russian coal mining industry has become more concentrated. Based on the Central Dispatching Department's data and our estimates, the ten largest coal mining companies in Russia produced approximately 70% of the overall coal production volume in 2018.

According to data from the Central Dispatching Department, from companies' websites and from our estimates, in 2018, we were the second largest coking coal producer in Russia, with a 13.9% share of total coking coal production by volume, and we had a 4.3% market share with respect to overall Russian coal production by volume. The following table lists the main Russian coking coal producers in 2018, the industrial groups to which they belong, their coking coal production volumes and their share of total Russian production volume.

Group	Company	Coking Coal Production (Thousands of Tonnes)	% of Coking Coal Production by Volume
EVRAZ plc	Raspadskaya PAO	12,740	13.5%
	UCC Yuzhkuzbassugol JSC	10,360	11.0%
	EVRAZ Total	23,100	24.5%
Mechel PAO	Yakutugol JSHC	6,357	6.8%
	Elgaugol OOO	3,446	3.7%
	Southern Kuzbass Coal Company PJSC	3,291	3.5%
	Mechel Total	13,094	14.0%
Severstal PAO	Vorkutaugol AO	9,621	10.2%
SUEK JSC	SUEK-Kuzbass JSC	7,192	7.6%
	Arcticheskije razrabotki OOO	494	0.5%
	SUEK Total	7,686	8.1%
Sibuglemet Holding	Mezhdurechye AO	4,392	4.7%
	Bolshevik Mine AO	1,619	1.7%
	Antonovskaya Mine AO	890	1.0%
	Sibuglemet Total	6,901	7.4%
Other		33,790	35.8%
Total		<u>94,192</u>	<u>100.0%</u>

Source: Central Dispatching Department, companies' websites and our estimates.

According to Metal Expert, in 2018, our share of Russia's total production volume of steam coal was 1.5%. The main producers in the Russian steam coal industry include SUEK, UMMC (Kuzbassrazrezugol Coal Company) and SDS-Coal, accounting for 53.9% of total steam coal production in 2018, according to Metal Expert.

In the domestic coal market, we compete primarily on the basis of price, as well as on the basis of the quality of coal, which in turn depends upon the quality of our production assets and the quality of our mineral reserves. Competition in the steam coal market is also affected by the fact that most power stations were built near specific steam coal sources and had their equipment customized to utilize the particular type of coal produced at the relevant local source. Outside of Russia, competition in the steam coal market is largely driven by coal quality, including volatile matter and calorie content.

Iron ore

The Russian iron ore market is generally characterized by high demand and limited sources of supply, with product quality as the main factor driving prices. According to Metal Expert, the market is dominated by relatively few producers, with the top three mining groups being Metalloinvest, NLMK and Severstal, representing 70.9% of total iron ore concentrate production. According to Metal Expert, we were seventh in production volume in 2018 with 2.0 million tonnes of iron ore concentrate, representing 2.0% of total production of iron ore concentrate in Russia.

Mineral reserves

Our coal and iron ore reserves are based on exploration drilling and geological data, and are that part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination. Each year we update our reserve calculations based on actual production and other factors, including economic viability and any new exploration data. Our coal and iron ore reserves are presented in accordance with the criteria for internationally recognized reserve and resource categories of the "Australasian Code for Reporting Mineral Resources and Ore Reserves" (as amended) published by the Joint Ore Reserves Committee ("JORC") of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia (the "JORC Code"), and meet the standards set by the SEC in its Industry Guide 7. Information on our mineral reserves has been prepared by our internal mining engineers as of December 31, 2018. To prepare this information our internal mining engineers used resource and reserve estimates, actual and forecast production, operating costs, capital costs, geological plan maps, geological cross sections, mine advance maps in plan and cross section and price projections.

Our coal and iron ore reserve estimates contained herein inherently include a degree of uncertainty and depend to some extent on geological assumptions and statistical inferences which may ultimately prove to have been unreliable. Consequently, reserve estimates should be regularly revised based on actual production experience or new information and should therefore be expected to change. Notably, should we encounter mineralization or formations different from those predicted by past drilling, sampling and similar examinations, reserve estimates may have to be adjusted and mining plans may have to be altered in a way that might adversely affect our operations. Moreover, if the price of metallurgical coal, steam coal or iron ore declines, or stabilizes at a price lower than recent levels, or if production costs increase or recovery rates decrease, it may become uneconomical to recover reserves containing relatively lower grades of mineralization and consequently our reserves may decrease. Conversely, should the price of metallurgical coal, steam coal or iron ore stabilize at a materially higher price than currently assumed, or if production costs decrease or recovery rates increase, it may become economical to recover material at lower grades than that assumed here and consequently our reserves may increase.

The calculation of our reserves in Russia is based on the expected operational life of each deposit based on life-of-mine plans, which in many cases exceed the relevant license period for the deposit. Russian subsoil licenses are issued for defined boundaries and specific periods, generally about 20 years. Our declared reserves

are contained within the current license boundary. Our Russian subsoil licenses expire on dates falling in 2020 through 2037. However, in many cases, the life of the deposit is well beyond the license term. Based on Russian law and practice, as evidenced by our experience and publicly available information, including a number of court cases, it is reasonably likely that an incumbent subsoil user will be granted license extension through the end of the expected operational life of the deposit, provided that the licensee is not in violation of the material terms of the license. The cost for the license extension is not substantial. See “— Regulatory Matters — Subsoil Licensing in Russia — Extension of licenses.” We have received extension of certain of our subsoil licenses which expired and we intend to extend the licenses for all deposits expected to remain productive subsequent to their license expiry dates. However, license extension is not guaranteed and is to a certain extent subject to the discretion of regulatory authorities. See “Item 3. Key Information — Risk Factors — Risks Relating to Our Business and Industry — Our business could be adversely affected if we fail to obtain or extend necessary subsoil licenses and permits or fail to comply with the terms of our subsoil licenses and permits,” “Item 3. Key Information — Risk Factors — Risks Relating to the Russian Federation — Legal risks and uncertainties — Deficiencies in the legal framework relating to subsoil licensing subject our licenses to the risk of governmental challenges and, if our licenses are suspended or terminated, we may be unable to realize our reserves, which could materially adversely affect our business, financial condition, results of operations and prospects” and “— Regulatory Matters — Subsoil Licensing in Russia.”

As of December 31, 2018, we had coal reserves totaling 2,953.5 million tonnes, of which approximately 76% was coking coal. The table below summarizes our coal reserves as of December 31, 2018.

<u>Company</u>	<u>Proved Reserves⁽¹⁾</u>	<u>Probable Reserves⁽¹⁾</u>	<u>Total</u>	<u>% in Open Pit</u>
	(In thousands of tonnes)			
Yakutugol	182,231	555	182,786	100.0%
Elgaugol	1,726,974	503,461	2,230,435	100.0%
Southern Kuzbass Coal Company	514,443	25,786	540,229	79.1%
Total	<u>2,423,648</u>	<u>529,802</u>	<u>2,953,450</u>	<u>96.2%</u>

(1) Reserves include adjustments for loss and dilution modifying factors.

The table below summarizes our reserves by coal type as of December 31, 2018.

<u>Company</u>	<u>Category</u>	<u>Coking Coal</u>	<u>Steam Coal</u>	<u>Anthracite</u>	<u>Lignite</u>	<u>Total⁽¹⁾</u>
		(In thousands of tonnes)				
	Proved	91,463	7,984	0	82,784	182,231
	Probable	263	292	0	0	555
Yakutugol	Total	91,726	8,276	0	82,784	182,786
	Proved	1,468,363	258,611	0	0	1,726,974
	Probable	462,257	41,204	0	0	503,461
Elgaugol	Total	1,930,620	299,815	0	0	2,230,435
	Proved	205,081	198,478	110,884	0	514,443
	Probable	18,529	7,154	103	0	25,786
Southern Kuzbass Coal Company	Total	223,610	205,632	110,987	0	540,229
	Proved	1,764,907	465,073	110,884	82,784	2,423,648
	Probable	481,049	48,650	103	0	529,802
Total		<u>2,245,956</u>	<u>513,723</u>	<u>110,987</u>	<u>82,784</u>	<u>2,953,450</u>

(1) Reserves include adjustments for loss and dilution modifying factors.

The table below sets forth reserves attributable to our Yakutugol mines as of December 31, 2018.

<u>Mine</u>	<u>Proved Reserves</u>	<u>Probable Reserves</u>	<u>Total⁽¹⁾⁽²⁾</u>	<u>Heat Value⁽³⁾</u>	<u>% Sulfur</u>
	<u>(In thousands of tonnes)</u>			<u>(In kcal/kg)</u>	
Neryungrinsky Open Pit ⁽⁴⁾⁽⁵⁾	97,184	555	97,739	8,794	0.11 - 0.30
Kangalassky Open Pit ⁽⁵⁾	82,784	0	82,784	6,834	0.40
Dzhebariki-Khaya Open Pit ⁽⁵⁾	2,263	0	2,263	7,500	0.22
Total	<u>182,231</u>	<u>555</u>	<u>182,786</u>		

- (1) Reserves reported on a wet in-situ basis and include adjustments for loss and dilution modifying factors.
- (2) These reserves amounts are based on the quantities that could be extracted economically using current operating costs and certain estimated future prices. In estimating the reserves, we used the following average prices: \$112 per tonne (FCA basis) for coking coal concentrate and \$32 per tonne (FCA basis) for raw steam coal.
- (3) Heat value is reported on a moisture- and ash-free basis.
- (4) Mined coking coal is processed at Neryungrinskaya Washing Plant with a weighted average yield of coking coal concentrate of 60%.
- (5) Steam coal is sold as ROM without processing.

The table below sets forth reserves attributable to our Elgaugol mine as of December 31, 2018.

<u>Mine</u>	<u>Proved Reserves</u>	<u>Probable Reserves</u>	<u>Total⁽¹⁾⁽²⁾</u>	<u>Heat Value⁽³⁾</u>	<u>% Sulfur</u>
	<u>(In thousands of tonnes)</u>			<u>(In kcal/kg)</u>	
Elga Open Pit ⁽⁴⁾	1,726,974	503,461	2,230,435	7,000-8,600	0.25
Total	<u>1,726,974</u>	<u>503,461</u>	<u>2,230,435</u>		

- (1) Reserves reported on a wet in-situ basis and include adjustments for loss and dilution modifying factors.
- (2) These reserves amounts are based on the quantities that could be extracted economically using current operating costs and certain estimated future prices. In estimating the reserves, we used the following average prices: \$110 per tonne (FCA basis) for coking coal concentrate and \$25 per tonne (FCA basis) for raw steam coal.
- (3) Heat value is reported on a moisture- and ash-free basis.
- (4) Mined coal is processed at Elginskaya Washing Plant and Sibir Washing Plant with a weighted average yield of concentrate of 46% and 59%, respectively.

The table below sets forth reserves attributable to our Southern Kuzbass mines as of December 31, 2018.

<u>Mine</u>	<u>Proved Reserves</u>	<u>Probable Reserves</u>	<u>Total⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾</u>	<u>Heat Value⁽⁵⁾</u>	<u>% Sulfur</u>
	<u>(In thousands of tonnes)</u>			<u>(In kcal/kg)</u>	
Krasnogorsky Open Pit	191,367	194	191,561	8,100	0.33
Olzherassky Open Pit	53,456	5,963	59,419	8,363	0.30
Tomusinsky Open Pit	5,915	4,337	10,252	8,390	0.30
Sibirginsky Open Pit	166,286	45	166,331	8,530	0.30
Sibirginskaya Underground	38,710	4,024	42,734	8,513	0.28
V.I. Lenina Underground	26,997	11,223	38,220	8,588	0.35
Olzherasskaya-Novaya Underground	31,712	0	31,712	7,902	0.20
Yerunakovskaya-1 Underground (project) ⁽⁶⁾	—	—	—	—	—
Yerunakovskaya-3 Underground (prospect) ⁽⁷⁾	—	—	—	—	—
Olzherasskaya-Glubokaya Underground (prospect) ⁽⁷⁾	—	—	—	—	—
Usinskaya Underground (prospect) ⁽⁷⁾	—	—	—	—	—
Total	<u>514,443</u>	<u>25,786</u>	<u>540,229</u>		

- (1) Reserves reported on a wet in-situ basis and include adjustments for loss and dilution modifying factors.
- (2) These reserves amounts are based on the quantities that could be extracted economically using current operating costs and certain estimated future prices. In estimating the reserves, we used the following average prices (FCA basis): \$135 per tonne for coking coal concentrate, \$74 per tonne for anthracite, \$74 per tonne for PCI and \$33 per tonne for raw steam coal.
- (3) Reserves are presented on an assumed 100% basis.
- (4) Mined coal is processed at Sibir Washing Plant, Kuzbasskaya Washing Plant, Tomusinskaya Washing Plant, Sibirginskaya Processing Unit and Krasnogorskaya Washing Plant with a weighted average yield of concentrate of 65%, 72%, 85%, 32% and 50%, respectively.
- (5) Heat value is reported on a moisture- and ash-free basis.
- (6) The extraction is considered uneconomic based on a feasibility study developed in 2017.
- (7) Not considered in the review because these prospects presently do not have mine plans.

As of December 31, 2018, we had iron ore reserves (proved and probable) totaling 139.8 million tonnes at an average iron grade of 26.9%. The table below summarizes iron ore reserves by mine as of December 31, 2018.

<u>Mine</u>	<u>Proved Reserves</u>	<u>Probable Reserves</u>	<u>Total⁽¹⁾⁽²⁾⁽³⁾</u>	<u>Grade (Fe %)⁽⁴⁾</u>
			(In thousands of tonnes)	
Korshunovsky Open Pit	50,916	30,722	81,638	24.1
Rudnogorsky Open Pit	31,317	26,853	58,170	30.8
Total	<u>82,233</u>	<u>57,575</u>	<u>139,808</u>	<u>26.9</u>

- (1) Reserves reported on a wet in-situ basis and include adjustments for loss and dilution modifying factors.
- (2) These reserves amounts are based on the quantities that could be extracted economically using current operating costs and certain estimated future prices. In estimating the reserves, we used the average price of \$61 per tonne (FCA basis) for iron ore concentrate.
- (3) Reserves are presented on an assumed 100% basis.
- (4) Mined iron ore is processed at the Korshunovsky concentrating plant with a weighted average yield of iron ore concentrate of 31%.

Steel Segment

Our steel segment comprises the production and sale of semi-finished steel products, long products of a wide range of steel grades, carbon and stainless flat steel products and high value-added metal products, including wire products, stampings and forgings, structural shapes, beams and rails. Within these product groups, we are further able to tailor various steel grades to meet specific end-user requirements. It also comprises the production of ferrosilicon, both for internal use and for sales to third parties. Our steel segment is supported by our mining segment, which includes coke and iron ore concentrate.

Our steel segment has production facilities in Russia and Lithuania. Our total steel output was 3.9 million tonnes in 2018, 4.3 million tonnes in 2017 and 4.3 million tonnes in 2016. Our ferrosilicon production amounted to 76.1 thousand tonnes in 2018, 68.6 thousand tonnes in 2017 and 88.5 thousand tonnes in 2016.

Description of key products

Pig iron. Pig iron is an iron alloy with carbon content typically above 2%, which is produced from smelting iron ore feed (sinter, pellets and other ore materials) in the blast furnace. Liquid pig iron is used as an intermediate product in the manufacturing of steel. Pig iron in molten state and cold pig iron can be used as charging material for steel manufacturing in basic oxygen furnaces, electric arc furnaces and in the manufacturing of cast iron in cupolas. Cold pig iron is brittle. We sell small volumes of pig iron from our Chelyabinsk Metallurgical Plant to third parties.

Semi-finished products. Semi-finished products typically require further milling before they are useful to end consumers. We offer semi-finished billets, blooms and slabs. Billets and blooms are precursors to long products and have a square cross section. The difference between billets and blooms is that blooms have a larger cross-section which is more than eight inches and is broken down in the mill to produce rails, I-beams, H-beams and sheet piling. Slabs are precursors to flat products and have a rectangular cross section. Such types of products can be produced both by continuous casting of liquid steel and by casting of liquid steel in casting forms with subsequent drafting on blooming mills. We offer our customers billets and blooms produced by Izhtal and Chelyabinsk Metallurgical Plant, as well as slabs produced by Chelyabinsk Metallurgical Plant.

Long steel products. Long steel products are rolled products used in many industrial sectors, particularly in the construction and engineering industries. They include various types of products, for example, rebar, structural shapes (channels, flange beams, rails, special sections and others), calibrated long steel products and wire rod, which could be supplied both in bars and coils in a wide range of sizes. We offer our customers a wide selection of long products produced from various steel grades at Chelyabinsk Metallurgical Plant, Izhtal and Beloretsk Metallurgical Plant.

Flat steel products. Flat steel products are manufactured by multiple drafting slabs in forming rolls with subsequent coiling or cutting into sheets. Plates are shipped after hot rolling or heat treatment. Coiled stock can be subject to cutting lengthwise into slit coils or crosswise into sheets. Stainless steel is used to manufacture plates and cold-rolled sheets in coils and flat sheets. Hot-rolled plates and carbon and alloyed coiled rolled products are manufactured at Chelyabinsk Metallurgical Plant.

Stampings and forgings. Stampings are special parts stamped from metal billets. Forgings are special products made through the application of localized compressive forces to metal. Forged metal is stronger than cast or machined metal. Our stampings and forgings are offered on a made-to-order basis according to minimum batches depending on the products' sizes. Our product offerings include rollers and axles used in vehicle manufacturing; gears and wheels; bars; and others. Our stampings and forgings are produced at Urals Stampings Plant, including its branch in Chelyabinsk.

Wire products. Wire products are processed from wire rod and are ready for use in manufacturing and consumer applications. Our wire products are manufactured at Beloretsk Metallurgical Plant, Vyartsilya Metal Products Plant and Izhtal in Russia and Mechel Nemunas in Lithuania. Our wide-ranging wire products line includes spring wire; rope wire; bearing wire; microwire; precision alloy wire; high and low carbon concrete reinforcing wire; galvanized wire; copper-coated and bright welding wire; strand of various application; various types of nails; steel wire ropes specially engineered for the shipping, aerospace, oil and gas and construction industries; steel wire ropes for passenger and freight elevators; general-purpose wire; steel straps and clips; chain link fences; welded (reinforcing) meshes; and others.

Ferrosilicon. Ferrosilicon is used in ferrous metallurgy as a deoxidizer or as an alloying element for production of electrotechnical, spring wire, corrosion-resistant and heat resistant steel grades, or as a pig iron modifier. In nonferrous metallurgy, ferrosilicon is used as a reducing agent for production of nonferrous metals and alloys. We produce two types of ferrosilicon: with 65% and 75% silicon content in the alloy. We offer our customers ferrosilicon produced by Bratsk Ferroalloy Plant.

The following table sets out our production volumes by primary steel product categories and main products within these categories.

<u>Product</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
	(In thousands of tonnes)		
Pig Iron	3,690	4,029	4,053
Semi-Finished Steel Products, including:	953	833	936
Carbon and Low-Alloyed Semi-Finished Products	943	828	926
Long Steel Products, including:	2,538	2,769	2,768
Stainless Long Products	11	12	12
Alloyed Long Products	30	65	127
Rebar	1,200	1,319	1,509
Rails	245	358	304
Structural Shapes	455	411	213
Wire Rod	219	241	249
Low-Alloyed Engineering Steel	377	360	353
Flat Steel Products, including:	318	477	464
Stainless Flat Products	6	4	6
Carbon and Low-Alloyed Flat Products	312	472	457
Forgings, including:	49	40	41
Stainless Forgings	1	2	3
Alloyed Forgings	33	26	26
Carbon and Low-Alloyed Forgings	15	12	11
Stampings	143	95	75
Wire Products, including:	577	575	602
Wire	526	522	549
Ropes	42	43	43

Steel manufacturing process and types of steel

The most common steel manufacturing processes are production in a basic oxygen furnace (“**BOF**”) and production in an electric arc furnace (“**EAF**”).

In BOF steel manufacturing, steel is produced with less than 2% carbon content. The principal raw materials used to produce steel are liquid pig iron and scrap metal. The molten steel, depending on the products in which it will be used, undergoes additional refining and is mixed with manganese, nickel, chrome, titanium and other components to give it special properties. Approximately 74% of the world’s steel output is made in BOFs, according to Wood Mackenzie.

In EAF steel manufacturing, steel is generally produced from remelted scrap metal. Heat to melt the scrap metal is supplied from high-voltage electricity that arcs within the furnace between graphite electrodes and the scrap metal. This process is suitable for producing almost all steel grades, including stainless steel; however, it is limited in its use for production of high-purity carbon steel. Approximately 26% of the world’s steel output is made in EAFs, according to Wood Mackenzie.

Steel products are broadly subdivided into two categories — flat and long products. Flat products are hot-rolled or cold-rolled coils and sheets that are used in the engineering, pipe and manufacturing industries, as well as in the white goods and automotive industries. Long products are used for construction-type applications (beams, rebar) and the engineering industry. To create flat and long products, molten steel is cast in continuous-casting machines or casting forms (molds). The molten steel crystallizes and turns into semi-finished products in the form of blooms, slabs or ingots. Ingots and blooms have a square cross-section and are used for further processing into long products. Slabs have a rectangular cross-section and are used to make flat products. All

semi-finished products are rolled at high temperatures, a process known as hot rolling. They are drawn and flattened through rollers to give the metal the desired dimensions and strength properties. Some flat steel products go through an additional step of rolling without heating, a process known as cold rolling and is used to obtain certain mechanical properties of the steel. After cold rolling, annealing in reheating furnaces with cooling that stress-relieves the metal is periodically required. Oil may be applied to the metal surface for protection from rust.

The properties of steel (strength, solidity, plasticity, magnetization, corrosion-resistance) may be modified to render it suitable for its intended future use by the addition by smelting of small amounts of other metals into the structure of the steel, varying the steel's chemical composition. For example, the carbon content of steel can be varied in order to change its plasticity, or chrome and nickel can be added to produce stainless steel. Resistance to corrosion can be achieved through application of special coatings (including polymeric coatings), galvanization, copper coating or tinning, painting and other treatments.

Ferrosilicon manufacturing process

Ferrosilicon is produced in EAFs in a continuous ore smelting process. Silicon is reduced from quartzite with coke and coal carbon and alloyed with steel cutting iron. Ferrosilicon is discharged from the furnace periodically. After cooling, metal ingots are split and sorted into various commercial fractions.

Steel segment production facilities

Most of our metallurgical plants have obtained a certificate of quality under standards set by the International Organization for Standardization ("ISO"). For example, the main manufacturing processes at Chelyabinsk Metallurgical Plant, Izhtal, Beloretsk Metallurgical Plant and Urals Stampings Plant are ISO 9001:2015 certified. Chelyabinsk Metallurgical Plant has also obtained a certificate of compliance with international standards of the environmental management system ISO 14001:2015 and a certificate of compliance with the international standard of the occupational health and safety management system BS OHSAS 18001:2007.

Chelyabinsk Metallurgical Plant

Chelyabinsk Metallurgical Plant is an integrated steel mill which produces long and flat carbon and stainless steel products, rail and structural sections and semi-finished products. Semi-finished products are used for further processing in Russia or our internal needs. Chelyabinsk Metallurgical Plant also produces pig iron which is used in the manufacturing of steel. The plant sources all of its metallurgical coke needs from Mechel Coke and most of its iron ore concentrate needs from Korshunov Mining Plant. Its customer base is largely comprised of companies from the construction and railways construction and repair industries, as well as ferrous metallurgy. We acquired Chelyabinsk Metallurgical Plant in 2001.

Chelyabinsk Metallurgical Plant's principal production lines include a BOF workshop equipped with three converters; two EAF workshops equipped with EAFs of 100 and 125 tonnes, respectively; five concasting machines; a blooming mill for 200-320 millimeter billets; five long products rolling mills for 6.5-190 millimeter round bars and 75-156 millimeter square bars, wire rod, rebar steel, bands and long products; a universal rail and structural rolling mill for structural shapes of different types and sizes and rail products; a hot-rolled flat products workshop with a thick sheet continuous rolling mill for hot-rolled sheets of up to 1,800 millimeters wide and up to 20 millimeters thick; a semi-continuous rolling mill for up to 1,500 millimeters wide and up to 6 millimeters thick hot-rolled coils; a cold-rolled product workshop for 0.3-4 millimeter cold-rolled stainless sheet. In addition, we have at our Chelyabinsk Metallurgical Plant four sintering machines and three blast furnaces. The following table sets forth the capacity, the capacity utilization rate and the planned increase in capacity for each of Chelyabinsk Metallurgical Plant's principal production areas.

<u>Production Area</u>	<u>Capacity in 2018</u>	<u>Capacity Utilization Rate in 2018</u>	<u>Planned Increase (2019-2021)</u>
	<u>(In thousands of tonnes, except for percentages)</u>		
Sintering	5,000	89.1%	—
Pig iron	4,112	89.7%	—
Steelmaking	4,920	73.3%	—
Rolling	4,601	72.0%	—

Chelyabinsk Metallurgical Plant produced approximately 3.6 million tonnes of raw steel and 3.3 million tonnes of rolled products, of which 245.2 thousand tonnes were rail products in 2018.

In 2008, we initiated construction of a universal rail and structural rolling mill at Chelyabinsk Metallurgical Plant. The project is aimed at producing new types of large section structural shapes (including beams, angles, rails, channels and special sections) with total output 1.1 million tonnes per annum. Italian Danieli & C. Officine Meccaniche S.p.A. ("**Danieli**") is the equipment supplier and Chinese Minmetals Engineering Co. Ltd. ("**Minmetals**") is the general contractor. Investments will amount to RUB 21.6 billion. In July 2013, the universal rail and structural rolling mill was launched. At present, we are developing production of both guarantee products and new products, as well as certification of products for the Russian and European markets is being carried out. Five certificates of conformity of the Customs Union and two certificates of compliance with the TSI safety standards for the EU countries were obtained on certain types of rails; preparatory work for further certification of rails for the Russian Federation and the European Union is in progress.

The main target customers for the universal rolling mill products are Russian Railways, construction industry and different manufacturing companies. On November 13, 2008, Chelyabinsk Metallurgical Plant and Russian Railways signed an agreement for the supply of up to 400 thousand tonnes of rails annually until 2030. Under the agreement, we supply rails with annual adjustment of volumes based on production and economic factors. Additionally, we expect an increase in sales volume of the universal rolling mill products, which will occur along with the development and certification of new types of products.

Izhstal

Izhstal is a special steel producer located in the western Urals city of Izhevsk, in the Republic of Udmurtia, a Russian administrative region also known as Udmurtia. Its customer base is largely comprised of companies from the aircraft, defense, engineering, metal-processing and automotive industries. We acquired Izhstal in 2004.

Izhstal's principal production facilities include two EAFs of 25 and 40 tonnes; two ladle furnaces and a ladle vacuum oxygen decarburizer; a concasting machine; a blooming mill for 100-220 millimeter billets; two medium-sized long products rolling mills for 30-120 millimeter round bars, 30-90 millimeter square bars, bands and hexagonal bars; and one continuous small sort wire mill for 5.5-29 millimeter round, 12-28 millimeter square

and 12-27 millimeter hexagonal light sections, reinforced steel and bands. The following table sets forth the capacity, the capacity utilization rate and the planned increase in capacity for each of Izhstal's principal production areas.

<u>Production Area</u>	<u>Capacity in 2018</u>	<u>Capacity Utilization Rate in 2018</u>	<u>Planned Increase (2019-2021)</u>
	(In thousands of tonnes, except for percentages)		
Steelmaking	328	81.4%	—
Rolling	652	66.8%	—
Wire products	4	9.4%	—

Izhstal produced approximately 267.2 thousand tonnes of raw steel, 435.3 thousand tonnes of rolled products (of which, 434.9 thousand tonnes were long products) and 0.4 thousand tonnes of wire products in 2018.

Beloretsk Metallurgical Plant

Beloretsk Metallurgical Plant is a wire products plant in Beloretsk, in the southern part of Ural Mountains, which produces wire rod and a broad range of wire products from semi-finished products supplied by Chelyabinsk Metallurgical Plant and Izhstal. Its customers are largely from the construction, mining, engineering and other industries. We acquired Beloretsk Metallurgical Plant in 2002.

Beloretsk Metallurgical Plant's principal production lines include a rolling workshop equipped with a wire mill for production of 5.5-13.5 millimeter wire rod; a number of wire products workshops equipped with drawing, rewinding, wire stranding, cabling, grinding equipment and heat treatment furnaces, wire annealing and galvanizing, patenting and galvanizing lines; low relaxation prestressed concrete wire and rope lines; cold-worked rebar line and cold strand and section rolling mills. The following table sets forth the capacity, the capacity utilization rate and the planned increase in capacity for each of Beloretsk Metallurgical Plant's principal production areas.

<u>Production Area</u>	<u>Capacity in 2018</u>	<u>Capacity Utilization Rate in 2018</u>	<u>Planned Increase (2019-2021)</u>
	(In thousands of tonnes, except for percentages)		
Rolling	630	79.2%	—
Wire products	600	76.3%	—

Beloretsk Metallurgical Plant produced a total of 457.8 thousand tonnes of wire products in 2018. Rolled products production in 2018 amounted to a total of 498.9 thousand tonnes, of which 435.8 thousand tonnes were further processed into wire products and 63.1 thousand tonnes constituted the output volume of wire rod for third-party customers.

Vyartsilya Metal Products Plant

Vyartsilya Metal Products Plant is a wire products plant in the Republic of Karelia, an administrative region in the northwest of Russia near the Finnish border that produces low carbon welding, general-purpose and structural wire, nails and chain link fences. The plant uses wire rod supplied by Chelyabinsk Metallurgical Plant and Beloretsk Metallurgical Plant. The plant's customers are largely from the construction industry and ferrous metallurgy. We acquired Vyartsilya Metal Products Plant in 2002.

Vyartsilya Metal Products Plant's principal production facilities include drawing machines, annealing furnaces, chain linking machines, nail-making presses and cutting machines. The following table sets forth the capacity, the capacity utilization rate and the planned increase in capacity for Vyartsilya Metal Products Plant's principal production area.

<u>Production Area</u>	<u>Capacity in 2018</u>	<u>Capacity Utilization Rate in 2018</u>	<u>Planned Increase (2019-2021)</u>
	(In thousands of tonnes, except for percentages)		
Wire products	81	82.0%	—

Vyartsilya Metal Products Plant produced 66.4 thousand tonnes of wire products in 2018.

Urals Stampings Plant

Urals Stampings Plant produces stampings and forgings from special steels and heat-resistant and titanium alloys for the aerospace, oil and gas, heavy engineering, power and other industries. Urals Stampings Plant sources its special steel needs from Chelyabinsk Metallurgical Plant and Izhtal. We acquired Urals Stampings Plant in 2003.

Principal production facilities of Urals Stampings Plant and its branch in Chelyabinsk include 1.5-25 tonne swages and hydraulic presses. The following table sets forth the capacity, the capacity utilization rate and the planned increase in capacity for Urals Stampings Plant's principal production area.

<u>Production Area</u>	<u>Capacity in 2018</u>	<u>Capacity Utilization Rate in 2018</u>	<u>Planned Increase (2019-2021)</u>
	(In thousands of tonnes, except for percentages)		
Stampings and forgings	240	80.8%	—

Urals Stampings Plant produced 194.0 thousand tonnes of special steel stampings and forgings in 2018.

Mechel Nemunas

Mechel Nemunas is a Lithuanian wire products plant located in Kaunas that produces hard-drawn, annealed, calibrated wire, nails, steel wire fiber and chain link fences. The plant uses wire rod supplied by Chelyabinsk Metallurgical Plant and Beloretsk Metallurgical Plant. Its customers are primarily from the construction industry of Europe and Baltic countries. We acquired Mechel Nemunas in 2003.

Mechel Nemunas's principal production facilities include drawing machines, nail-making and thread-rolling machines, equipment for fiber production, chain linking machines and bell furnaces. The following table sets forth the capacity, the capacity utilization rate and the planned increase in capacity for Mechel Nemunas's principal production area.

<u>Production Area</u>	<u>Capacity in 2018</u>	<u>Capacity Utilization Rate in 2018</u>	<u>Planned Increase (2019-2021)</u>
	(In thousands of tonnes, except for percentages)		
Wire products	82	63.8%	—

Mechel Nemunas produced 52.2 thousand tonnes of wire products in 2018.

Bratsk Ferroalloy Plant

Bratsk Ferroalloy Plant is the largest enterprise in Eastern Siberia producing high-grade ferrosilicon. Ferrosilicon is used in the steelmaking industry as a deoxidizer for manufacturing of most steel grades, including

carbon and stainless steel grades; or as an alloying element for the production of insulating, acid-proof and heatproof steel grades; or as a pig iron modifier; or as a reducing agent for the production of nonferrous metals and alloys. Approximately 5-6 kg of ferrosilicon is used in every tonne of steel produced. We acquired Bratsk Ferroalloy Plant in 2007.

The main production facilities of the plant include three ore-thermal furnaces with a capacity of 25 megavolt-amperes (“MVA”) and one ore-thermal furnace with a capacity of 33 MVA. In October 2010, we signed contracts with Siberian Plant of Electrothermal Equipment (Sibelectrotherm JSC, Novosibirsk) for the supply of four ore-thermal furnaces with a capacity of 33 MVA each to replace the existing furnaces. We commenced commercial operations of the first new furnace in the second quarter of 2013. Currently, the second furnace assemblage is suspended. The launch of this furnace is expected in 2019. Following the commissioning of the second new furnace, Bratsk Ferroalloy Plant’s production capacity is expected to increase by 5%.

The following table sets forth the capacity, the capacity utilization rate and the planned increase in capacity for Bratsk Ferroalloy Plant’s principal production area.

<u>Production Area</u>	<u>Capacity in 2018</u>	<u>Capacity Utilization Rate in 2018</u>	<u>Planned Increase (2019-2021)</u>
(In thousands of tonnes, except for percentages)			
Ferrosilicon (65% silicon content in the alloy)	88	86.4%	—

Bratsk Ferroalloy Plant produced 76.1 thousand tonnes of ferrosilicon with 65% and 75% silicon content in the alloy in 2018.

Sales of steel segment products

The following table sets forth our revenues by primary steel segment product categories and our main products within these categories (including as a percentage of total steel segment revenues) for the periods indicated.

Product	2018		2017		2016	
	Amount	% of Revenues	Amount	% of Revenues	Amount	% of Revenues
(In millions of Russian rubles, except for percentages)						
Pig Iron	133.1	0.1%	113.9	0.1%	679.2	0.4%
Semi-Finished Steel Products, including:	54.4	0.0%	491.9	0.3%	3,433.5	2.1%
Carbon and Low-Alloyed Semi-Finished Products	8.5	0.0%	326.8	0.2%	2,730.4	1.7%
Long Steel Products, including:	105,722.0	56.3%	96,768.0	56.0%	89,575.0	55.5%
Stainless Long Products	2,698.1	1.4%	2,190.6	1.3%	2,055.2	1.3%
Other Long Products	50,871.9	27.1%	48,729.7	28.2%	39,098.9	24.2%
Rebar	48,000.2	25.6%	42,734.5	24.7%	45,204.1	28.0%
Wire Rod	4,151.8	2.2%	3,113.2	1.8%	3,216.8	2.0%
Flat Steel Products, including:	22,786.2	12.1%	22,504.8	13.0%	18,230.2	11.2%
Stainless Flat Products	1,382.3	0.7%	1,198.0	0.7%	1,507.7	0.9%
Carbon and Low-Alloyed Flat Products	21,403.9	11.4%	21,306.8	12.3%	16,722.5	10.3%
Forgings, including:	3,976.6	2.1%	4,101.4	2.4%	4,416.9	2.8%
Stainless Forgings	810.4	0.4%	1,125.8	0.7%	1,385.2	0.9%
Other Forgings	3,166.2	1.7%	2,975.6	1.7%	3,031.7	1.9%
Stampings	11,871.1	6.3%	8,146.1	4.7%	7,235.1	4.5%
Wire Products, including:	30,040.4	16.0%	27,577.6	16.0%	24,579.8	15.2%
Wire	19,589.8	10.4%	17,498.4	10.1%	15,530.4	9.6%
Ropes	3,916.5	2.1%	3,374.4	2.0%	3,075.7	1.9%
Other Wire Products	6,534.1	3.5%	6,704.8	3.9%	5,973.7	3.7%
Steel Pipes	3,230.2	1.7%	2,733.1	1.6%	3,286.2	2.0%
Ferrosilicon	3,927.0	2.1%	2,807.1	1.6%	3,367.5	2.1%
Other	6,176.7	3.3%	7,516.0	4.3%	6,835.3	4.2%
Total	<u>187,917.7</u>	<u>100.0%</u>	<u>172,759.9</u>	<u>100.0%</u>	<u>161,638.7</u>	<u>100.0%</u>

The following table sets forth percentage of sales revenue by the regions in which our steel segment products were sold for the periods indicated.

Region⁽¹⁾	2018	2017	2016
Russia	69.7%	74.4%	72.3%
Europe	16.9%	14.4%	14.8%
CIS	11.5%	9.8%	10.4%
Asia	1.6%	1.1%	1.2%
Middle East ⁽²⁾	0.1%	0.1%	0.5%
Other	0.1%	0.0%	0.5%
United States	0.1%	0.2%	0.3%
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

- (1) The regional breakdown of sales is based on the geographic location of our customers, and not on the location of the end users of our products, as our customers are often distributors that resell and, in some cases, further export our products.

- (2) Our steel segment sales to Middle East primarily go to Turkey, which accounted for 96.7% of the total steel segment sales to Middle East in 2018. We did not have any direct sales to Iran and Syria in 2018, and we have no plans to make such direct sales in the future.

In 2018, the five largest customers of our steel products were Russian Railways (long steel products and wire products), EVRAZ (flat steel products, long steel products and wire products), Metallservice OAO (long steel products, flat steel products and wire products), Steel Industrial Company AO (long steel products, wire products, flat steel products, pipes and semi-finished products) and United Wagon Company Trading House OOO (stampings), which together accounted for 10.7% of our total steel segment sales.

In 2018, the five largest customers of ferrosilicon were Severstal, Mitsui & Co., Globalalloy Technologies Co. Ltd., NLMK and Scanalloys Ltd., which together accounted for 1.6% of our total steel segment sales.

The majority of our steel segment export sales are made to end users in non-sanctioned countries. The remainder of our steel products is exported to independent distributors and traders. We refer to such transactions as indirect sales. Contracts with distributors and traders generally specify certain locations to which we must deliver our products. The distributors and traders take delivery of our products at these locations, and further on-sell the products to other distributors or end users. Generally, when dealing with distributors and traders, we do not have information about the end users of our products. In case of indirect sales, we do not have control over the final destination of our products, contractually or otherwise.

Based on the available documentation, we are aware that certain of our products may be sold into and can be re-sold to countries that are subject to international trade restrictions or economic embargoes that prohibit and/or materially restrict certain persons (for instance, U.S. incorporated entities and U.S. citizens or residents) from engaging in commercial, financial or trade transactions with such countries, including Iran, Syria, Sudan, North Korea and Cuba (the “**Sanctioned Countries**”). We did not have any direct sales to the Sanctioned Countries in 2018.

We are aware of governmental initiatives in the United States and elsewhere to adopt laws, regulations or policies prohibiting or materially restricting transactions with or investment in, or requiring divestment from, entities doing business with the Sanctioned Countries. We recognize that acts prohibiting or restricting the foregoing can sometimes be applied to our company and that dealings with the Sanctioned Countries can have an adverse effect on our business reputation.

The following table sets forth information on our domestic and export sales of our primary steel segment product categories for the periods indicated. We define exports as sales by our Russian and foreign subsidiaries to customers located outside their respective countries. We define domestic sales as sales by our Russian and foreign subsidiaries to customers located within their respective countries. See note 26 to the consolidated financial statements.

Product	2018	2017	2016
	(In millions of Russian rubles, except for percentages)		
Pig Iron	133.1	113.9	679.2
Domestic Sales	100.0%	100.0%	82.7%
Export	0.0%	0.0%	17.3%
Semi-Finished Steel Products	54.4	491.9	3,433.5
Domestic Sales	65.7%	93.3%	63.7%
Export	34.3%	6.7%	36.3%
Long Steel Products	105,722.0	96,768.0	89,575.0
Domestic Sales	87.9%	90.3%	88.6%
Export	12.1%	9.7%	11.4%
Flat Steel Products	22,786.2	22,504.8	18,230.2
Domestic Sales	84.4%	89.2%	88.5%
Export	15.6%	10.8%	11.5%
Forgings	3,976.6	4,101.4	4,416.9
Domestic Sales	56.7%	61.3%	72.0%
Export	43.3%	38.7%	28.0%
Stampings	11,871.1	8,146.1	7,235.1
Domestic Sales	91.1%	92.1%	95.4%
Export	8.9%	7.9%	4.6%
Wire Products	30,040.4	27,577.6	24,579.8
Domestic Sales	82.5%	85.5%	84.0%
Export	17.5%	14.5%	16.0%
Steel Pipes	3,230.2	2,733.1	3,286.2
Domestic Sales	93.4%	93.8%	90.2%
Export	6.6%	6.2%	9.8%
Ferrosilicon	3,927.0	2,807.1	3,367.5
Domestic Sales	49.5%	53.1%	47.2%
Export	50.5%	46.9%	52.8%
Other	6,176.7	7,516.0	6,835.3
Domestic Sales	86.8%	83.3%	81.2%
Export	13.2%	16.7%	18.8%
Total	187,917.7	172,759.9	161,638.7
Domestic Sales	85.4%	87.9%	86.0%
Export	14.6%	12.1%	14.0%

The end users of our steel products vary. Our rebar is principally used in the construction industry. The main end users of our wire rod are construction companies and wire products producers. Our other long steel products are used in various moving parts manufactured by the automotive industry, as well as the engineering, pipe, construction and railway construction industries. Our flat steel products are used in the construction (covers, floor plates) and pipe industries. Our stampings and forgings are primarily used in the engineering and pipe industries. The main end users of our wire products are the construction, mining, engineering and other industries.

The following table describes, in percentage terms, Russian domestic shipment volumes of our steel products further broken down by industry sector.

<u>Use by Industry</u>	<u>Construction</u>	<u>Metals Trading</u>	<u>Ferrous Metallurgy</u>	<u>Engineering and Metalworking</u>	<u>Vehicles Manufacturing</u>	<u>Railways Construction and Repair</u>	<u>Other Industries⁽¹⁾</u>
Semi-Finished Steel							
Products	3.5%	20.2%	71.5%	0.0%	2.3%	0.0%	2.5%
Long Steel Products	24.2%	32.4%	8.9%	3.1%	4.0%	11.1%	16.3%
Flat Steel Products	7.4%	29.3%	17.9%	4.4%	1.3%	0.0%	39.7%
Forgings	0.0%	76.6%	8.7%	14.5%	0.2%	0.0%	0.0%
Stampings	0.0%	11.7%	0.0%	3.4%	84.9%	0.0%	0.0%
Wire Products	15.8%	37.4%	15.8%	3.6%	2.6%	5.3%	19.5%
Steel Pipes	9.4%	64.5%	13.7%	2.6%	0.2%	0.0%	9.6%

(1) Including mining and power industries and consumer goods sector.

Marketing and distribution

We use flexible sales strategies that are tailored to our customers and the markets we serve. Our overall sales strategy is to develop long-term, close partnerships with the end users of our products. As part of our end-user strategy, we research sales to distributors to identify the end user and directly market our steel products to these customers. With respect to our largest end users, we have established working committees, composed of our manufacturing engineers and customer personnel. These committees meet quarterly to monitor the performance of our products and ensure that our customers' specifications and quality requirements are consistently met. These committees also provide customers with the opportunity to discuss their future needs with us. We attend industry conferences and advertise in industry periodicals to market our products and capabilities. Through these efforts, we have established a strong brand identity for Mechel in Russia, the CIS, Central Europe, South-East Asia and the Middle East.

We have a distribution network consisting of Mechel Service and Mechel Service Global which provide end users in Russia, the CIS and Europe with our steel products. Mechel Service and Mechel Service Global help us to develop and service our long-standing customer relationships by providing highly specialized technical sales and service to our customers.

In 2018, our domestic and export sales were conducted by Mechel Service and Mechel Service Global, respectively, as well as directly by our own production facilities.

Domestic sales

Our Russian steel production facilities Chelyabinsk Metallurgical Plant, Izhstal and Urals Stampings Plant are located in large industrial areas and have long-standing relationships with local wholesale customers. Mechel Service, our steel sales and service subsidiary, has 52 storage sites in 41 cities throughout Russia to serve our end users, which helps us to establish long-standing customer relationships by virtue of proximity to both production and customers. In 2018, Mechel Service sold 1.3 million tonnes of our steel products.

Ferrosilicon sales are conducted directly by our Bratsk Ferroalloy Plant. We supply ferrosilicon on the Russian market under annual contracts with monthly adjustment of prices and volumes, as well as on the spot market (under monthly tenders).

Export sales

Most of the exports in our steel segment are made to end users in non-sanctioned countries, with the rest sold to independent distributors and traders, which then resell our products to end users. Our export sales are carried out directly by our own production facilities and through Mechel Service Global's distribution network.

Our production facilities supply high-quality rolled steel products to the subsidiaries of Mechel Service Global in Western Europe either directly, or through the logistics center in the Port of Antwerp. Our logistics center in the Port of Antwerp also allows us to sell high-quality rolled steel products to manufacturing and service companies on a walk-in basis.

In 2018, ferrosilicon sales outside of Russia were principally to Japan. Deliveries to Japanese customers were made on cost insurance and freight (“CIF”) delivery terms (including transportation by rail, handling in ports of Nakhodka, Vladivostok and Vostochny and use of major container lines in major Japanese ports and insurance). We sell ferrosilicon based both on long-term contracts and on a spot basis.

Distribution

Rail transportation is used for most shipments from our production facilities and warehouses to end customers, wholesale warehouses or seaports.

Market share and competition

In our core export markets, we primarily compete with other Russian producers, as well as producers from Germany, Kazakhstan, Ukraine and the Czech Republic. The leading global steel manufacturers have been increasingly focused on value-added and higher-priced products. The principal competitive factors include price, distribution, product quality, product range and customer service.

In the Russian market, we compete on the basis of price and quality of steel products, their added value, product range and service, technological innovation and proximity to customers. The Russian steel industry is characterized by a relatively high concentration of production, with the six largest integrated steel producers, including ourselves, accounting for 84.2% of overall domestic crude steel output in 2018, according to Metal Expert.

The following is a brief description of Russia’s five largest steel producers excluding ourselves:

- *Novolipetsk Steel PAO (“NLMK”)* is Russia’s largest steel manufacturer by volume, accounting for 23.1% of the volume of Russian commodity steel production in 2018. NLMK produces flat products (hot-rolled and cold-rolled), galvanized products and slabs, as well as long products. The company’s production facilities are located in Lipetsk (NLMK), in the Sverdlovsk region (long products producer NLMK-Ural and wire products producer NLMK-Metalware) and in the Kaluga region (long products producer NLMK-Kaluga). NLMK exported 62.3% of its steel products in 2018. Domestically, NLMK’s largest customers are in the construction and oil and gas industries, followed by companies in the automotive sector. NLMK also controls iron ore producer Stoilensky GOK and coke producer Altai-Koks.
- *Severstal PAO (“Severstal”)* is Russia’s second largest steel manufacturer by volume on a consolidated basis, accounting for 16.4% of the volume of Russian commodity steel products output in 2018. The company specializes in flat products which constitute a significant part of its production. Severstal is the second-leading producer of flat products, accounting for 15.2% of Russia’s total flat products output in 2018. Domestic sales of flat products accounted for 53.5% of Severstal’s output in 2018, with the oil and gas industry and automotive sector as its leading customers. Severstal controls coal producer Vorkutaugol and iron ore producers Karelsky Okatysh and Olenegorsky GOK, which satisfy a portion of Severstal’s coking coal and iron ore requirements.
- *Magnitogorsk Iron & Steel Works PAO (“MMK”)* is Russia’s third largest steel manufacturer by volume, accounting for 16.1% of the volume of Russian commodity steel products output (including long products, flat products and semi-finished products) in 2018. MMK’s product mix is comprised mostly of flat products, which accounted for 84.8% of its commercial steel products output (including

semis) in 2018. Domestically, MMK controls a significant portion of the supplies to the oil and gas and automotive sectors. MMK exported 34.2% of its output in 2018. Its production facilities are located in Magnitogorsk in the southern Urals. MMK also controls coking coal producer Belon.

- *EVRAZ plc* (“**EVRAZ**”), which includes Russian steel producers EVRAZ NTMK and EVRAZ ZSMK, had a 14.2% share by volume of Russian commodity steel products output in 2018. EVRAZ focuses on the production of long products, including rebar, wire rod and profiled rolled products (such as rails, beams, channels and angles). EVRAZ exported 56.8% of its output in 2018. EVRAZ also controls iron ore producers EVRAZ KGOK and Evrazruda, as well as coking coal producers UCC Yuzhkuzbassugol, Raspadskaya and Mezhegeyugol.
- *Metalloinvest Holding Company AO* (“**Metalloinvest**”), whose Russian assets consist of Oskol Electrometallurgical Plant AO (“**OEMK**”) and Ural Steel AO, had a 6.1% share by volume of Russian commodity steel products output in 2018. OEMK produces long products only, and Ural Steel produces both long and flat products. Metalloinvest exported 66.0% of its commodity steel production in 2018. The company’s production facilities are located in the Central and Urals Federal Districts of Russia. Metalloinvest also controls Russia’s largest iron ore and pellets production facilities Lebedinsky GOK and Mikhailovsky GOK.

Source: Companies’ websites; Metal Expert.

These six companies, including ourselves, can be divided into two groups by product type. MMK, Severstal and NLMK focus mainly on flat products, while we, EVRAZ and Metalloinvest produce primarily long products. Mechel is the fourth largest and most comprehensive producer of special steel and alloys in Russia, accounting for 11.2% of total Russian special steel output by volume in 2018, according to Chermet and Metal Expert. We are also the second largest producer of long steel products (excluding square billets) in Russia by volume, with significant market shares in both regular long steel products and special steel long products, according to Metal Expert.

In the Russian non-special steel long products category, our primary products and our market position by production volume in 2018 were as follows, according to Metal Expert:

- *Reinforcement bars (“rebar”)* — In rebar, we compete in the 6-40 millimeters range. In 2018, the largest domestic rebar producers were NLMK (23.9%), Severstal (17.2%), EVRAZ (16.2%), Mechel (16.2%) and MMK (4.7%).
- *Wire rod* — There were five major producers of wire rod in Russia in 2018: Mechel (26.7%), NLMK (18.7%), MMK (15.9%), Severstal (12.5%) and EVRAZ (9.8%).

OEMK, an EAF steel mill specializing in carbon and special steel long products and our special steel competitor, is located in the southwest of Russia and serves customers in the pipe, engineering and ball-bearing industries.

According to Metal Expert and Chermet, we were one of the leading producers in Russia of special steel long products (tool, high-speed and stainless long steel) in 2018, producing 9.3% of the total Russian output by volume, and we held significant shares of Russian production volumes in 2018 of stainless long products (20.6%), tool steel (30.5%) and high-speed steel (30.7%).

The following tables set forth additional information regarding our 2018 market share in Russia for various categories of steel products.

All long products (excluding square billets)

<u>Manufacturer</u>	<u>Production</u>	<u>Market Share by Production Volume</u>
	(In thousands of tonnes, except for percentages)	
EVRAZ	4,806	25.6%
Mechel	3,127	16.7%
NLMK	2,453	13.1%
Severstal	1,911	10.2%
MMK	1,643	8.8%
Metalloinvest	1,104	5.9%
Other	3,726	19.7%
Total	18,770	100.0%

Source: Metal Expert.

Long products — Wire rod⁽¹⁾

<u>Manufacturer</u>	<u>Production</u>	<u>Market Share by Production Volume</u>
	(In thousands of tonnes, except for percentages)	
Mechel	835	26.7%
NLMK	586	18.7%
MMK	497	15.9%
Severstal	391	12.5%
EVRAZ	305	9.8%
Other	512	16.4%
Total	3,126	100.0%

Source: Metal Expert.

(1) Including wire rod further processed into wire and other products within the same holding company.

Long products — Rebar

<u>Manufacturer</u>	<u>Production</u>	<u>Market Share by Production Volume</u>
	(In thousands of tonnes, except for percentages)	
NLMK	1,812	23.9%
Severstal	1,298	17.2%
EVRAZ	1,225	16.2%
Mechel	1,223	16.2%
MMK	359	4.7%
Other	1,655	21.8%
Total	7,572	100.0%

Source: Metal Expert.

Flat stainless steel

<u>Manufacturer</u>	<u>Production</u>	<u>Market Share by Production Volume</u>
	<u>(In thousands of tonnes, except for percentages)</u>	
VMZ Red October	10.7	55.7%
Mechel	5.7	29.9%
Other	2.8	14.4%
Total	<u>19.2</u>	<u>100.0%</u>

Source: Metal Expert.

Wire products

<u>Manufacturer</u>	<u>Production</u>	<u>Market Share by Production Volume</u>
	<u>(In thousands of tonnes, except for percentages)</u>	
Mechel	529.3	20.9%
MMK-Metiz	524.7	20.7%
Severstal-Metiz	440.9	17.4%
NLMK-Metalware	256.4	10.1%
EVRAZ	201.3	7.9%
Other	585.9	23.0%
Total	<u>2,538.5</u>	<u>100.0%</u>

Source: Metal Expert.

Wire products — High-tensile wire

<u>Manufacturer</u>	<u>Production</u>	<u>Market Share by Production Volume</u>
	<u>(In thousands of tonnes, except for percentages)</u>	
Severstal-Metiz	46.2	45.7%
Mechel	35.5	35.0%
MMK-Metiz	19.5	19.3%
Total	<u>101.2</u>	<u>100.0%</u>

Source: Metal Expert.

According to Metal Expert, Bratsk Ferroalloy Plant is the fourth largest Russian producer of ferrosilicon by volume. In 2018, we had a 12.9% market share by volume of Russian ferrosilicon production.

Following is a brief description of Russia's other largest ferrosilicon producers, according to Metal Expert and the companies' data:

- *Kuznetsk Ferroalloys AO* (“**Kuznetsk Ferroalloys**”) is the largest Russian ferrosilicon producer, with a 47.2% market share by production volume in 2018. Kuznetsk Ferroalloys also produces microsilica and quartzite. It is primarily export-oriented, having exported 90.5% of its ferrosilicon production volume in 2018.

- *Chelyabinsk Electrometallurgical Plant AO (“ChEMK”)* is the second largest Russian ferrosilicon producer, with a 20.2% market share by production volume in 2018. In addition it produces ferrochrome, silicomanganese and silicocalcium. In 2018, ChEMK exported 63.1% by volume of its ferrosilicon production.
- *Yurginsk Ferroalloy Plant AO (“Yurginsk Ferroalloy Plant”)* is the third largest Russian ferrosilicon producer, with a 14.0% market share by production volume in 2018. Yurginsk Ferroalloy Plant also produces microsilica. It is export-oriented, having exported 99.3% of its ferrosilicon production volume in 2018.

The following table sets forth additional information regarding our 2018 ferrosilicon market share in Russia.

<u>Manufacturer</u>	<u>Region</u>	<u>Production</u>	<u>Market Share by Production Volume</u>
	<u>(In thousands of tonnes, except for percentages)</u>		
Kuznetsk Ferroalloys	Kemerovo	282.1	47.2%
ChEMK	Chelyabinsk	120.6	20.2%
Yurginsk Ferroalloy Plant	Kemerovo	83.7	14.0%
Bratsk Ferroalloy Plant	Irkutsk	77.3	12.9%
NLMK	Lipetsk	24.2	4.0%
Serov Ferroalloys Plant	Sverdlovsk	10.4	1.7%
Total		<u>598.3</u>	<u>100.0%</u>

Source: Metal Expert.

Raw materials

The principal raw materials we use in pig iron production are iron ore products (sinter of our own production and purchased oxidized pellets), coke and fluxing additions. Pig iron is made in blast furnaces. For sinter production, we use iron ore concentrate. Iron ore concentrate is converted into sinter at Chelyabinsk Metallurgical Plant. In 2018, our steelmaking operations used 5.6 million tonnes of iron ore feed, approximately 25% in the form of pellets and 75% in the form of sinter, and we internally sourced approximately 32% of our total iron ore feed requirements. In 2018, Korshunov Mining Plant supplied our steel segment with 1.8 million tonnes of iron ore concentrate. In 2018, we purchased most of the remaining part of our iron ore feed from Russian suppliers such as Kachkanarsky GOK, Kovdorsky GOK, Lebedinsky GOK, Vysokogorsky GOK, Mikhailovsky GOK and Bakalskoye Rudoupravlenie under monthly and annual contracts on market terms.

We process coking coal concentrate into coke at Mechel Coke and Moscow Coke and Gas Plant. In 2018, our production facilities used 3.3 million tonnes of coking coal concentrate (including 2.6 million tonnes used by Mechel Coke and 0.7 million tonnes used by Moscow Coke and Gas Plant), and 87% of total usage was sourced internally. Coke is used both in pig iron production at Chelyabinsk Metallurgical Plant and in ferrosilicon production at Bratsk Ferroalloy Plant. In 2018, we produced and internally used approximately 1.9 million tonnes of coke as well as produced for sale to third parties another approximately 0.7 million tonnes of coke.

Our Pugachevsky Open Pit produces limestone which, after processing into lime and flux, is used by our own steel production facilities. In 2018, our limestone production amounted to 1.7 million tonnes.

We produce 96.1% of steel in BOFs. In steelmaking, scrap is used in the composition of feedstock, and we are approximately 86.6% self-sufficient in this raw material, which amounts to 324.1 thousand tonnes of scrap, sourcing the balance from various scrap traders.

In 2018, our production facilities used 28.7 thousand tonnes of ferrosilicon (including 22.4 thousand tonnes at Chelyabinsk Metallurgical Plant, 3.7 thousand tonnes at the Chelyabinsk branch of Urals Stampings Plant and 2.6 thousand tonnes at Izhtal), all of which was supplied by Bratsk Ferroalloy Plant.

Steelmaking requires significant amounts of electricity to power EAFs, ladle furnaces and rolling mills and to produce sinter. In 2018, our steel segment operations consumed approximately 3.2 billion kWh of electricity. Chelyabinsk Metallurgical Plant, Moscow Coke and Gas Plant and Urals Stampings Plant have power co-generation facilities, which produce electricity for internal consumption. Overall, our group consumed approximately 5.0 billion kWh of electricity in 2018. Aside from Southern Kuzbass Power Plant, which runs on steam coal and middlings, our power generating facilities work on blast furnace and coke gas, which are by-products of our steelmaking and coke-chemical operations, and natural gas, which we purchase from third parties. In 2018, we consumed 2.1 billion cubic meters of blast furnace gas, 449.0 million cubic meters of coke gas and 954.1 million cubic meters of natural gas. In 2018, Southern Kuzbass Power Plant consumed 1.3 million tonnes of steam coal and middlings sourced both from our own coal mining assets and from third parties.

Large amounts of water are also required in the production of steel. Water serves as a re-solvent, accelerator and washing agent. Water is used to cool equipment components, to carry away waste, to help produce and distribute heat and power and to dilute liquids. One of the principal sources of water is rivers, and many of our production facilities recirculate a portion of water used for their production needs. For example, Chelyabinsk Metallurgical Plant sources 88.1% of its water needs from recirculated water and the rest from a local river. Izhtal sources 84.0% of its water needs from recirculated water, 8.4% from recycled water and the rest from a storage reservoir. Beloretsk Metallurgical Plant sources 74.7% of its water needs from recirculated and recycled water and the rest from a storage reservoir and a local river.

Transportation costs are a significant component of our production costs and a factor in our price competitiveness in export markets. Rail transportation is our principal means of transporting raw materials from our mines to processing facilities and products to domestic customers and to ports for shipment overseas.

For a description of how seasonal factors impact our use and reserve levels of raw materials, see “Item 5. Operating and Financial Review and Prospects — Seasonality.”

Trade restrictions

In July 2018, the European Union introduced a system of import quotas, according to which the import of steel to the European Union until July 2021 is limited to specific volumes established for 26 categories of steel products. For each category of steel products, the import quota is calculated on the basis of the average volume of all imports of these products to the European Union over the past three years. If the quota is exceeded, a duty of 25% will be charged. Each product category consists of several types of products. Quotas apply to all suppliers of steel to the European Union, and for certain product categories, quotas are set for different countries. Our steel products supplied to the European Union are subject to these quotas. During the period from July 2018 to February 2019, the quota for the product category that includes beams produced by Chelyabinsk Metallurgical Plant amounted to 167.8 thousand tonnes, and the quota for the product category that includes rolled products produced by Izhtal amounted to 728.3 thousand tonnes.

In February 2008, an antidumping duty in the amount of 17.8% was imposed on exports to the European Union of ferrosilicon produced by our subsidiary Bratsk Ferroalloy Plant for a period of five years. In February 2013, the European Commission initiated an expiry review of the antidumping measures applicable to imports of ferrosilicon. In April 2014, the antidumping duty was extended for another five years.

Quartzite Production

We hold the subsoil license for the Uvatskoye deposit of quartzite and quartzite sandstones, a raw material used for ferrosilicon production. The deposit is accessible by unpaved road and located 20 kilometers southwest of Nizhneudinsk in the Irkutsk region. In 2011, we conducted successful technological tests of an experimental batch of quartzite for smelting of ferrosilicon. We completed the exploration of the alluvial part of the southern area of the Uvatskoye deposit and applied to the Department for Subsoil Use for the Irkutsk region

("Irkutsknedra") with a plan for the pilot commercial development of the alluvial part of the southern area. Irkutsknedra agreed to the plan and recommended further geologic exploration within the entire license area of the Uvatskoye deposit. In 2012, drilling and sampling activities were conducted. Since 2013, we have been carrying out the pilot commercial development of the alluvial part of the southern area of the Uvatskoye deposit, with a view to develop the processing methods and technical and economic parameters of the deposit. In 2017, laboratory studies of selected cores of the bedrock of the deposit were completed. In 2018, the temporary exploration conditions of the deposit were approved. At present, a feasibility study of the deposit's permanent conditions is being worked out. In light of the above, we are not able to state the amount of proved reserves for the Uvatskoye quartzite deposit.

The table below sets forth certain information regarding the subsoil license for our quartzite and quartzite sandstones deposit.

<u>License Area</u>	<u>License Holder</u>	<u>License Expiry Date</u>	<u>Status⁽¹⁾</u>	<u>Area (sq. km)</u>	<u>Year Production Commenced</u>	<u>Surface Land Use Rights</u>
Uvatskoye	Bratsk Ferroalloy Plant	July 2033	Exploration and development	18.21	n/a	Lease

(1) "Exploration and development" refers to sites where preliminary work and drilling for calculation of mineral reserves are being carried out.

Power Segment

Our power segment generates and supplies electricity, heat energy and other power resources to our group companies and to external consumers. It enables us to market electricity and heat energy made from our steam coal, and to maintain the power self-sufficiency of our mining and steel segments. Our power segment consists of a power generating plant Southern Kuzbass Power Plant and a power distribution company Kuzbass Power Sales Company.

The following table sets out total volumes of electricity production by our group.

	<u>2018</u>	<u>2017</u>	<u>2016</u>
	<u>(In million kWh)</u>		
Electricity	3,250.6	3,427.4	3,378.2

Southern Kuzbass Power Plant

Southern Kuzbass Power Plant is located in Kaltan in the Kemerovo region, which is in the southern part of Russia's coal-rich Kuzbass district. It has a total installed capacity of 554 MW and installed heat capacity of 506 Gcal/h. In 2018, the plant generated 1,693.0 million kWh of electricity and 852.9 thousand Gcal of heat energy. We acquired Southern Kuzbass Power Plant in 2007.

Southern Kuzbass Power Plant uses steam coal and middlings as fuel, which are supplied to it mostly from local sources, including our Southern Kuzbass Coal Company. In 2018, it consumed 631.5 thousand tonnes of steam coal and middlings sourced from Southern Kuzbass Coal Company, Elgaugol and Yakutugol.

The generation facilities of Southern Kuzbass Power Plant are listed below:

<u>Generation Unit No.</u>	<u>Year of Manufacture</u>	<u>Month and Year of Commissioning at Southern Kuzbass Power Plant</u>	<u>Installed Capacity (MW)</u>	<u>Electricity Production in 2018 (million kWh)</u>
VK-50-2 LMZ	1950	April 1951	53	73.7
VK-50-2 LMZ	1950	November 1951	53	0
VK-50-2 LMZ	1950	August 1952	53	197.8
VK-50-2 LMZ	1952	February 1953	53	215.2
T-115-8,8 LMZ	1996	December 2003	113	427.5
T-88/106-90 LMZ	1953	July 1954	88	88.7
VK-50-2 LMZ	1954	December 1954	53	183.5
T-88/106-90 LMZ	1953	September 1956	88	506.6
Total			<u>554</u>	<u>1,693.0</u>

The plant sells electricity and capacity on the wholesale market only, as well as heat energy directly to consumers. In Russia, it is common for thermal power plants to produce and sell heat energy, sometimes in the form of industrial steam and sometimes in the form of hot water, for business and residential heating and household use, which is distributed in towns and cities by a network of hot water distribution pipes. Southern Kuzbass Power Plant's heat energy is distributed at regulated prices in the form of hot water in the cities of Kaltan, Osinniki and Mezhdurechensk.

Kuzbass Power Sales Company

Kuzbass Power Sales Company is the largest power distribution company in the Kemerovo region. Its marketed power volume in 2018 amounted to approximately 9.9 billion kWh. We acquired Kuzbass Power Sales Company in 2007. The addition of Kuzbass Power Sales Company, along with Southern Kuzbass Power Plant, allows us to increase revenues in our power segment.

Kuzbass Power Sales Company sells electricity on the retail and wholesale markets. The company sells electricity to households, social infrastructure companies, housing and public utilities and large industrial companies. Due to its area of operation, its primary industrial consumers are in the mining and processing industries. It supplies electricity to end consumers directly and also through one regional agent.

The company is included in the Register of Guaranteeing Suppliers of the Kemerovo region. For a discussion of guaranteeing suppliers, see “— Regulatory Matters — Regulation of Russian Electricity Market — Sales of electricity — Retail electricity market.”

Mechel Energo

Mechel Energo's core activity is the supply of electricity, heat energy in the form of hot water and steam, compressed air, oxygen, nitrogen, liquid nitrogen and liquid oxygen. In addition, it coordinates the supply of energy to our production facilities. The company has a separate business unit in Izhevsk, as well as branches in Chelyabinsk (including production department in Chebarkul), Beloretsk and Vidnoye. Mechel Energo also performs the functions of the sole executive body of its subsidiary Southern Kuzbass Power Plant.

Mechel Energo supplies heat energy (in the form of hot water and steam) at regulated prices to its consumers, including residential consumers and commercial customers, in the cities of Vidnoye, Chelyabinsk, Chebarkul, Beloretsk and Izhevsk.

Mechel Energo's sales amounted to approximately 3.5 billion kWh of electricity purchased in the wholesale and retail electricity markets and 3.8 million Gcal of heat energy in 2018.

Capital Investment Program

We continually review our capital investment program in light of our cash flow, liquidity position, results of operations and market conditions. In light of the above factors, we may adjust our capital investment program. See “Item 3. Key Information — Risk Factors — Risks Relating to Our Financial Condition and Financial Reporting — We will require a significant amount of cash to fund our capital investment program.” For further information on funding of capital investments, see “Item 5. Operating and Financial Review and Prospects — Liquidity and Capital Resources.”

Our capital investment program includes capital spending of up to RUB 33.0 billion for 2019-2021. Our capital investment program is primarily targeted at expanding the mining segment and increasing the efficiency of the steel segment, including, *inter alia*, investments of approximately RUB 22.0 billion in mining and approximately RUB 8.1 billion in steel. However, our ability to fully realize our capital investment program is constrained by our ability to generate cash flow, obtain additional financing and refinance or restructure existing indebtedness. We may be limited in our ability to obtain financing on a project finance basis which may impose further restrictions on the operations of the project or require the economic returns of the project to be shared with investors or lenders.

In the mining segment, we expect to direct approximately RUB 5.9 billion for the development of the Elga coal deposit in 2019-2021. We will invest approximately RUB 147.9 million in 2019-2021 for increasing coal production at Sibirginskaya Underground, which is part of Southern Kuzbass Coal Company.

The steel segment projects are targeted at expanding the proportion of high value-added products which we produce, while maintaining existing output, and are mainly focused on Chelyabinsk Metallurgical Plant. The main project, initiated in 2008, is the construction of a universal rail and structural rolling mill with a capacity of 1.1 million tonnes, which allows us to reduce the proportion of lower-value semi-finished products sales by increasing the production of high-quality rolled steel products and rails. The universal rail and structural rolling mill was launched in July 2013.

The table below sets forth the major items of our capital expenditures by segment and facility for 2019-2021 (including cumulatively the expenditures made since the launch of the relevant project):

	Planned Increase in Capacity and/or Other Improvement	Approximate Total Planned Expenditures⁽¹⁾	Year of Project Launch	Estimated Year of Completion
(In millions of Russian rubles)				
Mining Segment				
Maintenance expenditures	Maintaining current coal and iron ore mining and coal and iron ore concentrate production	13,358	2019	2021
<i>Elgaugol</i>				
Construction of the Elga coal complex facilities	Development of the coal deposit with increase of production capacity to 11.7 million tonnes per annum	18,060	2009	2021
<i>Elga-road</i>				
Construction of the rail line to the Elga deposit	Providing access to the coal deposit	66,509	2009	2021
<i>Southern Kuzbass Coal Company</i>				
Increase of coal production at Sibirginskaya Underground	Increase of production output to 2.4 million tonnes per annum	4,569	2009	2019
Steel Segment				
Maintenance expenditures	Maintaining current output capacity	2,709	2019	2021
<i>Chelyabinsk Metallurgical Plant</i>				
Construction of rolling facilities in blooming building	Introducing new types of rolled products for construction industry with a design capacity of 1.1 million tonnes per annum	21,602	2009	2019
Reconstruction of oxygen-converter production	Increase of cast weight to 152 tonnes	5,319	2009	2021
Power segment				
Maintenance expenditures	Maintaining current output capacity	1,294	2019	2021
Transport division				
Maintenance expenditures	Maintaining current output capacity	598	2019	2021
<i>Port Posiet</i>				
Technical modernization of Port Posiet	Increase of cargo-handling capacity to 9.0 million tonnes per annum	4,549	2009	2021

(1) We estimate that approximately RUB 1,826 million of planned expenditures were spent on the aforementioned projects in 2018. In 2018, we spent RUB 4,842 million in total on capital expenditures.

Research and Development

We maintain research programs at the corporate level and at certain of our business units to carry out research and applied technology development activities. At the corporate level, we have a Department of Technology Development at Mechel-Steel Management (two employees) and a Production and Technical Department at Mechel Mining Management (13 employees). In December 2008, we established Mechel Engineering (219 employees) to carry out design and engineering works to increase the efficiency of our mining business. The head office of Mechel Engineering is located in Novosibirsk. Geological services provided by

Mechel Engineering include: (1) geological survey work related to prospecting and developing minerals and coal deposits; (2) hydrogeological survey work; (3) monitoring of geological environment; (4) preparation of geological materials for feasibility studies and preparation of geological reports with reserves estimation; (5) test drilling; and (6) computer simulation of coal and ore deposits.

In the course of our research and development, we also contract with third-party consultants and Russian research institutions.

In addition to these activities performed at our corporate level, each of Chelyabinsk Metallurgical Plant, Beloretsk Metallurgical Plant and Urals Stampings Plant have specialized research divisions with a total of 131 employees involved in the improvement of existing technologies and products.

Our research and development expenses in the years ended December 31, 2018, 2017 and 2016 were not significant.

Insurance

Most of our Russian production facilities have no comprehensive insurance coverage against the risks associated with the business in which we operate, other than insurance required under Russian law, existing collective bargaining agreements, loan agreements or other undertakings. Our Russian facilities have a number of compulsory insurance policies: liability of the owner of a hazardous facility for injury in an accident at a hazardous facility, third-party liability motor vehicle insurance and other forms of insurance. Some of our facilities provide their workers with medical insurance and accident and health insurance in accordance with existing collective bargaining agreements. In addition, most of our Russian facilities have voluntary motor vehicle insurance, and some of our facilities have cargo insurance, property insurance (real property and machinery) and certain types of third-party liability insurance.

Some of our international production facilities are not covered by comprehensive insurance typical for such operations in Western countries. However, they all have the compulsory insurance coverage required under the law of their respective jurisdictions: motor vehicle liability insurance, pollution liability insurance, employer liability, etc. Furthermore, some of our international facilities carry insurance coverage for their property (real property and machinery, inventory, motor vehicle), liability (third-party liability, professional and product liability), cargo (including freight insurance), accounts receivable, financial losses related to the abuse of the employees, as well as medical insurance, litigation insurance and accident insurance for their workers.

Environmental Protection

Similar to other companies operating in the industries in which we operate, our activities may have an adverse impact on the environment due to emission of coal and coke dust and other pollutants and hazardous materials into the atmosphere, discharge of polluted waste water into the environment and generation of waste and hazardous materials that need to be disposed of or reused without serious damage to the environment.

Our environmental policy has the following key components:

- implement formal environmental management systems that are aligned with applicable international standards;
- identify, assess, monitor, control and manage significant environmental risks;
- establish clear and meaningful environmental objectives and targets aimed at continuous improvement;
- implement, maintain and regularly test emergency response plans;
- identify potential environmental emergencies; and
- comply with all applicable laws and regulations and when practicable, strive to exceed those requirements.

We have been developing and implementing environmental programs at all of our mining, steel and power subsidiaries. Such programs include measures to enforce our adherence to the requirements and limits imposed on air and water pollution, as well as disposal of industrial waste, introduction of environmentally friendly industrial technologies, the construction of purification and filtering facilities, the repair and reconstruction of industrial water supply systems, the installation of metering systems, reforestation and the recycling of water and industrial waste.

Regulatory Matters

Licensing of Operations in Russia

We are required to obtain numerous licenses, authorizations and permits from the Russian governmental authorities for our operations. Some of our companies need to obtain licenses, authorizations and permits to carry out their activities, including, among other things, for:

- the use of subsoil, which is described in more detail in “— Subsoil Licensing in Russia” below;
- the use of water resources;
- the emission and discharge of pollutants into the environment;
- the handling of waste of a I-IV hazard class;
- the handling of industrial explosives;
- operation of explosive and fire and chemically hazardous production facilities of a I-III hazard class;
- fire control and security;
- medical operations;
- mine surveying;
- loading and unloading operations;
- transportation activities;
- collection, processing, storage and sale of ferrous and non-ferrous scrap;
- works with information classified as state secret;
- manufacturing of equipment for nuclear facility; and
- operation of radiation source.

The Federal Law “On Licensing of Certain Types of Activities,” dated May 4, 2011, as amended (the “**Licensing Law**”), as well as other laws and regulations, sets forth the activities subject to licensing and establish procedures for issuing licenses.

Under the Licensing Law, generally, licenses may be issued for an indefinite term. Some licenses, in particular, licenses for the use of natural resources may be issued for various periods. Upon the expiration of a license, it may be extended upon application by the licensee, provided the licensee is not in violation of the terms and conditions of the license and the relevant regulations.

In accordance with amendments to the Federal Law “On the Electric Power Industry” No. 35-FZ dated March 26, 2003, as amended (the “**Electric Power Industry Law**”) and other legislative acts which entered into force on December 25, 2018, power sales activity related to the sale of electricity in the retail electricity market is subject to compulsory licensing since July 1, 2020. The Electric Power Industry Law does not provide for licensing procedures, instead the Russian government shall enact an order setting out procedures for obtainment of an electric power sales activity license, which is outstanding as of the date hereof. We aim to file for a license once the procedures are enacted.

Regulatory authorities maintain considerable discretion in the timing of issuing licenses and permits. The requirements imposed by these authorities may be costly, time-consuming and may result in delays in the commencement or continuation of exploration or extraction operations. Further, private individuals and the public at large possess rights to comment on and otherwise participate in the licensing process, including through challenges in the courts. For example, individuals and public organizations may make claims or applications to Rosnedra and Rosprirodnadzor regarding subsoil abuse, damage to the subsoil and general environmental issues. Rosnedra and Rosprirodnadzor are required by law to review such claims and applications and to respond to those who file them. The agency can initiate further investigation in the course of reviewing claims and applications, and such investigations can lead to suspension of the subsoil license if the legal grounds for such suspension are identified in the course of the investigation. In addition, citizens may make claims in court against state authorities for failing to enforce environmental requirements (for example, if a breach by the licensee of its license terms caused damage to an individual's health, legal interests or rights), and pursuant to such a claim the court may order state authorities to suspend the subsoil license. Accordingly, the licenses we need may not be issued, or if issued, may not be issued in a timely fashion, or may impose requirements which restrict our ability to conduct our operations or to do so profitably.

As part of their obligations under licensing regulations and the terms of our licenses and permits, some of our companies must comply with numerous industrial standards, employ qualified personnel, maintain certain equipment and a system of quality controls, monitor operations, maintain and make appropriate filings and, upon request, submit specified information to the licensing authorities that control and inspect their activities.

Subsoil Licensing in Russia

In Russia, mining minerals requires a subsoil license from Rosnedra with respect to an identified mineral deposit. In addition to a subsoil license, a subsoil user needs to obtain rights (through ownership, lease or other right) to use a land plot covering the surface of the area where such licensed mineral deposit is located. In addition, as discussed above, operating permits are required with respect to specific mining activities.

The primary law regulating subsoil licensing is the Federal Law "On Subsoil," dated February 21, 1992, as amended (the "**Subsoil Law**"), which sets out the regime for granting licenses for the exploration and extraction of mineral resources. The Procedure for Subsoil Use Licensing, adopted by Resolution of the Supreme Soviet of the Russian Federation on July 15, 1992, as amended (the "**Licensing Regulation**"), also regulates the licensing of exploration and extraction of mineral resources. According to both the Subsoil Law and the Licensing Regulation, subsurface mineral resources are generally subject to the jurisdiction of the federal authorities.

Among different licenses required for mining minerals in Russia, the two major types of licenses are: (1) an exploration license, which is a non-exclusive license granting the right of geological exploration and assessment within the license area, and (2) an extraction license, which grants the licensee an exclusive right to produce minerals from the license area. In practice, many of the licenses are issued as combined licenses, which grant the right to explore and produce minerals from the license area. A subsoil license defines the license area in terms of latitude, longitude and depth. The subsoil user has the right to develop and use, including sell, mineral resources extracted from the license area for a specified period. The Russian Federation, however, retains ultimate state ownership of all subsoil mineral resources.

There are three major types of payments with respect to the extraction of minerals: (1) a lump-sum payment for granting the right to use subsoil; (2) periodic payments for the use of subsoil under the Subsoil Law; and (3) the mineral extraction tax under the Russian Tax Code. Failure to make these payments could result in refusal to grant the right to use subsoil or the suspension or termination of the subsoil license. The Subsoil Law-mandated payments are not material to our mining segment's results of operations. For coal, the basic rate of the mineral extraction tax ranges from RUB 11 to RUB 57 per tonne depending on the type of coal. At the same time, the actual rate of tax in respect of extracted coal is subject to indexation on a quarterly basis taking into account deflator coefficients adopted by the Ministry of Economic Development of the Russian Federation.

For iron ore, the mineral extraction tax is 4.8%. In 2018, mineral extraction taxes amounted to RUB 1,227 million, which are included in the consolidated statement of profit (loss) and other comprehensive income as extraction related overheads.

Currently, extraction licenses and combined licenses are awarded, generally, by tender or auction conducted by special auction commissions of Rosnedra. While such tender or auction may involve a representative of the relevant region, the separate consent of regional authorities is generally not required in order to issue subsoil licenses. The winning bidder in a tender is selected on the basis of the submission of the most technically competent, financially attractive and environmentally sound proposal that meets published tender terms and conditions. At an auction, the success of a bid is determined by the attractiveness of the financial proposal. In limited circumstances, extraction licenses may also be issued without holding an auction or tender, for instance to holders of exploration licenses who discover mineral resource deposits through exploration work conducted at their own expense. Regional authorities may issue extraction licenses for “common” mineral resources, such as clay, sand or limestone.

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 license is issued. Following the development and approval of a technical plan in accordance with established procedure, documents defining the adjusted mining allotment boundaries are incorporated as an integral part into the license. Pursuant to Resolution No. 118 of the Government of the Russian Federation dated March 3, 2010, as amended, a special commission comprised of representatives from the Ministry of Natural Resources and Ecology, Rosnedra, Rosprirodnadzor, Rostekhnadzor and relevant local authorities approve development plans and other project documentation relating to the use of subsoil plots.

The term of the license is set forth in the license. Under the Subsoil Law, exploration licenses are generally issued for a term of up to five years and up to 10 years for geological surveys of internal sea waters, territorial sea waters or the continental shelf of the Russian Federation. In accordance with amendments to the Subsoil Law that entered into force in January 2014, exploration licenses with respect to subsoil plots partially or fully located in certain constituent entities of the Russian Federation can be issued for a term of up to seven years. Extraction licenses are issued for the term of the expected operational life of the field based on a feasibility study that provides for rational use and protection of the subsoil. In the event that a prior license with respect to a particular field is terminated early (for example, when a license is withdrawn due to non-usage of the licensed subsoil), an extraction license may have a one year term until a new licensee is determined, but is generally granted to another user for the term of the expected operational life of the field based on a feasibility study. Licensees are also allowed to apply for extensions of such licenses for the purposes of completing the exploration and development of the field, or remediation activities in the absence of violations of the terms and conditions of the license. The term of a subsoil license runs from the date the license is registered with Rosnedra.

Issuance of licenses

Subsoil licenses are issued by Rosnedra. Most of the currently existing extraction licenses owned by companies derive from: (1) pre-existing rights granted during the Soviet era and up to the enactment of the Subsoil Law to state-owned enterprises that were subsequently reorganized in the course of post-Soviet privatizations; or (2) tender or auction procedures held in the post-Soviet period. The Civil Code, the Subsoil Law and the Licensing Regulation contain the major requirements relating to tenders and auctions. The Subsoil Law allows extraction licenses to be issued without a tender or auction procedure only in limited circumstances, such as instances when a mineral deposit is discovered by the holder of an exploration license at its own expense during the exploration phase.

Extension of licenses

The Subsoil Law permits a subsoil licensee to request an extension of an extraction license for the term of the expected operational life of the subsoil plot in order to complete the extraction from the subsoil plot covered

by the license or the procedures necessary to vacate the land once the use of the subsoil is complete, provided the user is not in violation of the terms and conditions of the license and the relevant regulations.

In order to extend the period of a subsoil license, a company must file an application with territorial authorities of Rosnedra to amend the license. In addition, as we have seen in practice, a subsoil licensee may be required to prepare and provide to the authority amended technical documentation and development plan of the deposit under the license justifying the requested extension. The costs associated with the license extension are generally not substantial and mainly relate to preparing amendments to the technical documentation and development plan of the subsoil plot. Application to extend the period of subsoil license is typically made six months before its expiration.

To the best of our knowledge, derived from publicly available information, the relevant governmental authorities when determining whether to approve an amendment (including an extension) of a license consider the following: (1) the grounds for the amendments, with specific information as to how the amendments may impact payments by the licensee to the federal and local budgets; (2) compliance of the licensee with the conditions of the license; and (3) the technical expertise and financial capabilities that would be required to implement the conditions of the amended license. We have successfully extended certain of our subsoil licenses which were due to expire for the entire term of the expected operational life of the subsoil plots. The terms of the licenses were extended in accordance with the amendments we made to the development plans of the subsoil plots. Furthermore, as evidenced by a number of court cases during the past several years, license extensions are being rejected predominantly on the grounds of subsoil users being in violation of the material terms of the licenses. Though current regulation does not specify what license terms are material, current practice suggest that regulatory authorities tend to treat as material terms of the license the terms related to license payments, production levels and operational milestones.

The factors that may, in practice, affect a company's ability to obtain the approval of license amendments (including extensions) include: (1) its compliance with the license terms and conditions; (2) its management's experience and expertise relating to subsoil issues; and (3) the relationship of its management with federal and/or local governmental authorities, as well as local governments. For a description of additional factors that may affect Russian companies' ability to extend their licenses, see "Item 3. Key Information — Risk Factors — Risks Relating to Our Business and Industry — Our business could be adversely affected if we fail to obtain or extend necessary subsoil licenses and permits or fail to comply with the terms of our subsoil licenses and permits." See also "Item 3. Key Information — Risk Factors — Risks Relating to the Russian Federation — Legal risks and uncertainties — Deficiencies in the legal framework relating to subsoil licensing subject our licenses to the risk of governmental challenges and, if our licenses are suspended or terminated, we may be unable to realize our reserves, which could materially adversely affect our business, financial condition, results of operations and prospects" and "Item 3. Key Information — Risk Factors — Risks Relating to the Russian Federation — Legal risks and uncertainties — Weaknesses relating to the Russian legal system and legislation create an uncertain investment climate."

Transfer of licenses

Licenses may be transferred only under certain limited circumstances that are set forth in the Subsoil Law, including the reorganization or merger of the licensee or in the event that an initial licensee transfers its license to a newly established legal entity in which it has at least a 50% ownership interest, provided that the transferee possesses the equipment and authorizations necessary to conduct the exploration or extraction activity covered by the transferred license.

Maintenance and termination of licenses

A license granted under the Subsoil Law is accompanied by a licensing agreement. The law provides that there will be two parties to any subsoil licensing agreement: the relevant state authorities and the licensee. The licensing agreement sets out the terms and conditions for the use of the subsoil.

Under a licensing agreement, the licensee makes certain environmental, safety and extraction commitments. For example, the licensee makes an extraction commitment to bring the field into extraction by a certain date and to extract an agreed-upon volume of natural resources each year. The licensing agreement may also contain commitments with respect to the social and economic development of the region. When the license expires, the licensee must return the land to a condition which is adequate for future use. Although most of the conditions set out in a license are based on mandatory rules 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. However, commitments relating to safety and the environment are generally not negotiated.

The fulfillment of license's conditions is a major factor in the good standing of the license. If the subsoil licensee fails to fulfill the license's conditions, upon notice, the license may be terminated or the subsoil user's rights may be restricted by the licensing authorities. However, if a subsoil licensee cannot meet certain deadlines or achieve certain volumes of exploration work or extraction output as set forth in a license, it may apply to amend the relevant license conditions, though such amendments may be denied.

The Subsoil Law and other Russian legislation contain extensive provisions for license termination. A licensee can be fined or the license can be suspended or terminated for repeated breaches of the law, upon the occurrence of a direct threat to the lives or health of people working or residing in the local area, or upon the occurrence of certain emergency situations. A license may also be terminated for violations of "material" license terms. Although the Subsoil Law does not specify which terms are material, failure to pay subsoil taxes and failure to commence operations in a timely manner have been common grounds for limitation or termination of licenses. Consistent underproduction and failure to meet obligations to finance a project would also be likely to constitute violations of material license terms. In addition, certain licenses provide that the violation by a subsoil licensee of any of its obligations may constitute grounds for terminating the license.

Rosprirodnadzor routinely conducts scheduled and unscheduled inspections for compliance by subsoil users with the terms of their licenses and reports violations to Rosnedra. Rosnedra examines Rosprirodnadzor's reports and, if it finds that these violations constitute sufficient grounds for terminating the license, the Commission for Termination of Subsoil Licenses considers the nature of these violations and recommends that Rosnedra either (i) revoke the license; (ii) notify the subsoil user about the identified violations and potential termination of the license if the subsoil user fails to rectify the identified violations within a prescribed period of time; or (iii) consider that the actions described in (i) and (ii) above are unreasonable and accept the information provided by the subsoil user.

If the licensee does not agree with a decision of the licensing authorities, including a decision relating to the termination of a license or the refusal to change an existing license, the licensee may appeal the decision through administrative or judicial proceedings. In certain cases prior to termination, the licensee has the right to attempt to cure the violation within three months of its receipt of notice of the violation. If the issue has been resolved within such a three-month period, no termination or other action may be taken.

Land Use Rights in Russia

Russian legislation prohibits the carrying out of any commercial activity, including mineral extraction, on a land plot without appropriate surface land use rights. Land use rights are needed and obtained for only the portions of the license area actually being used, including the plot being mined, access areas and areas where other mining-related activity is occurring.

Under the Land Code, companies generally have ownership or lease rights with regard to land in the Russian Federation.

A majority of land plots in the Russian Federation is owned by federal, regional or municipal authorities who, through bidding (carried out in the form of an auction) or without bidding, can sell, lease or grant other use rights to the land to third parties.

Our mining subsidiaries generally have entered into long-term lease agreements for their surface land within the specified license mining area. Under Russian law, a lessee generally has a right to enter into a new land lease agreement with a lessor upon the expiration of a land lease. In order to renew a land lease agreement, the lessee must apply to the lessor (usually state or municipal authorities) for a renewal prior to the expiration of the agreement. Any land lease agreement for a term of one year or more must be registered with the relevant state authorities.

Environmental Legislation in Russia

We are subject to laws, regulations and other legal requirements relating to the protection of the environment, including those governing the emission and discharge of substances into the air and water, the formation, distribution and disposal of hazardous substances and waste, the cleanup of contaminated sites, flora and fauna protection and wildlife protection. Issues of environmental protection in Russia are regulated primarily by the Federal Law “On Environmental Protection” dated January 10, 2002, as amended (the “**Environmental Protection Law**”), as well as by a number of other federal, regional and local legal acts.

Since 2008, the Ministry of Natural Resources and Ecology has been working on significant amendments to the Environmental Protection Law and other regulations. These amendments have already come into force or are gradually coming into force. The purpose of the amendments is to strengthen liability for companies’ non-compliance with environmental laws and regulations, to improve the distribution of functions between state environmental agencies at both the federal and regional levels, to increase the role of public control over compliance with environmental standards, as well as to stimulate the use of the best available environmental technologies in production processes.

The amendments, in particular, divide objects that have a negative impact on the environment into four categories depending on the degree of impact on the environment. The environmental protection requirements that apply differ depending on the relevant impact category and include environmental impact charges, permission documents and control procedures. The first category includes objects that have a significant negative impact on the environment (to which, therefore, the strictest environmental protection requirements apply) and the fourth category includes objects that have minimal environment impact. Among other things, the adopted amendments contemplate that starting from 2020 charges for environmental impact exceeding regulatory thresholds will increase. Furthermore, the liability for certain environmental violations has been enhanced recently, and the fines for certain environmental offenses, for example, in connection with violations of water use requirements, increased by 15 times the current amounts. See “Item 3. Key Information — Risk Factors — Risks Relating to Our Business and Industry — More stringent environmental laws and regulations or more stringent enforcement or findings that we have violated environmental laws and regulations could result in higher compliance costs and significant fines and penalties, or require significant capital investment, or even result in the suspension of our operations, which could have a material adverse effect on our business, financial condition, results of operations and prospects.”

Pay-to-pollute

The Environmental Protection Law and other Russian environmental protection legislation establish a “pay-to-pollute” regime administered by federal and local authorities. “Pay-to-pollute” (or payments for environmental pollution) is a form of mandatory reimbursement to the Russian government for damage caused to the environment.

The Russian government has established standards relating to the permissible impact on the environment and, in particular, standards of permissible emissions and discharges and waste disposal limits. In case of non-compliance with the statutory standards a company may obtain temporary approved limits on emissions and discharges on the basis of permits valid only during the period of implementation of environmental measures. The establishment of limits is allowed only upon the availability of a plan for emissions and discharges reduction agreed with Rosprirodnadzor. The emissions and discharges reduction plan is required to be implemented within a specific period with an annual submission of a report on its implementation to Rosprirodnadzor.

Rosprirodnadzor may revoke the limits, if the company fails to implement measures to reduce emissions and discharges in a timely manner. If, by the end of that period, the company's emissions and discharges are still in excess of the statutory standards, a new plan must be submitted to Rosprirodnadzor for review and approval in order to receive new limits.

Fees for the emission/discharge per tonne of each contaminant into air and water and fees for waste disposal are established by governmental authorities. These fees are determined on a sliding scale for both the statutory standards and individually approved limits on emissions and discharges, as well as for pollution in excess of these limits: the lowest fees are imposed for pollution within the statutory standards, intermediate fees are imposed for pollution within the individually approved temporary limits (within limit fees; exceed the fees within the statutory standards by 5 times) and the highest fees are imposed for pollution exceeding such limits (above-limit fees; exceed the fees within the individually approved temporary limits by 5 times). Thus, above-limit fees exceed the fees within the statutory standards by 25 times. In accordance with recent amendments to the Environmental Protection Law, starting from 2020, environmental impact charges exceeding regulatory thresholds in certain cases will be increased by up to 100 times current fees as statutorily prescribed. Payment of above-limit fees does not relieve the company from the responsibility as provided by Russian law, as well as the development and implementation of environmental measures aimed at reducing the negative impact on the environment. In 2018, we incurred above-limit fees and penalties in Russia in the amount of approximately RUB 127.5 million.

Environmental expert review

According to the Federal Law "On Environmental Expert Review" dated November 23, 1995, as amended (the "**EER Law**"), environmental expert review is a process of verifying the compliance of project documentation with environmental standards and technical regulations for the purpose of preventing a negative environmental impact. The EER Law provides for the main principles for conducting environmental expert review and for the type of documentation which is subject to such review.

In relation to our operating companies, all documentation underlying the issuance of some of our licenses is subject to environmental expert review.

Review of documentation related to capital construction is regulated under the Urban Development Code, dated December 29, 2004, as amended (the "**Urban Development Code**"). The Urban Development Code provides for governmental inspection to verify the compliance of project documentation with relevant technical regulations, including sanitary-epidemiological and environmental regulations, requirements for the protection of objects of cultural heritage, as well as fire, industrial, nuclear and other kinds of safety requirements, and compliance with the results of engineering surveys with relevant technical regulations.

Environmental enforcement authorities

Currently state environmental regulation is administered by several federal services and agencies and their regional subdivisions, in particular, Rosprirodnadzor, the Federal Service for Hydrometrology and Environmental Monitoring, Rosnedra, the Federal Agency for Forestry, the Federal Agency for Water Resources and some others. Included in these agencies' sphere of responsibility are environmental preservation and control, enforcement and observance of environmental legislation, drafting and approving regulations and filing court claims to recover environmental damages. The statute of limitations for such claims is 20 years.

The Russian federal government and the Ministry of Natural Resources and Ecology are responsible for coordinating the work of the federal services and agencies engaged in state environmental regulation.

The structure of environmental enforcement authorities described above was established in 2004. This structure was subjected to certain changes in 2008 and 2010. In particular, the Ministry of Natural Resources was

transformed into the Ministry of Natural Resources and Ecology. In late 2010, this structure was further changed and the powers previously held by Rostekhnadzor in the field of environmental protection regarding the limitation of negative industrial impact, waste treatment and state environmental impact assessments were transferred to Rosprirodnadzor which is coordinated by the Ministry of Natural Resources and Ecology.

Environmental liability

If the operations of a company violate environmental requirements or cause harm to the environment or any individual or legal entity, a court action may be brought to limit or ban these 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. Courts may also impose cleanup obligations on violators in lieu of or in addition to imposing fines or other penalties to compensate for damages.

Subsoil licenses generally require certain environmental commitments. Although these commitments can be substantial, the penalties for failing to comply and the reclamation requirements are generally low; however, failure to comply with environmental requirements can result in a suspension of mining operations.

Reclamation

We conduct our reclamation activities for land damaged by production in accordance with the current environmental legislation. In general, our reclamation activities involve both a technical stage and a biological stage. In the technical stage, we backfill the pits, grade and terrace mound slopes, level the surface of the mounds, and add clay rock on top for greater adaptability of young plants. In the biological stage, we plant conifers (pine, larch, cedar) on horizontal and gently sloping surfaces and shrubs and bushes to reinforce inclines. Russian environmental regulations do not require mines to achieve the approximate original contour of the property as is required, for example, in the United States. Generally, reclamation should ensure the restoration of disturbed lands for their further use in agricultural, forestry, water management, recreational and other purposes. In 2018, we incurred reclamation costs in Russia of approximately RUB 77 million.

Kyoto Protocol and the United Nations Framework Convention on Climate Change

In December 1997, in Kyoto, Japan, the signatories to the United Nations Convention on Climate Change established individual, legally binding targets to limit or reduce greenhouse gas emissions by developed nations. This international agreement, known as the Kyoto Protocol, came into force on February 16, 2005. At the Doha 2012 United Nations Climate Change Conference Russia, Japan and some other countries announced suspension of their participation in the Kyoto Protocol.

In December 2015 at the Paris climate conference, 196 countries adopted the United Nations Framework Convention on Climate Change which is due to enter into force in 2020. The agreement sets out a global action plan to avoid climate change. 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 Ecology of the Russian Federation has approved a number of methodology guidelines for the quantification of the amount of greenhouse gas emissions by organizations conducting business and other activities in Russia. In 2018, the Ministry of Economic Development of the Russian Federation proposed a draft law on state regulation of greenhouse gas emissions. This draft law, if enacted, would establish target limits for greenhouse gas emissions, general rules and guidelines for emitters and introduce permits for greenhouse gas emissions. The draft law is at an early stage of development, and it is hard to predict if or when it would be adopted into a law.

Technical Regulations

We are subject to various technical regulations and standards which apply to industrial manufacturing businesses. The Federal Law No. 184-FZ “On Technical Regulation” dated December 27, 2002, as amended (the

“**Technical Regulation Law**”) has 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). Currently, national and interstate standards which would standardize technical regulations are being developed. However, considerable part of technical regulations have not been implemented yet, 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 standardization authority has declared GOSTs and interstate standards adopted before July 1, 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. A number of our products must be certified. Where certification is not mandatory, a company may elect voluntary certification by applying for a compliance certificate from the relevant certification authorities. Following the issuance of such certificate, the applicant has the right to use the relevant compliance mark on its products.

Health and Safety Regulations in Russia

Due to the nature of our business, much of our activity is conducted at industrial sites with a large number of workers, and industrial safety and workplace safety issues are of significant importance to the operation of these sites.

The principal law regulating industrial safety is the Federal Law “On Industrial Safety of Hazardous Production Facilities,” dated July 21, 1997, as amended (the “**Safety Law**”). The Safety Law applies, in particular, to production facilities and sites where certain activities are conducted, including sites where load-lifting machines are used, where melts of ferrous and nonferrous metals are produced, used, stored and transported, where hazardous substances are stored and used (including allowed concentrations) and where certain types of mining is done. There are also regulations that address safety rules for coal mines, the production and processing of ore, the blast-furnace industry, steel smelting, alloy production and nickel production. Additional safety rules also apply to certain industries, including fuel and energy complex, metallurgical and coke-chemical industries and the foundry industry.

The Safety Law provides for hazardous production facilities of four classes from class IV to class I, with class IV being less hazardous and class I being the most hazardous. The safety and compliance requirements set up by the Safety Law apply to each facility depending on their class of hazard. Each existing hazardous production facility was to be re-registered with the state register by January 1, 2014 and be assigned with a hazard class. We re-registered hazardous production facilities at our operations in accordance with the applicable law.

Any construction, reconstruction, liquidation or other activities in relation to regulated industrial sites is subject to a state 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 organization and approved by Rostekhnadzor.

In addition, the Safety Law establishes an alternative form of industrial safety regulation that is based on risk assessment rather than prescriptions of obligatory requirements and standards imposed by Rostekhnadzor. A company that operates a hazardous production facility may develop a safety case, a document which describes that the facility has been designed and operated in a way to limit any risks of major accident. The Safety Law considers that in drafting the safety case, the relevant companies will be able to refer to specific safety arrangements and safety analyses as confirmation of having certain safety measures in place. To make these arrangements fully operational further changes will need to be introduced into relevant laws and regulations.

Companies that operate such production facilities and sites have a wide range of obligations under the Safety Law and the Labor Code of Russia of December 30, 2001, as amended (the “**Labor Code**”). In particular, they must limit access to such sites to qualified specialists, maintain industrial safety controls and carry insurance for third-party liability for injuries caused in the course of operating industrial sites. Russian regulations require these companies to enter into contracts with professional emergency response units or create their own emergency response services in certain cases, conduct personnel trainings and drills, create systems to cope with and notify the authorities of accidents and maintain these systems in good working order. Effective from January 1, 2014, companies that operate industrial sites of hazard classes I and II must implement industrial safety management systems to prevent accidents and incidents at hazardous production facilities and develop certain emergency response plans.

Companies that operate production sites of hazard classes I and II and handle hazardous substances in quantities set by the Safety Law must also prepare declarations of industrial safety which summarize the risks associated with operating a particular production site and measures the company has taken and will take to mitigate such risks and use the site in accordance with applicable industrial safety requirements. Such declarations must be adopted by the chief executive officer of the company, who is personally responsible for the completeness and accuracy of the data contained therein. The industrial safety declaration as well as a state industrial safety review are required for the issuance of a license permitting the operation of a hazardous production facility.

Rostekhnadzor has broad authority in the field of control and management of industrial safety. In case of an accident, a special commission led by a representative of Rostekhnadzor conducts a technical investigation of the cause. The company operating the hazardous production facility where the accident took place bears all costs of an investigation. Rostekhnadzor officials have the right to access production sites and may inspect documents to ensure a company’s compliance with safety rules. Rostekhnadzor may suspend for up to 90 days or initiate a court decision to terminate operations of companies and/or impose administrative liability on officers of such companies. Moreover, new rules on public control came into force in 2017. This type of control is performed on a voluntary basis by public inspectors who comply with certain qualification requirements.

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 obligated to compensate the individual for lost earnings, as well as health-related damages.

Russian Antimonopoly Regulation

The Federal Law “On Protection of Competition,” dated July 26, 2006, as amended (the “**Competition Law**”), provides for a mandatory pre-approval by the FAS of the following actions:

- other than in respect to financial organizations, such as banks, an acquisition by a person (or its group) of more than 25% of the voting shares of a Russian joint-stock company (or one-third of the interests in a Russian limited liability company), except upon incorporation, and the subsequent increase of these stakes to more than 50% of the total number of the voting shares and more than 75% of the voting shares (one-half and two-thirds of the interests in a Russian limited liability company), or acquisition by a person (or its group) of ownership or rights of use with respect to the core production assets (other than land and non-industrial buildings, constructions, premises and parts thereof or constructions in progress) and/or intangible assets of an entity which are located in Russia if the balance sheet value of such assets exceeds 20% of the total balance sheet value of the core production and intangible assets of such entity, or obtaining rights to determine the conditions of business activity of a Russian entity or to exercise the powers of its executive body by a person (or its group), or an acquisition by a person (or its group) of more than 50% of the voting shares (interests) of a foreign entity, which has supplied goods, works and/or services to Russia in an amount exceeding RUB 1 billion in the preceding year, or other

rights to determine the conditions of business activity of such entity or to exercise the powers of its executive body, if, in any of the above cases, the aggregate asset value of an acquirer and its group together with a target and its group (excluding the asset value of the seller and its group, if as a result of the acquisition the seller and its group cease to determine the conditions of business activity of the target) exceeds RUB 7 billion and at the same time the total asset value of the target and its group exceeds RUB 400 million, or the total annual revenues of such acquirer and its group, and the target and its group for the preceding calendar year exceed RUB 10 billion and at the same time the total asset value of the target and its group exceeds RUB 400 million;

- mergers and consolidations of entities, other than financial organizations, if their aggregate asset value (the aggregate asset value of the groups of persons to which they belong) exceeds RUB 7 billion, or total annual revenues of such entities (or groups of persons to which they belong) for the preceding calendar year exceed RUB 10 billion;
- founding of a business entity, if its charter capital is paid by the shares (or limited liability company interests) and/or the assets (other than cash) of another business entity (other than financial organization) or the newly founded business entity acquires shares (or limited liability company interests) and/or the assets (other than cash) of another business entity based on a transfer act or a separation balance sheet and rights in respect of such shares (or limited liability company interests) and/or assets (excluding monetary funds) as specified above, at the same time provided that the aggregate asset value of the founders (or group of persons to which they belong) and the business entities (or groups of persons to which they belong) which shares (or limited liability company interests) and/or assets (other than cash) are contributed to the charter capital of the newly founded business entity exceeds RUB 7 billion, or total annual revenues of the founders (or group of persons to which they belong) and the business entities (or groups of persons to which they belong) which shares (or limited liability company interests) and/or assets are contributed to the charter capital of the newly founded business entity for the preceding calendar year exceed RUB 10 billion; and
- entering into joint venture agreements between competitors, if their aggregate asset value (the aggregate asset value of the groups of persons to which they belong) exceeds RUB 7 billion, or total annual revenues of such entities (or groups of persons to which they belong) for the preceding calendar year exceed RUB 10 billion.

The above requirements for a mandatory pre-approval by the FAS will not apply if the transactions are performed by members of the same group, if the information about such a group of persons was disclosed to the antimonopoly authority and there were no changes within one month prior to the date of the transaction within that group of persons. In such cases, the FAS must be notified of the transactions subsequently in accordance with Russian anti-monopoly legislation. Furthermore, the requirement for a mandatory approval of transactions/actions described above will not apply if the transactions/actions are performed by members of the same group where a company and individual or an entity, if such an individual or an entity holds (either due to its participation in this company or based on the authorities received from other persons) more than 50% of the total amount of votes in the equity (share) capital of this company.

A transaction entered into in violation of the above requirements may be invalidated by a court decision pursuant to a claim brought by the FAS if the FAS proves to the court that the transaction leads or could lead to the limitation of competition in the relevant Russian market. The FAS may also issue binding orders to companies that have violated the applicable antimonopoly requirements and bring court claims seeking liquidation, split-up or spin-off of business entities if a violation of antimonopoly laws was committed by such business entities. In addition, a company may be subject to the administrative fine of an amount from RUB 150,000 to RUB 250,000 for the failure to file a FAS post-transactional notification and from RUB 300,000 to RUB 500,000 for the failure to file an application for FAS pre-approval of the transaction.

Under the Competition Law, a company with a dominant position in the relevant market is prohibited from misusing its dominant position. Specifically, such company is prohibited from:

- establishing and maintaining monopolistically high or monopolistically low prices of goods;
- withdrawing goods from circulation, if the result of such withdrawal is an increase in the price of goods;
- imposing contractual terms upon a counterparty which are unprofitable for the counterparty or not related to with the subject matter of agreement (i.e., terms that are economically or technologically unjustified);
- reducing or terminating, without economical or technological justification, production of goods if there is a demand for the goods or orders for their delivery have been placed and it is possible to produce them profitably;
- refusing or evading, without economical or technological justification, to enter into a contract with customers in cases when the production or delivery of the relevant goods is possible;
- establishing without economical, technological or other justification different prices for the same goods;
- establishing unjustifiably high or unjustifiably low price of a financial service by a financial organization;
- creating discriminatory conditions;
- creating barriers to entry into the market for the relevant goods or forcing other companies to leave the market;
- violating pricing procedures established by law; and
- manipulating prices in the wholesale and/or retail electricity (capacity) markets.

In 2016, as a result of amendments to the Competition Law, the register of entities with a market share exceeding 35% in the relevant market was abolished. Inclusion of a company in the register implied that it might be subject to additional FAS oversight, but at the same time provided the company with information on the occupied market share. The abolition of the register creates additional antimonopoly risks to the company.

In order to prevent the creation of discriminatory conditions, the Government of the Russian Federation can establish rules for non-discriminatory access to goods that are produced and/or sold by a business entity holding a dominant position and not included into the register of natural monopolies whose share exceeds 70% in the relevant market. Such rules may be established in case a decision of the antimonopoly authority on the fact of abuse of a dominant position by such business entity entered into force.

In the event of a breach of any terms of business conduct required by the FAS, the FAS may initiate proceedings to investigate violations of antimonopoly legislation. If a violation of antimonopoly legislation is identified, the FAS may initiate administrative proceedings which may result in the imposition of a fine calculated on the basis of the annual revenues received by the company in the market where such violation was committed. Such fines may include an administrative fine of an amount from RUB 300,000 to RUB 1 million or, if such violation has led or may lead to the prevention, limitation or elimination of competition, an administrative fine of up to 15% of the proceeds from sale of all goods, works and services in the market where such violation was committed, but not more than 2% of the aggregate amount of proceeds from sale of all goods, works and services in case of abuse of a dominant position and not more than 4% of the aggregate amount of proceeds from sale of all goods, works and services in case of conclusion of an inadmissible agreement according to the law. Russian legislation also provides for criminal liability of company executives for violations of certain provisions of antimonopoly legislation. Furthermore, for systematic violations, a court may order, pursuant to a suit filed by the FAS, a compulsory split-up or spin-off of the violating company, and no affiliation can be preserved between the new entities established as result of such a mandatory reorganization.

The FAS has determined certain of our companies to have a dominant position in certain markets and these companies are subject to directive issued by the FAS which impose certain restrictions on their commercial activities. See “Risk Factors — Risks Relating to Our Business and Industry — Antimonopoly regulation could lead to sanctions with respect to the subsidiaries we have acquired or established or our prices, sales volumes and business practices.”

The Strategic Industries Law

The Strategic Industries Law, dated April 29, 2008, as amended, regulates foreign investments in companies with strategic importance for the national defense and security of the Russian Federation (“**Strategic Companies**”). The Strategic Industries Law provides an exhaustive list of strategic activities, engagement in which makes a company subject to restrictions. Among others, the list of such activities includes exploration and/or production of natural resources on subsoil plots of federal importance. Subsoil plots of federal importance include plots with deposits of uranium, diamonds, high-purity quartz ore, nickel, cobalt, niobium, lithium, beryllium, tantalum, yttrium-group rare-earth metals and platinoid metals. They also include deposits of oil, gas, vein gold and copper which are above certain size limits specified in the Subsoil Law, as well as subsoil plots of the internal sea, territorial sea and continental shelf; and subsoil plots, the use of which requires the use of land plots included in the category of national defense and security land. The Strategic Subsoil List was first officially published in *Rossiyskaya Gazeta* on March 5, 2009. Services rendered by business entities included into the register of natural monopolies pursuant to the Federal Law “On Natural Monopolies,” dated August 17, 1995, as amended, with certain exceptions, are also considered to constitute strategic activity. Furthermore, production and sale of metals, alloys with special features or raw materials that are used in production of weapons and military equipment is also deemed to be a strategic activity starting from July 2017. The production and distribution of industrial explosives is also deemed to be activity of strategic importance for national defense and homeland security.

Investments resulting in a foreign investor or a group of entities obtaining control over a Strategic Company, or acquiring fixed assets of a Strategic Company representing 25% or more of its balance sheet value, require prior approval from state authorities. The procedure for issuing such consent will involve a special governmental commission on the control of foreign investments (the “**Governmental Commission**”), which was established by a government resolution dated July 6, 2008 as the body responsible for granting such consents, and the FAS, which is authorized to process applications for consent from foreign investors and to issue such consents based on the decisions of the Governmental Commission. “**Control**” for these purposes means an ability to determine, directly or indirectly, decisions taken by a Strategic Company, whether through voting at the general shareholders’ (or limited liability company interest-holders’) meeting of the Strategic Company, participating in the board of directors or management bodies of the Strategic Company, or acting as the external management organization of the Strategic Company or otherwise. Thus, generally, “control” will be deemed to exist if any foreign investor or a group of entities acquires more than 50% of the shares (or limited liability interests) of a Strategic Company, or if by virtue of a contract or ownership of securities with voting rights it is able to appoint more than 50% of the members of the board of directors or of the management board of a Strategic Company. However, there are special provisions for Strategic Companies involved in the exploration or extraction of natural resources on plots of federal importance (“**Subsoil Strategic Companies**”): a foreign investor or group of entities is considered to have control over a Subsoil Strategic Company when such foreign investor or group of entities holds directly or indirectly 25% or more of the voting shares of the Subsoil Strategic Company or holds the right to appoint its sole executive officer and/or 25% or more of its management board or has the unconditional right to elect 25% or more of its board of directors. At that, pursuant to the amendments to the Strategic Industries Law, which were adopted on May 31, 2018 and entered into force on June 12, 2018, foreign investors which do not submit to the FAS information on their beneficiaries, beneficial owners and controlling parties, or organizations controlled by such foreign investors, are prohibited from obtaining control over a Strategic Company or acquiring fixed assets of a Strategic Company representing 25% or more of its balance sheet value.

Furthermore, in case a foreign investor or its group of entities which is a holder of securities of a Strategic Company, Subsoil Strategic Company or other entity which exercises control over these companies becomes a direct or indirect holder of voting shares in amount which is considered to give them direct or indirect control over these companies in accordance with the Strategic Industries Law due to a change in the allocation of votes resulting from the procedures provided by Russian law (e.g. as a result of a buy-back by the relevant company of its shares, conversion of preferred shares into common shares or holders of preferred shares becoming entitled to vote at a general shareholders' meeting in cases provided by Russian law), such shareholders will have to apply for state approval of their control within three months of receiving such control. If the Governmental Commission refuses to grant the approval the shareholders shall sell the relevant part of their respective shares or participatory interest, and if they do not comply with this requirement, a Russian court can deprive such foreign investor or its group of entities of the voting rights in such Strategic Company upon a claim of the competent authority. In such cases, the shares of the foreign investor are not counted for the purposes of establishing a quorum and reaching the required voting threshold at the general shareholders' meeting of the Strategic Company.

Any transfers of a stake, or certain rights, in a Strategic Company or in a Subsoil Strategic Company to foreign investors that are (i) companies controlled by the Russian Federation, the constituent entity of the Russian Federation or (ii) companies controlled by Russian nationals, provided that such Russian nationals are Russian tax residents and do not have other nationality, will not require prior approval from the state authorities.

If a foreign investor or its group of entities obtains control over a Strategic Company in violation of the Strategic Industries Law, the relevant transaction is void, and in certain cases a Russian court can deprive such foreign investor or group of entities of the voting rights in such Strategic Company upon a claim by the competent authority. In addition, resolutions of the general shareholders' meetings or other management bodies of a Strategic Company adopted after a foreign investor or group of entities obtained control over the Strategic Company in violation of the Strategic Industries Law, as well as transactions entered into by the Strategic Company after obtaining such control, may be held invalid by a court upon a claim by the competent authority. See "Item 3. Key Information — Risk Factors — Risks Relating to the Russian Federation — Legal risks and uncertainties — Expansion of limitations on foreign investment in strategic sectors could affect our ability to attract and/or retain foreign investments."

Employment and Labor Regulations in Russia

Labor matters in Russia are governed primarily by the Labor Code. In addition to this core legislation, relationships between employers and employees are regulated by federal laws, such as the Law "On Employment in the Russian Federation," dated April 19, 1991, as amended, and the Law "On Compulsory Social Insurance Against Industrial Accidents and Occupational Diseases," dated July 24, 1998, as amended; legal acts of executive authorities; and local government acts related to labor issues.

Employment contracts

As a general rule, employment contracts for an indefinite term are entered into with all employees. Russian labor legislation generally disfavors fixed-term employment contracts. However, an employment contract may be entered into for a fixed term of up to five years in certain cases where labor relations may not be established for an indefinite term due to the nature of the duties or the conditions of the performance of such duties, as well as in other cases expressly identified by the Labor Code or other federal law. In some cases it is also possible to enter into an employment contract for the employee to perform specified tasks. All terms and conditions of employment contracts are regulated by the Labor Code.

Under Russian law, employment may be terminated by mutual agreement between the employer and the employee at the end of the term of a fixed-term employment contract or on the grounds set out in the Labor Code as described below. An employee has the right to terminate his or her employment contract with a minimum of

two weeks' notice (or one month's notice for a company's chief executive officer), unless the employment contract is terminated before the notice period ends by mutual agreement between employer and employee.

An employer may terminate an employment contract only on the basis of the specific grounds enumerated in the Labor Code, including, *inter alia*:

- liquidation of the enterprise or downsizing of staff;
- failure of the employee to comply with the position's requirements due to incompetence, as confirmed by the results of an attestation;
- repeated failure of the employee to fulfill his or her work duties without valid reason, provided that the employee has been disciplined previously;
- entering the workplace under the influence of alcohol, narcotics or other intoxicating substances;
- a single gross breach by an employee of his or her work duties, including truancy;
- disclosure of state secrets or other confidential information, which an employee has come to know during fulfillment of his professional duties;
- embezzlement, willful damage or destruction of assets, and misappropriation as confirmed by a court decision or a decision by another competent governmental authority;
- failure to comply with safety requirements in the workplace if such failure to comply caused injuries, casualties or catastrophe; and
- provision by the employee of false documents upon entry into the employment contract.

An employee dismissed from an enterprise due to downsizing or liquidation is entitled to receive compensation and salary payments for a certain period of time, depending on the circumstances.

The Labor Code also provides protections for specified categories of employees. For example, except in cases of liquidation of an enterprise and other events specified in the Labor Code, an employer cannot dismiss minors, pregnant women, mothers with a child under the age of three, single mothers with a child under the age of 14 or other persons caring for a child under the age of 14 without a mother.

Any termination by an employer that is inconsistent with the Labor Code requirements may be invalidated by a court, and the employee may be reinstated. Lawsuits resulting in the reinstatement of illegally dismissed employees and the payment of damages for wrongful dismissal are increasingly frequent, and Russian courts tend to support employees' rights in most cases. Where an employee is reinstated by a court, the employer must compensate the employee for unpaid salary for the period between the wrongful termination and reinstatement, as well as for mental distress.

Work time

The Labor Code generally sets the regular working week at 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.

For employees working in hazardous or harmful conditions, the regular working week is decreased by four hours. Some of our production employees qualify for this reduced working week.

Annual paid vacation leave under the law is 28 calendar days. Our employees who work in mines and pits or work in harmful conditions may be entitled to additional paid vacation ranging from 7 to 42 business days.

Since January 1, 2019, the retirement age in the Russian Federation is 65 years for males and 60 years for females. However, employees who work in underground and open pit mines or do other work in potentially harmful conditions have the right to retire at an earlier age. Early retirement ages are established by the applicable legislation.

Salary

In accordance with Russian law, the minimum salary in Russia is RUB 11,280 per month starting from January 1, 2019.

Strikes

The Labor Code defines a strike as the temporary and voluntary refusal of workers to fulfill their work duties with the intention of settling a collective labor dispute. Russian legislation contains several requirements for legal strikes. Participation in a legal strike may not be considered by an employer as grounds for terminating an employment contract, although employers are generally not required to pay wages to striking employees for the duration of the strike. Participation in an illegal strike may be adequate grounds for termination of employment.

Trade unions

Although Russian labor regulations have decreased the authority of trade unions compared with the past, they retain influence over employees and, as such, may affect the operations of large industrial companies in Russia, such as Mechel. In this regard, our management routinely interacts with trade unions in order to ensure the appropriate treatment of our employees and the stability of our business.

The activities of trade unions are generally governed by the Federal Law “On Trade Unions, Their Rights and Guarantees of Their Activity,” dated January 12, 1996, as amended (the “**Trade Union Law**”). Other applicable legal acts include the Labor Code, which provides for more detailed regulations relating to activities of trade unions.

The Trade Union Law defines a trade union as a voluntary union of individuals with common professional and other interests that is incorporated 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 contracts and agreements such as those between the trade unions and employers, federal, regional and local governmental authorities and other entities;
- monitor compliance with labor laws, collective contracts and other agreements;
- access work sites and offices, and request information relating to labor issues from the management of companies and state and municipal authorities;
- represent their members and other employees in individual and collective labor disputes with management;
- organize and participate in strikes;
- monitor redundancy of employees and seek action by municipal authorities to delay or suspend mass layoffs; and
- appoint representatives of employees authorized to participate in meetings of the collegial management body with a consultative vote.

Russian laws require that companies cooperate with trade unions and do not interfere with their activities. Trade unions and their officers enjoy certain guarantees as well, such as:

- legal restrictions as to rendering redundant employees elected or appointed to the management of trade unions;

- protection from disciplinary punishment or dismissal on the initiative of the employer without prior consent of the management of the trade union and, in certain circumstances, the consent of the relevant trade union association;
- retention of job positions for those employees who stop working due to their election to the management of trade unions;
- protection from dismissal for employees who previously served in the management of a trade union for two years after the termination of the office term, except where a company is liquidated or the employer is otherwise entitled to dismiss the employee; and
- provision of necessary equipment, premises and vehicles by the employer for use by the trade union free of charge, if provided for by a collective contract or other agreement.

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. The trade union may also apply to state authorities and labor inspectors and prosecutors to ensure that an employer does not violate Russian labor laws. Trade unions may also initiate collective labor disputes, which may lead to strikes.

To initiate a collective labor dispute, trade unions present their demands to the employer. The employer is then obliged to consider the demands and notify the trade union of its decision. If the dispute remains unresolved, a reconciliation commission attempts to end the dispute. If this proves unsuccessful, collective labor disputes are generally referred to mediation or labor arbitration. 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 consequences for such violations are set out in Russian legislation.

Regulation of Russian Electricity Market

Industry background

The functioning of the energy system of the Russian Federation is based on a combination of technological and commercial infrastructure which operates under state control, on the one hand, and organizations engaged in the generation and sale of electricity which interact with each other in a competitive environment, on the other hand.

Pursuant to the Electric Power Industry Law, the electric power industry entities are organizations engaged in the production of electricity, heat energy and capacity, purchase and sale of electricity and capacity, power supply of consumers, rendering services in electricity transmission, operational-dispatching management in the electric power industry, sales of electric energy (capacity), organizing of purchase and sale of electric energy and capacity.

Generating companies carry out generation and sale of electricity in the wholesale or retail markets to sales organizations or end consumers. Sales organizations purchase electricity in the wholesale and retail markets and sell it to end consumers.

Electricity consumers are natural and legal persons who purchase electricity for their own household and/or production needs. Large consumers may purchase electricity directly on the wholesale market provided that they fulfill the requirements for participants of the wholesale electricity and capacity market. Other categories of consumers purchase electricity from power sales companies, including guaranteeing suppliers, as well as may purchase electricity from electricity producers who are not participants of the wholesale electricity and capacity market.

System Operator (SO UPS JSC), which is wholly-owned by the state, performs operational-dispatching management in the Unified Energy System of Russia. The main function of the System Operator is to control of the compliance of technological parameters of the energy system operation. The System Operator participates in the maintenance of the wholesale electricity and capacity market.

Grid operators transmit electricity through electric grids and carry out technological connection of power receiving devices of electricity consumers, power facilities of generating companies and power grid facilities of other owners to electric grids. Activities of grid operators are a natural monopoly and are regulated by the state.

Organizations of commercial infrastructure include Trading System Administrator JSC, Financial Settling Center JSC and Association Nonprofit Partnership Market Council. Association Nonprofit Partnership Market Council was established in order to balance the interests of the electricity market participants and to ensure the unity of the commercial infrastructure operation. Activities of infrastructure organizations, including pricing and conditions of interaction with contractors, are subject to state regulation and control.

In accordance with amendments to the Electric Power Industry Law and other legislative acts which entered into force on December 25, 2018, power sales activity is subject to compulsory licensing since July 1, 2020. Power sales activity is the sale of electricity produced and/or purchased in the retail electricity market both within and outside the unified national electric grid of Russia. A prerequisite for granting a license is compliance with licensing requirements.

Sales of electricity

The Russian electricity market consists of wholesale and retail electricity and capacity markets. The wholesale electricity and capacity market encompasses European territory of the Russian Federation, the Urals and Siberia and is divided into two pricing zones. The first pricing zone includes the European territory of the Russian Federation and the Urals and the second pricing zone includes Siberia. In addition, there are so-called non-pricing zones, namely the regions of the Far East, the Arkhangelsk region, the Kaliningrad region and the Komi Republic. Competition in these areas for various technical reasons is not possible yet. In non-pricing zones sale of electricity in the retail electricity and capacity market is made at regulated prices. The wholesale market provides a framework for large-scale, often interregional, energy trades. The retail electricity market operates within all Russian regional territories and provides a framework for mid-scale and end-consumer energy trades.

Wholesale electricity market

The wholesale electricity and capacity market is a sphere of distribution of electric energy and capacity within the Unified Energy System of Russia. The wholesale market participants include large producers and consumers of electricity and capacity, as well as other entities that earned the status of an entity of the wholesale market and act on the basis of applicable rules.

Trading on the wholesale electricity and capacity market is conducted in accordance with the agreement on accession to the trading system and wholesale market regulations which are developed and adopted by Association Nonprofit Partnership Market Council.

Electricity trading on the wholesale electricity and capacity market is carried out by means of the classical model of supply and demand balance or through bilateral contracts of purchase and sale of electric energy.

Currently electricity is traded on the basis of the following trading mechanisms:

Regulated bilateral contracts

Regulated contracts are effectively take-or-pay obligations at regulated prices defined by the FAS for electricity and capacity volumes. The volumes of electricity to be traded by the generators under regulated

contracts are set up by the FAS annually based on percentages of the volumes of electricity generated in the previous year. The volumes of electricity traded under regulated contracts have gradually declined for the wholesale market when it became fully liberalized in 2011. Starting from January 1, 2011, electricity is traded at non-regulated prices, except for electricity intended for supply to households.

A generator may provide the volumes of electricity it must sell under regulated contracts either through own generation or through the purchase of electricity on the spot market at market prices. Similarly, its consumers receive electricity at regulated prices in the volumes agreed under the regulated contracts, regardless of their actual needs, and can freely trade the imbalance on the spot market at market prices (either by purchasing additional volumes, if needed, or selling the excess electricity volumes).

Non-regulated bilateral contracts

Electricity supply volumes which are not agreed upon under regulated contracts, as well as all new generation capacity commissioned after January 1, 2007, can be traded by participants of the wholesale market under non-regulated contracts, on the “one-day-ahead” spot market or on the balancing market. All terms of electricity supply under non-regulated contracts are subject to free negotiation between sellers and purchasers.

Retail electricity market

The retail market participants include consumers, power supply companies, guaranteeing suppliers, power grid companies and electricity producers which do not supply electricity to the wholesale market.

The retail electricity market operates on the following main principles: (1) end consumers are free to choose between sales companies; (2) end consumers purchase at free prices set on the market, except for contracts with “guaranteeing suppliers”; and (3) “guaranteeing suppliers” cannot refuse to enter into a contract with an end consumer.

“Guaranteeing suppliers” sell electricity under prices that take account of: (1) the prices on the wholesale electricity and capacity market; (2) the sales premium of the particular guaranteeing supplier set by respective regional authorities; (3) the prices for electricity transmission and distribution through electricity networks; and (4) the prices of services of infrastructure organizations.

Since July 1, 2020, power sales activity in the retail electricity market is subject to compulsory licensing.

Heat market

Heat markets are regional retail markets. The market is divided into heat energy in hot water and heat energy in steam. Prices for heat energy in hot water are regulated and set within the general guidelines provided by the FAS and by regional authorities. Minimum and maximum prices for heat energy in hot water, which is traded on the retail markets, are set by the FAS separately for each administrative region of Russia for a period of at least one year. Regional authorities establish the prices for relevant territories within the range set by the FAS and subject to the types and prices of fuel used to produce the heat and the volumes of heat purchased on the relevant territory. Since January 1, 2019, the market of heat energy in steam that is not for household use is no longer regulated by the FAS.

Our Southern Kuzbass Power Plant delivers heat energy (in the form of hot water) at regulated prices to residential and commercial customers in the cities of Kaltan, Osinniki and Mezhdurechensk. Mechel Energo delivers heat energy (in the form of hot water and steam) at regulated prices to residential and commercial customers in the cities of Vidnoye, Chelyabinsk, Chebarkul, Beloretsk and Izhevsk.

EU REACH

On June 1, 2007, the European Union enacted regulations on registration, evaluation, authorization and restrictions of use of chemicals, known as REACH. The purpose of REACH is to ensure a high level of protection of human health and the environment, including the promotion of alternative methods of assessment of hazards of chemical substances.

REACH requires foreign manufacturers importing their chemical substances into the European Union, as well as EU manufacturers producing such substances in quantities of one tonne or more per year, to register these substances with the ECHA and provide the information about the registered substances usage and utilization to the competent authorities of the EU Member States and downstream users upon request. Prior to December 1, 2008, we pre-registered with the ECHA substantially all of the substances that we intended to export to or produce in the European Union. As a next step, we successfully registered with the ECHA the substances that we export to or produce in the European Union in an amount over 1,000 tonnes per year, and which are subject to REACH registration, namely: ferroalloys, coke-chemicals and pig iron exported to the European Union. This registration was completed prior to December 1, 2010 in compliance with the REACH implementation schedule.

Item 4A. Unresolved Staff Comments

None.

Item 5. Operating and Financial Review and Prospects

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes and other information in this document. This Item 5 contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those discussed in forward-looking statements as a result of various factors, including the risks described in “Item 3. Key Information — Risk Factors” and under the caption “Cautionary Note Regarding Forward-Looking Statements.”

In this Item 5, the term “domestic” describes sales by a subsidiary within the country where its operations are located. The term “export” describes cross-border sales by a subsidiary regardless of its location. See note 26 to the consolidated financial statements.

History of Incorporation

Mechel PAO was incorporated on March 19, 2003, as a joint-stock company holding shares and interests in the charter capitals of various mining and steel companies owned by Igor Zyuzin, Vladimir Iorich and companies controlled by them. These individuals acted in concert from 1995 until December 2006 pursuant to an agreement which required them to vote in the same way. During the period from March through December 2006, Mr. Iorich disposed of his entire interest in Mechel PAO to Mr. Zyuzin, and the agreement terminated on December 21, 2006.

Business Structure

Segments

We have organized our businesses into three segments:

- the mining segment, comprising production and sale of coal (metallurgical and steam), coke and chemical products and iron ore concentrate, which supplies raw materials to our steel and power segments and also sells substantial amounts of raw materials to third parties, and includes logistical assets, such as our seaports on the Sea of Japan and on the Sea of Azov, and our railway transportation assets;

- the steel segment, comprising production and sale of semi-finished steel products, long products of a wide range of steel grades, carbon and stainless flat products, high value-added metal products, including wire products, stampings and forgings, structural shapes, rails and others, and ferrosilicon, as well as our river port on the Kama River, a tributary of the Volga River; and
- the power segment, comprising generation and sale of electricity and heat energy, which supplies electricity and heat energy to our mining and steel segments and also sells a portion of electricity and heat energy to third parties.

The table below sets forth by segments our key mining, steel and power subsidiaries, presented in chronological order by date of acquisition/date of incorporation.

<u>Name</u>	<u>Location of Assets</u>	<u>Product/Business</u>	<u>Date Control Acquired/Date of Incorporation</u>	<u>Voting Interest⁽¹⁾</u>
<i>Mining Segment</i>				
Southern Kuzbass Coal Company	Russia	Coking coal, steam coal, anthracite and PCI	January 1999	99.1%
Korshunov Mining Plant	Russia	Iron ore concentrate	October 2003	90.0%
Port Posiet	Russia	Seaport: coal warehousing and transshipment	February 2004	97.8%
Mechel Coke	Russia	Coke and chemical products	June 2006	100.0%
Moscow Coke and Gas Plant	Russia	Coke and chemical products	October 2006	99.5%
Yakutugol	Russia	Coking coal, steam coal	October 2007	100.0%
Port Temryuk	Russia	Seaport: coal and metal transshipment	March 2008	100.0%
Elgaugol	Russia	Coking coal, steam coal	August 2013	51.0%
Elga-road	Russia	Railroad transportation	January 2016	51.0%
<i>Steel Segment</i>				
Chelyabinsk Metallurgical Plant	Russia	Semi-finished products, long and flat steel products	December 2001	94.2%
Vyartsilya Metal Products Plant	Russia	Wire products	May 2002	93.3%
Beloretsk Metallurgical Plant	Russia	Long steel products, wire products	June 2002	94.8%
Urals Stampings Plant	Russia	Stampings and forgings	April 2003	93.8%
Mechel Nemunas	Lithuania	Wire products	October 2003	100.0%
Izhstal	Russia	Long steel products, semi-finished products	May 2004	90.0%
Port Kambarka	Russia	River port	April 2005	90.4%
Bratsk Ferroalloy Plant	Russia	Ferrosilicon	August 2007	100.0%
<i>Power Segment</i>				
Mechel Energo	Russia	Power sales	February 2004	100.0%
Southern Kuzbass Power Plant	Russia	Power generation	April 2007	98.3%
Kuzbass Power Sales Company	Russia	Electricity distribution	June 2007	72.1%

(1) The percentages provided in this table are as of December 31, 2018. Some of our Russian subsidiaries have preferred shares outstanding that have voting rights similar to the common shares rights if dividends on those shares have not been paid. We have calculated voting interests by including these preferred shares for subsidiaries where dividends have not been paid.

Intersegment sales

We are an integrated group with operations organized into mining, steel and power segments. Our group companies supply materials to other companies in the same reporting segment or different reporting segments. For example, for the year ended December 31, 2018:

- The mining segment supplied approximately 32% of the steel segment's iron ore feed requirements, 100% of the steel segment's coke requirements and 48% of the power segment's coal requirements;
- The steel segment supplies wires, ropes, wire products and other metal products to the mining segment for use in its day-to-day operations; and
- Our co-generation facilities supplied approximately 31% of our group's overall electricity requirements.

The prices at which we record these transfers are based on market prices, and these transactions are eliminated as intercompany transactions for the purposes of our consolidated financial statements. For the period-on-period discussion of the results of operations by segments, such transfers are included in segment revenues and cost of sales.

Recent acquisitions and disposals

There were no significant acquisitions and disposals during 2016-2018.

Factors Affecting Our Results of Operations and Financial Condition

Cyclical nature of business and impact of macroeconomic factors

Our mining business sells significant amounts of coal to third parties and our revenues depend significantly on these sales. Cyclical and other changes in the world market prices for coal and iron ore affect the results of our mining operations. The changes in these prices result from factors which are beyond our control, such as market supply and demand. The global coal and iron ore supply and demand balance is strongly influenced by interdependent global economic and industrial demand cycles, as well as supply chain-related constraints such as shipping capacity, availability of rolling stock, transportation bottlenecks, production disruptions and natural disasters. Prices for the products of our mining business have varied significantly in the past and could vary significantly in the future. See “— Price trends for products” below. See also “Item 3. Key Information — Risk Factors — Risks Relating to Our Business and Industry — We operate in cyclical industries, and any local or global downturn, whether or not primarily affecting the mining and/or steel industries, may have an adverse effect on our business, financial condition, results of operations and prospects.”

The steel industry is highly cyclical in nature because the industries in which steel customers operate are cyclical and sensitive to changes in general economic conditions. The demand for steel products thus generally correlates to macroeconomic fluctuations in the economies in which we sell our products, as well as in the global economy. The prices of our steel products are influenced by many factors, including demand, worldwide production capacity, capacity utilization rates, raw materials costs, exchange rates, trade barriers and improvements in steelmaking processes. Steel prices also typically follow trends in raw materials prices and increases in market prices for steel may lag behind increases in production costs, including raw materials.

Demand for steel, particularly long steel products, is closely tied to the construction industry in the markets in which we sell our products. The construction business in Russia, the principal market for our products, was severely impacted by the global financial crisis and the sharp economic slowdown in Russia. As a result of the critical role of steel in infrastructural and overall economic development, the steel industry tends to track macroeconomic factors such as GDP and industrial output.

Global real GDP grew by 2.4% in 2016, 3.0% in 2017 and 3.0% in 2018, according to World Bank. According to Rosstat, Russia recorded GDP decline of 0.2% in 2016 and GDP growth of 1.5% in 2017 and 2.3% in 2018. In 2016, there was a slight recovery of the global economy, the reduction of geopolitical tensions and the decline in oversupply reserves of crude oil which in turn helped to restore in commodity prices. In 2017, the global economy experienced a cyclical recovery with acceleration of global economic activity and stabilization of commodity prices, however geopolitical tensions heightened. In 2018, the trends of 2017 continued with intensified competition of global economic systems and trade wars.

Trade and competition

Mining products and many types of steel products are considered commodities and treated as fungible in the world markets. As such, we compete with steel producers and mining companies with operations in different countries. The main competitive advantages that steel producers can secure are based on quality and production costs. Generally, steel producers in economically developed regions compete primarily based on quality of steel, while we and other steel producers in developing countries compete in the international market based primarily on price. With respect to our mining products, such as coal and iron ore, quality, production costs and transportation capabilities are key areas where companies seek a competitive advantage.

We benefit from import tariffs that Russia has in place for certain steel products. See “Risk Factors — Risks Relating to Our Business and Industry — We benefit from Russia’s tariffs and duties on imported steel, many of which have been reduced upon Russia’s WTO membership and may be eliminated in the future.”

Consolidation trends in the mining and steel industries

Major strategic mining industry players continued to aim for organic growth in 2018. The M&A activity in the mining industry remains weak and is driven mostly by major players targeted to portfolio optimization. The volatility of coal prices will continue to impact consolidation trends in the coal industry globally.

We expect M&A activity in the steel sector to recover in 2019 particularly if China implements a reform to balance supply and demand in steel production and global trading disputes begin to settle.

We, along with other Russian steel producers, tend to focus on vertical integration which ensures access to a stable supply of raw materials, particularly coking coal and iron ore. Our vertical integration helps us to better manage the effects of raw materials supply constraints and also provides us with an opportunity to capture higher margins in sales of our mining segment products to third parties.

Price trends for products

Coking coal and steam coal

In 2016, metallurgical coal prices were extremely volatile, especially in the second half of the year. According to CRU, in 2016, the premium hard coking coal spot price increased four times from the beginning of the year and reached \$310 per tonne (FOB Australia) in November. According to CRU, quarterly contract price rose from \$81 per tonne (FOB Australia) in the first quarter of 2016 to \$200 per tonne (FOB Australia) in the fourth quarter of 2016. The Chinese government’s actions to reduce coal supply were the primary driver of the metallurgical coal price rally in 2016. By the end of the year, the spot price had fallen by 25% from its peak level in November 2016 and amounted to \$230 per tonne due to a reversal in Chinese coal supply policy. The government was attempting to inject supply into the market since October 2016 and this led to an improvement in the availability of domestic metallurgical coal, according to CRU. The average contract price in 2016 was \$114 per tonne, according to CRU. The average spot price in 2016 was \$140 per tonne (FOB Australia), according to CRU. In the second quarter of 2017, quarterly contract benchmark pricing shifted to a system that uses a three-month average of a daily spot price. This had been triggered by the extreme price volatility of

metallurgical coal pricing after cyclone Debbie hit Queensland, Australia. According to CRU, hard coking coal spot prices jumped to \$270 per tonne (FOB Australia) in mid-April, as Queensland coal shipments halted after cyclone Debbie. After the cyclone passed, almost all producers and all ports have been slowly resuming operations and prices returned to the previous level. In the third quarter of 2017, another price hike has been driven upwards by heated Chinese demand for seaborne cargoes amid a boom in steel production. In the end of the third quarter of 2017, prices started to decline due to Chinese government's intention to decrease crude steel output in order to improve ecological situation in the winter months. However, during November and December 2017, prices were moving upwards again as port loading disruptions took place in Australia. The average contract price in 2017 was \$206 per tonne, 81% higher than the average contract price in 2016, according to CRU. The average spot price in 2017 was \$183 per tonne (FOB Australia), 31% higher than the average spot price in 2016, according to CRU. In the beginning of 2018, spot metallurgical coal prices were in decline as loading disruptions in Australia eased significantly and due to weaker finished steel demand in China. Throughout the second and the third quarters of 2018, prices held in a relatively stable range. Premium hard coking coal spot prices (FOB Australia) rose to \$221 per tonne in November 2018, up from \$183 per tonne in August on the back of continued supply disturbances during the period. Particularly, coking coal availability was affected by the shutdown of Peabody's North Goonyella mine in Queensland, according to CRU. The average contract price in 2018 was \$207 per tonne (FOB Australia), just 0.5% higher than the average contract price in 2017, according to CRU. The spot price averaged \$206 per tonne (FOB Australia) in 2018, which was 12.6% higher than the average spot price in 2017, according to CRU.

In the first five months of 2016, the spot price for steam coal was generally stable fluctuating around \$46 per tonne (5,500 NAR CFR China), but starting from June steam coal prices began to rise sharply due to the Chinese government's coal supply policy, according to Platts. As a result of decreased coal production in China, steam coal prices rose from \$50 per tonne in June 2016 to \$87 per tonne (5,500 NAR CFR China) in November 2016, but corrected to \$75 per tonne in December 2016. The average price in 2016 was \$59 per tonne (5,500 NAR CFR China), according to Platts. In the first half of 2017, steam coal prices fluctuated around \$75 per tonne (5,500 NAR CFR China) and then started to grow reaching \$88 per tonne (5,500 NAR CFR China) in October 2017 due to very strong Chinese coal demand during the summer and reduced supply as the focus on improving coal mine safety in China intensified. The average price in 2017 was \$79 per tonne (5,500 NAR CFR China), 34% higher than the average price in 2016, according to Platts. According to Platts, in the first four months of 2018, steam coal spot prices fell from \$97 per tonne to \$78 per tonne (5,500 NAR CFR China) due to decreased coal consumption as the winter season came to an end. Prices increased again in June 2018, up to \$90 per tonne (5,500 NAR CFR China), due to strong coal demand during the summer peak season. In the second half of 2018, import prices for steam coal in China were generally weak and went down to \$71 per tonne (5,500 NAR CFR China) due to a mild winter in China and stringent import restrictions at the end of the year. The average price in 2018 was \$82 per tonne (5,500 NAR CFR China), 3.8% higher than the average price in 2017, according to Platts.

Iron ore

During 2016, iron ore spot prices were generally rising with minor downward corrections in May-June and September. The iron ore spot price increased from a low of \$42 per dry metric tonne (62% Fe, CFR China) in January to a high of \$80 per dry metric tonne in December, according to MMI. Strong Chinese demand for imported iron ore, which hit an all-time high in 2016, was the main reason of the price increase. The average spot price in 2016 was \$58 per dry metric tonne, according to MMI. The strong Chinese steel sector supported iron ore prices in 2017 and the average spot price reached \$71 per dry metric tonne (62% Fe, CFR China) which was 22% higher than the average price in 2016, according to MMI. Throughout the year prices fluctuated from \$54 to \$93 per dry metric tonne (62% Fe, CFR China), according to MMI. Iron ore spot prices slightly decreased in 2018 as a result of slower iron ore imports in China and growing global supply of iron ore. The average spot price in 2018 was \$69 per dry metric tonne (62% Fe, CFR China) which was 3% lower than the average price in 2017, according to MMI.

Coke

In 2016, the world coke price showed almost the same dynamics as coking coal prices. According to Platts, coke prices increased from \$109 per tonne (FOB China basis) in the first quarter of the year to \$305 per tonne (FOB China basis) in the fourth quarter of the year. Such sharp rise of the coke price was driven largely by panic buying by steel producers globally. Initially, tightness in the market was created following implementation of the '276 working days' policy at Chinese coal mines that reduced coal production. The average domestic coke price in 2016 was RUB 12,022 per tonne (including VAT, FCA basis), according to Metal Expert. Price growth in the domestic coke market was due to a sharp rise of coking coal prices in the second half of the year in Russia, which led to cost increases of coke producers and increased coke prices on export markets. In 2017, coke prices were on the rise: prices increased from \$270 per tonne (FOB China basis) in the first quarter of 2017 to \$330 per tonne (FOB China basis) in the fourth quarter of 2017, according to Platts. In 2017, margins on steel products in China hit multi-year highs, and to take advantages of high prices, steel mills were restocking raw materials in order to ramp up blast furnace production. The average domestic coke price in 2017 was RUB 17,902 per tonne (including VAT, FCA basis), which was 49% higher than the average price in 2016, according to Metal Expert. The sharp price rise was due to higher domestic coking coal prices. The rise in prices continued from 2016 into a third year. In 2018, the world coke price increased from \$351 per tonne (FOB China basis) in the first quarter of the year to \$366 per tonne (FOB China basis) in the fourth quarter of 2018, according to Platts. There was a recovery in demand from two main markets for Chinese coke: India and Japan last year. The average domestic coke price in 2018 was RUB 17,681 per tonne (including VAT, FCA basis), just 1% lower than the average price in 2017, according to Metal Expert.

Steel

In 2016, the Russian domestic price for rebar increased to RUB 30,177 (+20.5% year-on-year) per tonne due to further ruble devaluation, strong export markets and limited supply in the second and fourth quarters. The average export price for square billets remained almost unchanged at \$328 (+0.1% year-on-year) per tonne, according to Metal-Courier. In 2017, the Russian domestic price for rebar increased to RUB 30,603 (+1.4% year-on-year) per tonne because of strong export markets of square billets, according to Metal-Courier. The average export price for square billets increased to \$436 (+33.1% year-on-year) per tonne as a result of upturned export scrap market and credit stimulation in China which pushed prices for semi-finished products, according to Metal-Courier. In 2018, the Russian domestic price for rebar increased to RUB 36,513 (+19.3% year-on-year) per tonne because of strong export markets of square billets and scrap, according to Metal-Courier. The average export price for square billets increased to \$491 (+12.5% year-on-year) per tonne as a result of upturned export scrap market in the first half of the year, which was due to rising raw material costs from a lack of electrodes, as well as high Chinese export prices for billet and long products during the first and second quarters of the year, according to Metal-Courier.

Ferrosilicon

In 2016, from January to September, the average price for ferrosilicon was within the range of \$1,155-1,195 per tonne (75% Si, CIF Japan). In October and November, the average price for ferrosilicon showed a sharp increase and amounted to \$1,285 per tonne (75% Si, CIF Japan). Quotations in the Japanese market increased as the price rose in China. In December, the price stopped rising and amounted to \$1,260 per tonne (75% Si, CIF Japan). The average price for ferrosilicon in 2016 was \$1,193 per tonne (75% Si, CIF Japan), according to TEX. The first half of 2017 was relatively stable, monthly price fluctuations did not exceed 7%. The price range was at the level of \$1,100-1,200 per tonne (75% Si, CIF Japan), according to TEX. In the second half of 2017, due to the Chinese government's introduction of production restrictions in the metallurgical, coal and ferroalloy industries, ferrosilicon prices in the Asia region sharply increased reaching \$2,200 per tonne (75% Si, CIF Japan) by December 2017, according to TEX. The average price for ferrosilicon in 2017 was \$1,362 per tonne (75% Si, CIF Japan), an increase of 14% compared to 2016, according to TEX. In early 2018, ferrosilicon prices began to decline following a sharp rise at the end of 2017. In April 2018, the price dropped to \$1,358 per tonne (75% Si,

CIF Japan), according to TEX. At the end of April 2018, the Ministry of Ecology and Environment of China suspended operation of silica stone mines resulting in a decrease of silicon in the market and an increase in the price of ferrosilicon up to \$1,459 per tonne (75% Si, CIF Japan) in May, according to TEX. From the second quarter of 2018 until the end of the year, there were no significant events, and prices gradually decreased. According to TEX, the price reached \$1,280 per tonne (75% Si, CIF Japan) in December 2018. The average price for ferrosilicon in 2018 was \$1,408 per tonne (75% Si, CIF Japan), an increase of 3.3% compared to 2017, according to TEX.

Freight costs

In 2018, the dry bulk market showed at volatility at times but continued to increase in freight rates. Such volatility was caused by the uncertainty related to the U.S.-China trade war, Brexit, new ballast water requirements of the U.N. International Maritime Organization (the “**IMO**”), as well as the upcoming sulfur content fuel regulations of the IMO scheduled to take effect in January 2020. The largest increase in the dry bulk sector came from the Supramax sector, where the average time charter rate increased from \$9,345 per day in 2017 to \$11,486 per day in 2018. The average Panamax rate was \$11,653 per day in 2018 compared to \$9,766 per day in 2017. The average rate for Handysize vessels in 2018 was \$8,700 per day compared to \$7,636 per day in 2017. The average rate for Capesizes in 2018 was \$16,528 per day compared to \$15,129 per day in 2017. In 2018, deliveries of dry bulk carriers over 20,000 deadweight fell to its lowest in a decade, coming in at 266 units equivalent to 27.3 million deadweight, or 3% of net fleet growth.

Exchange rates

Our products are typically priced in rubles for Russian and the CIS sales and in U.S. dollars or euros for international sales. Our direct costs, including raw materials, labor and transportation costs are largely incurred in rubles and other local currencies, while other costs, such as interest expenses, are incurred in rubles, euros and U.S. dollars. The mix of our revenues and costs is such that a depreciation in real terms of the ruble against the U.S. dollar tends to result in a decrease in our costs relative to our revenues, while an appreciation of the ruble against the U.S. dollar in real terms tends to result in an increase in our costs relative to our revenues.

Results of Operations

The following table sets forth our consolidated statement of profit (loss) data for the years ended December 31, 2018, 2017 and 2016.

	Year Ended December 31,					
	2018		2017		2016	
	Amount	% of Revenues	Amount	% of Revenues	Amount	% of Revenues
	(In millions of Russian rubles, except for percentages)					
Revenue from contracts with customers . . .	312,574	100.0%	299,113	100.0%	276,009	100.0%
Cost of sales	(177,756)	(56.9%)	(160,356)	(53.6%)	(146,322)	(53.0%)
Gross profit	134,818	43.1%	138,757	46.4%	129,687	47.0%
Total selling, distribution and operating income and (expenses), net	(85,038)	(27.2%)	(81,590)	(27.3%)	(86,997)	(31.5%)
Operating profit	49,780	15.9%	57,167	19.1%	42,690	15.5%
Total other income and (expense), net	(33,563)	(10.7%)	(41,447)	(13.9%)	(28,539)	(10.3%)
Profit before tax from continuing operations	16,217	5.2%	15,720	5.3%	14,151	5.1%
Income tax expense	(2,681)	(0.9%)	(3,150)	(1.1%)	(4,893)	(1.8%)
Profit for the period from continuing operations	13,536	4.3%	12,570	4.2%	9,258	3.4%
Loss after tax for the period from discontinued operations, net	—	0.0%	—	0.0%	(426)	(0.2%)
Profit for the period	13,536	4.3%	12,570	4.2%	8,832	3.2%
Less: profit attributable to non-controlling interests	908	0.3%	1,013	0.3%	1,706	0.6%
Profit attributable to equity shareholders of Mechel PAO	12,628	4.0%	11,557	3.9%	7,126	2.6%

Year ended December 31, 2018 compared to year ended December 31, 2017

Revenues

Consolidated revenues increased by RUB 13,461 million, or 4.5%, to RUB 312,574 million in the year ended December 31, 2018 from RUB 299,113 million in the year ended December 31, 2017.

The sales increase was due to an increase in sales prices across our major segments.

The following table sets forth our net revenues by segment, including a breakdown by sales to third parties and other segments.

<u>Revenues by Segment</u>	<u>Year Ended December 31,</u>	
	<u>2018</u>	<u>2017</u>
	<u>(In millions of Russian rubles, except for percentages)</u>	
Mining segment		
To third parties	96,882	100,129
To power segment	1,030	921
To steel segment	36,519	41,365
Total	<u>134,431</u>	<u>142,415</u>
Steel segment		
To third parties	187,918	172,760
To power segment	4,132	5,917
To mining segment	1,733	1,705
Total	<u>193,783</u>	<u>180,382</u>
Power segment		
To third parties	27,774	26,224
To steel segment	10,829	12,387
To mining segment	4,642	3,951
Total	<u>43,245</u>	<u>42,562</u>
Eliminations	<u>58,885</u>	<u>66,246</u>
Consolidated revenues	<u>312,574</u>	<u>299,113</u>
% from mining segment	31.0%	33.5%
% from steel segment	60.1%	57.7%
% from power segment	8.9%	8.8%

Mining segment

Our mining segment revenues decreased by RUB 7,984 million, or 5.6%, to RUB 134,431 million in the year ended December 31, 2018 from RUB 142,415 million in the year ended December 31, 2017.

Coking coal concentrate sales to third parties decreased by RUB 23 million, or 0.1%, to RUB 43,633 million in the year ended December 31, 2018 from RUB 43,656 million in the year ended December 31, 2017, as a result of a decrease in sales volumes of RUB 4,907 million that was offset by an increase in sales prices of RUB 4,884 million. The average contract price in 2018 was \$207 per tonne (FOB Australia), 0.5% higher than the average contract price in 2017, according to CRU. The spot price averaged \$206 per tonne (FOB Australia) in 2018, which was 12.6% higher than the average spot price in 2017, according to CRU.

The volume of coking coal concentrate sold to third parties decreased by 539 thousand tonnes, or 11.2%, to 4,258 thousand tonnes in the year ended December 31, 2018 from 4,797 thousand tonnes in the year ended December 31, 2017. The decrease in sales volumes of coking coal concentrate was mainly due to the decreased production of coking coal.

The volume of coking coal concentrate sold to third parties decreased at Yakutugol and increased at Southern Kuzbass Coal Company. Yakutugol's coking coal concentrate sales volumes decreased by 901 thousand tonnes, or 21.9%, to 3,208 thousand tonnes in the year ended December 31, 2018 from 4,109 thousand tonnes in the year ended December 31, 2017 due to decrease in production and reduction in coking coal concentrate yield. Southern Kuzbass Coal Company's coking coal concentrate sales volumes

increased by 346 thousand tonnes, or 132.2%, to 608 thousand tonnes in the year ended December 31, 2018 from 262 thousand tonnes in the year ended December 31, 2017 due to increase in production.

Coke sales to third parties decreased by RUB 135 million, or 1.2%, to RUB 11,244 million in the year ended December 31, 2018 from RUB 11,379 million in the year ended December 31, 2017, as a result of a decrease in sales volumes of RUB 1,093 million that was partially offset by an increase in sales prices of RUB 958 million. In 2018, the world coke price increased from \$351 per tonne (FOB China basis) in the first quarter of the year to \$366 per tonne (FOB China basis) in the fourth quarter of 2018, according to Platts. The average domestic coke price in 2018 was RUB 17,681 per tonne (including VAT, FCA basis), just 1% lower than the average price in 2017, according to Metal Expert.

Coke supplied to the steel segment decreased by RUB 1,776 million, or 6.5%, to RUB 25,420 million in the year ended December 31, 2018 from RUB 27,196 million in the year ended December 31, 2017. The decrease was due to a decrease in sales volumes of RUB 2,222 million that was partially offset by an increase in sales prices of RUB 446 million. Coke sales volumes from Mechel Coke to Chelyabinsk Metallurgical Plant slightly decreased by 170 thousand tonnes, or 9.0%, to 1,727 thousand tonnes in the year ended December 31, 2018 from 1,897 thousand tonnes in the year ended December 31, 2017.

Chemical products sales to third parties increased by RUB 593 million, or 25.1%, to RUB 2,961 million in the year ended December 31, 2018 from RUB 2,368 million in the year ended December 31, 2017, mainly as a result of an increase in sales prices.

Anthracite and PCI sales to third parties decreased by RUB 1,750 million, or 8.2%, to RUB 19,687 million in the year ended December 31, 2018 from RUB 21,437 million in the year ended December 31, 2017, as a result of a decrease in sales volumes of RUB 4,935 million that was partially offset by an increase in sales prices of RUB 3,185 million. The decrease in sales volumes of anthracite and PCI was due to drop in coal extraction as a result of a decrease in transportation capacity.

Steam coal sales to third parties decreased by RUB 3,512 million, or 26.1%, to RUB 9,935 million in the year ended December 31, 2018 from RUB 13,447 million in the year ended December 31, 2017, as a result of a decrease in sales volumes of RUB 3,575 million that was partially offset by an increase in sales prices of RUB 63 million. The decrease in third-party sales volumes was due to decrease in production. The average price in 2018 was \$82 per tonne (5,500 NAR CFR China), 3.8% higher than the average price in 2017, according to Platts.

Steam coal supplied to the power segment decreased by RUB 11 million, or 6.4%, to RUB 163 million in the year ended December 31, 2018 from RUB 174 million in the year ended December 31, 2017, as a result of a decrease in sales volumes. Sales of steam coal to Southern Kuzbass Power Plant decreased by 55 thousand tonnes, or 31.7%, to 120 thousand tonnes in the year ended December 31, 2018 from 175 thousand tonnes in the year ended December 31, 2017 due to steam coal production decrease.

Sales of iron ore concentrate to third parties increased by RUB 619 million, or 281.0%, to RUB 839 million in the year ended December 31, 2018 from RUB 220 million in the year ended December 31, 2017, as a result of an increase in sales volumes of RUB 798 million that was partially offset by a decrease in sales prices of RUB 179 million. Iron ore spot prices slightly decreased in 2018 as a result of slower iron ore imports in China and growing global supply of iron ore. The average spot price in 2018 was \$69 per dry metric tonne (62% Fe, CFR China) which was 3% lower than the average price in 2017, according to MMI.

Supplies of iron ore concentrate to the steel segment decreased by RUB 2,238 million, or 20.3%, to RUB 8,782 million in the year ended December 31, 2018 from RUB 11,020 million in the year ended December 31, 2017, as a result of a decrease in sales volumes of RUB 2,984 million that was partially offset by an increase in sales prices of RUB 746 million. Sales volumes decreased due to decrease in production.

Excluding intersegment sales, export sales were stable at 79.0% of mining segment sales in the year ended December 31, 2018, compared to 77.8% in the year ended December 31, 2017.

Steel segment

Our steel segment revenues increased by RUB 13,401 million, or 7.4%, to RUB 193,783 million in the year ended December 31, 2018 from RUB 180,382 million in the year ended December 31, 2017.

Semi-finished products sales decreased by RUB 438 million, or 89.0%, to RUB 54 million in the year ended December 31, 2018 from RUB 492 million in the year ended December 31, 2017, as a result of a decrease of RUB 471 million in sales volumes and an increase of RUB 33 million in sales prices. The decrease in third-party sales volumes was due to the fact that almost all produced volumes were consumed within our steel segment. In 2018, the annual average domestic price for billets (including VAT, FCA basis) was RUB 104,028 per tonne, 303.5% higher than the average domestic price in 2017.

Other long products sales increased by RUB 2,141 million, or 4.4%, to RUB 50,872 million in the year ended December 31, 2018 from RUB 48,731 million in the year ended December 31, 2017, as a result of an increase of RUB 5,716 million in sales prices that was partially offset by a decrease in sales volumes of RUB 3,575 million. The increase in sales prices was due to increase in purchase prices for steelmaking raw materials (iron ore feed, coke, ferroalloys, etc.). Sales volumes decreased due to lower demand in Russia.

Other flat products sales increased by RUB 97 million, or 0.5%, to RUB 21,404 million in the year ended December 31, 2018 from RUB 21,307 million in the year ended December 31, 2017, as a result of an increase of RUB 3,839 million in sales prices that was offset by a decrease in sales volumes of RUB 3,742 million. In 2018, the annual average price for flat steel products (including VAT, FCA basis) was RUB 46,479 per tonne, 23.1% higher than the average price in 2017. The sales volume decreased mainly due to temporary suspension of production as a result of equipment repairs.

Wire sales increased by RUB 2,092 million, or 12.0%, to RUB 19,590 million in the year ended December 31, 2018 from RUB 17,498 million in the year ended December 31, 2017, as a result of an increase of RUB 2,352 million in sales prices that was partially offset by a decrease of RUB 260 million in sales volumes. The increase in sales prices was driven by an increase in the prices of wire rod used as the main input for wire production. Sales volumes declined due to lower demand in domestic market.

Rebar sales increased by RUB 5,265 million, or 12.3%, to RUB 48,000 million in the year ended December 31, 2018 from RUB 42,735 million in the year ended December 31, 2017, as a result of an increase of RUB 8,276 million in sales prices that was partially offset by a decrease of RUB 3,011 million in sales volumes. In 2018, domestic and export prices for rebar increased mainly due to increase in purchase prices for raw materials. Sales volumes decreased due to redirection of production in favor of high value-added products.

Steel pipes sales increased by RUB 497 million, or 18.2%, to RUB 3,230 million in the year ended December 31, 2018 from RUB 2,733 million in the year ended December 31, 2017, as a result of an increase of RUB 345 million in sales prices and of RUB 152 million in sales volumes. The price increased mainly due to favorable market conditions.

Pig iron sales increased by RUB 19 million, or 16.7%, to RUB 133 million in the year ended December 31, 2018 from RUB 114 million in the year ended December 31, 2017, as a result of an increase of RUB 15 million in sales prices and of RUB 4 million in sales volumes. Pig iron third-party sales volumes depend on consumption within our steel segment.

Stampings sales increased by RUB 3,725 million, or 45.7%, to RUB 11,871 million in the year ended December 31, 2018 from RUB 8,146 million in the year ended December 31, 2017, as a result of an increase of

RUB 3,947 million in sales volumes that was partially offset by a decrease of RUB 222 million in sales prices. The increase in sales volumes was due to ongoing recovery of demand from the key consuming industries (engineering and transport industries).

Ferrosilicon sales increased by RUB 1,120 million, or 39.9%, to RUB 3,927 million in the year ended December 31, 2018 from RUB 2,807 million in the year ended December 31, 2017, as a result of an increase of RUB 883 million in sales prices and of RUB 237 million in sales volumes. The increase in sales prices was driven by the growth of quotation in the world market. The average price for ferrosilicon in 2018 was \$1,408 per tonne (75% Si, CIF Japan), an increase of 3.3% compared to 2017, according to TEX. The increase in sales volumes was due to increase in production capacity following furnaces repair at Bratsk Ferroalloy Plant and strong demand for ferrosilicon.

Sales of non-core products and services decreased by RUB 1,339 million, or 17.8%, to RUB 6,177 million in the year ended December 31, 2018 from RUB 7,516 million in the year ended December 31, 2017.

Excluding intersegment sales, export sales were 14.6% of steel segment sales in the year ended December 31, 2018, compared to 12.1% in the year ended December 31, 2017.

Power segment

Our power segment revenues increased by RUB 683 million, or 1.6%, to RUB 43,245 million in the year ended December 31, 2018 from RUB 42,562 million in the year ended December 31, 2017.

Electricity sales to third parties increased by RUB 1,712 million, or 7.0%, to RUB 26,009 million in the year ended December 31, 2018 from RUB 24,297 million in the year ended December 31, 2017, as a result of an increase of RUB 1,217 million in sales volumes and RUB 496 million in sales prices.

Other revenue, which consists mostly of capacity and heat energy, decreased by RUB 162 million, or 8.4%, to RUB 1,765 million in the year ended December 31, 2018 from RUB 1,927 million in the year ended December 31, 2017, due to a decrease in capacity sales volumes of Southern Kuzbass Power Plant.

Intersegment sales decreased by RUB 868 million, or 5.3%, to RUB 15,471 million in the year ended December 31, 2018 from RUB 16,338 million in the year ended December 31, 2017, mainly as a result of transition to intra-group tolling scheme.

Cost of sales and gross profit

The consolidated cost of sales was 56.9% of consolidated revenues in the year ended December 31, 2018, as compared to 53.6% of consolidated revenues in the year ended December 31, 2017, resulting in a decrease in consolidated gross profit to 43.1% in the year ended December 31, 2018 from 46.4% for the year ended December 31, 2017. Cost of sales primarily consists of costs relating to raw materials (including products purchased for resale), direct payroll, depreciation and energy. The table below sets forth cost of sales and gross profit by segment for the years ended December 31, 2018 and 2017, including as a percentage of segment revenues.

<u>Cost of Sales and Gross Profit by Segment</u>	<u>Year Ended December 31, 2018</u>		<u>Year Ended December 31, 2017</u>	
	<u>Amount</u>	<u>% of Segment Revenues</u>	<u>Amount</u>	<u>% of Segment Revenues</u>
	<u>(In millions of Russian rubles, except for percentages)</u>			
Mining segment				
Cost of sales	57,232	42.6%	48,952	34.4%
Gross profit	77,199	57.4%	93,464	65.6%
Steel segment				
Cost of sales	149,349	77.1%	146,369	81.1%
Gross profit	44,433	22.9%	34,013	18.9%
Power segment				
Cost of sales	30,674	70.9%	29,838	70.1%
Gross profit	12,571	29.1%	12,724	29.9%

Mining segment

Mining segment cost of sales increased by RUB 8,280 million, or 16.9%, to RUB 57,232 million in the year ended December 31, 2018 from RUB 48,952 million in the year ended December 31, 2017. The gross profit percentage decreased to 57.4% in the year ended December 31, 2018 compared to 65.6% in the year ended December 31, 2017, mainly due to increase in stripping costs.

Coal production cash costs per tonne (see “— “Cash Costs per Tonne” Measure”) at Southern Kuzbass Coal Company increased by RUB 482 per tonne, or 22.5%, from RUB 2,145 in the year ended December 31, 2017 to RUB 2,627 in the year ended December 31, 2018, mainly due to increase in fixed costs share per tonne stimulated by production volumes decrease and growth of stripping costs.

Coal production cash costs at Yakutugol increased by RUB 653 per tonne, or 78.8%, from RUB 829 in the year ended December 31, 2017 to RUB 1,482 in the year ended December 31, 2018, mainly due to increase in fixed costs share per tonne stimulated by production volumes decrease and growth of stripping costs.

Coke production cash costs increased by 8.7% at Moscow Coke and Gas Plant and 6.4% at Mechel Coke following the increase in coking coal concentrate purchase prices.

Iron ore production cash costs increased by 34.3% mainly due to increase in transportation cost per tonne and growth of stripping costs.

Steel segment

Steel segment cost of sales increased by RUB 2,980 million, or 2.0%, to RUB 149,349 million in the year ended December 31, 2018 from RUB 146,369 million in the year ended December 31, 2017. Steel segment cost of sales was 77.1% of the segment’s revenues in the year ended December 31, 2018, as compared to 81.1% in the year ended December 31, 2017. The increase in gross profit from 18.9% to 22.9% is caused by the increase in sales prices for most of the segment’s products.

Power segment

Power segment cost of sales increased by RUB 836 million, or 2.8%, to RUB 30,674 million in the year ended December 31, 2018 from RUB 29,838 million in the year ended December 31, 2017, due to increase in electricity tariffs and sales volumes. The power segment gross profit percentage decreased to 29.1% in the year ended December 31, 2018 from 29.9% in the year ended December 31, 2017 due to purchase price increase.

“Cash Costs per Tonne” Measure

In this document, we present cash costs per tonne for coal, coke and iron ore production for each significant production facility of our mining segment. Cash costs per tonne is a performance indicator that is not defined according to IFRS or U.S. GAAP. Cash costs per tonne includes various production costs, such as raw materials, auxiliary materials, wages and social taxes of production personnel, electricity, gas and fuel costs, repairs and maintenance of production equipment, costs of mining works, mineral extraction tax and royalty payments, but excludes non-cash items such as depreciation and amortization and write-down of inventories to their net realizable value. We use this indicator to evaluate the performance of individual production subsidiaries and their respective ability to generate cash. Cash costs per tonne is a widely used performance indicator in the mining industry to evaluate the cost-effectiveness of mining operations. We believe that investors use this indicator in addition to the financial information prepared in accordance with IFRS to evaluate the performance of our companies. Consequently, this information must be considered supplementary and should not be regarded as a substitute for the performance indicators prepared in accordance with IFRS.

The reconciliation of mining segment production cash costs per tonne for the year ended December 31, 2018 is presented below:

	In thousands of tonnes	Cash cost, in thousands of Russian rubles per tonne	In millions of Russian rubles
Coal — Southern Kuzbass Coal Company — sales to third parties . . .	3,445	2.6	9,050
Coal — Southern Kuzbass Coal Company — intersegment sales	716	2.6	1,882
Coal — Yakutugol — sales to third parties	5,781	1.5	8,570
Coal — Yakutugol — intersegment sales	44	1.5	65
Coal — Elgaugol — sales to third parties	1,764	1.9	3,352
Coal — Elgaugol — intersegment sales	142	1.9	270
Iron ore — Korshunov Mining Plant — sales to third parties	140	3.1	427
Iron ore — Korshunov Mining Plant — intersegment sales	1,785	3.1	5,450
Coke — Moscow Coke and Gas Plant — sales to third parties ⁽¹⁾	497	13.0	6,485
Coke — Moscow Coke and Gas Plant — intersegment sales	0.2	13.0	2
Coke — Mechel Coke — sales to third parties ⁽²⁾	199	7.4	1,481
Coke — Mechel Coke — intersegment sales	1,743	7.4	12,967
Depreciation and amortization			6,424
Write-down of inventory to their net realizable value			443
Cost of coal produced by third companies and re-sold by our trading subsidiaries, including intersegment sales			80
Stockholding year to year movements, costs of other products and services (coking products, washing services) and costs of other subsidiaries ⁽³⁾			284
Total mining segment cost of sales			<u>57,232</u>

- (1) Cash costs per tonne for coke were reduced by by-products credits. The amount of by-products credits in the total cash costs per tonne was RUB 135, or 1%, at Moscow Coke and Gas Plant in the year ended December 31, 2018.

- (2) Cash costs per tonne for coke were reduced by by-products credits. The amount of by-products credits in the total cash costs per tonne was RUB 1,017, or 14%, at Mechel Coke in the year ended December 31, 2018.
- (3) Costs of other products and services were increased by the amount of by-products credits of RUB 903 million in the year ended December 31, 2018.

The reconciliation of mining segment production cash costs per tonne for the year ended December 31, 2017 is presented below:

	In thousands of tonnes	Cash cost, in thousands of Russian rubles per tonne	In millions of Russian rubles
Coal — Southern Kuzbass Coal Company — sales to third parties . . .	4,182	2.1	8,971
Coal — Southern Kuzbass Coal Company — intersegment sales	833	2.1	1,788
Coal — Yakutugol — sales to third parties	7,357	0.8	6,100
Coal — Yakutugol — intersegment sales	0	0.8	0
Coal — Elgaugol — sales to third parties	1,515	1.5	2,216
Coal — Elgaugol — intersegment sales	87	1.5	127
Iron ore — Korshunov Mining Plant — sales to third parties	30	2.3	69
Iron ore — Korshunov Mining Plant — intersegment sales	2,448	2.3	5,566
Coke — Moscow Coke and Gas Plant — sales to third parties ⁽¹⁾	556	12.0	6,670
Coke — Moscow Coke and Gas Plant — intersegment sales	1	12.0	15
Coke — Mechel Coke — sales to third parties ⁽²⁾	214	7.0	1,497
Coke — Mechel Coke — intersegment sales	1,914	7.0	13,384
Depreciation and amortization			6,940
Write-down of inventory to their net realizable value			67
Cost of coal produced by third companies and re-sold by our trading subsidiaries, including intersegment sales			69
Stockholding year to year movements, costs of other products and services (coking products, washing services) and costs of other subsidiaries ⁽³⁾			(4,525)
Total mining segment cost of sales			<u>48,952</u>

- (1) Cash costs per tonne for coke were reduced by by-products credits. The amount of by-products credits in the total cash costs per tonne was RUB 125, or 1%, at Moscow Coke and Gas Plant in the year ended December 31, 2017.
- (2) Cash costs per tonne for coke were reduced by by-products credits. The amount of by-products credits in the total cash costs per tonne was RUB 833, or 12%, at Mechel Coke in the year ended December 31, 2017.
- (3) Costs of other products and services were increased by the amount of by-products credits of RUB 799 million in the year ended December 31, 2017.

Selling, distribution and operating income and (expenses), net

Selling, distribution and operating income and (expenses), net increased by RUB 3,448 million, or 4.2%, to RUB 85,038 million in the year ended December 31, 2018 from RUB 81,590 million in the year ended December 31, 2017, as a result of an increase in administrative and other operating expenses in the mining, steel and power segments and impairment of goodwill and other non-current assets in the mining and power segments, as well as an increase in allowance for expected credit losses on financial assets in the steel and power segments and a decrease in selling and distribution expenses in the mining segment in the year ended December 31, 2018. As a percentage of consolidated revenues, selling, distribution and operating income and (expenses), net decreased to 27.2% in the year ended December 31, 2018 from 27.3% in the year ended December 31, 2017. Our selling, distribution and operating income and (expenses), net consist primarily of selling and distribution

expenses, loss on write-off of non-current assets, impairment of goodwill and other non-current assets, allowance for expected credit losses on financial assets, taxes other than income taxes, administrative and other operating expenses and other operating income. The table below sets forth these costs by segment for the years ended December 31, 2018 and 2017, including as a percentage of segment revenues.

Selling, Distribution and Operating Income and (Expenses), Net by Segment	Year Ended December 31, 2018		Year Ended December 31, 2017	
	Amount	% of Segment Revenues	Amount	% of Segment Revenues
(In millions of Russian rubles, except for percentages)				
Mining segment				
Selling and distribution expenses	29,469	21.9%	30,551	21.5%
Loss on write-off of non-current assets	573	0.4%	135	0.1%
Impairment of goodwill and other non-current assets	3,684	2.7%	3,801	2.7%
Allowance for expected credit losses on financial assets	43	0.1%	156	0.1%
Taxes other than income taxes	2,942	2.2%	3,329	2.3%
Administrative and other operating expenses	8,452	6.3%	7,789	5.5%
Other operating income	(538)	(0.4%)	(488)	(0.3%)
Total	<u>44,625</u>	<u>33.2%</u>	<u>45,273</u>	<u>31.8%</u>
Steel segment				
Selling and distribution expenses	14,134	7.3%	14,266	7.9%
Loss on write-off of non-current assets	257	0.1%	145	0.1%
Impairment of goodwill and other non-current assets	819	0.4%	2,280	1.3%
Allowance for expected credit losses on financial assets	161	0.1%	(266)	(0.1%)
Taxes other than income taxes	1,809	0.9%	1,530	0.8%
Administrative and other operating expenses	8,068	4.2%	7,185	4.0%
Other operating income	(646)	(0.3%)	(281)	(0.2%)
Total	<u>24,602</u>	<u>12.7%</u>	<u>24,859</u>	<u>13.8%</u>
Power segment				
Selling and distribution expenses	11,385	26.3%	10,869	25.5%
Loss on write-off of non-current assets	29	0.1%	41	0.1%
Impairment of goodwill and other non-current assets	2,719	6.3%	—	0.0%
Allowance for expected credit losses on financial assets	736	1.7%	442	1.0%
Taxes other than income taxes	83	0.2%	108	0.3%
Administrative and other operating expenses	1,386	3.2%	616	1.4%
Other operating income	(527)	(1.2%)	(618)	(1.5%)
Total	<u>15,811</u>	<u>36.6%</u>	<u>11,458</u>	<u>26.9%</u>

Mining segment

Selling and distribution expenses consisted almost entirely of transportation expenses related to our selling activities. Such expenses decreased by RUB 1,082 million, or 3.5%, to RUB 29,469 million in the year ended December 31, 2018 from RUB 30,551 million in the year ended December 31, 2017, mainly due to the decrease in segment export sales volumes by 18%. As a percentage of mining segment revenues, selling and distribution expenses increased from 21.5% to 21.9% due to the increase in railway tariffs.

Loss on write-off of non-current assets increased by RUB 438 million, or 323.4%, to RUB 573 million in the year ended December 31, 2018 from RUB 135 million in the year ended December 31, 2017, due to the increase in the number of property, plant and equipment objects that are not planned for further use in production process at our mining service subsidiaries.

Impairment of goodwill and other non-current assets decreased by RUB 117 million, or 3.1%, to RUB 3,684 million in the year ended December 31, 2018 from RUB 3,801 million in the year ended December 31, 2017. In 2017, we recognized impairment of property, plant and equipment and mineral licenses in relation to (i) Korshunov Mining Plant of RUB 2,271 million due to the decline in long-term forecast for iron ore prices and growth of stripping costs required for removal of landslide deformations and (ii) Southern Kuzbass Coal Company of RUB 1,529 million due to the refusal by the regulatory authorities to extend the term of mineral license for exploration and extraction. In 2018, we recognized impairment of property, plant and equipment in relation to (i) Korshunov Mining Plant of RUB 1,151 million since the estimated future cash flows remain negative and (ii) Southern Kuzbass Coal Company of RUB 2,533 million due to changes in management's plans to invest funds into the ongoing construction projects and, as a result, the inability to generate future economic benefits in the current market conditions. See note 18 to the consolidated financial statements.

Allowance for expected credit losses on financial assets decreased by RUB 113 million to RUB 43 million in the year ended December 31, 2018 from RUB 156 million in the year ended December 31, 2017, due to the decrease in overdue accounts receivable.

Taxes other than income taxes decreased by RUB 387 million, or 11.6%, to RUB 2,942 million in the year ended December 31, 2018 from RUB 3,329 million in the year ended December 31, 2017, as accruals of fines and penalties for taxes other than income tax in 2018 are less than in 2017.

Administrative and other operating expenses consist of payroll and payroll taxes, depreciation, rent and maintenance, legal and consulting expenses, office overheads and other expenses. These expenses increased by RUB 663 million, or 8.5%, to RUB 8,452 million in the year ended December 31, 2018 from RUB 7,789 million in the year ended December 31, 2017, mainly as a result of an increase in salaries and related social taxes by RUB 1,087 million, or 24.8%, to RUB 5,473 million in the year ended December 31, 2018 from RUB 4,386 million in the year ended December 31, 2017.

Other operating income increased insignificantly by RUB 50 million to RUB 538 million in the year ended December 31, 2018 from RUB 488 million in the year ended December 31, 2017.

Steel segment

Selling and distribution expenses consisted almost entirely of transportation expenses related to our selling activities. Such expenses decreased by RUB 132 million, or 0.9%, to RUB 14,134 million in the year ended December 31, 2018 from RUB 14,266 million in the year ended December 31, 2017, mainly due to the overall decrease in sales volumes of steel segment products that was partially offset by the increase in railway tariffs in 2018 as compared to 2017. As a percentage of steel segment revenues, selling and distribution expenses decreased to 7.3% in the year ended December 31, 2018 from 7.9% in the year ended December 31, 2017.

Loss on write-off of non-current assets increased by RUB 112 million, or 77.2%, to RUB 257 million in the year ended December 31, 2018 from RUB 145 million in the year ended December 31, 2017, due to the increase in a number of idled property, plant and equipment written off by our steel production subsidiaries.

Impairment of goodwill and other non-current assets decreased by RUB 1,461 million, or 64.1%, to RUB 819 million in the year ended December 31, 2018 from RUB 2,280 million in the year ended December 31, 2017. In 2017, we recognized impairment of property, plant and equipment and construction in progress in relation to Izhstal of RUB 2,130 million and additional impairment in relation to Bratsk Ferroalloy Plant of RUB 151 million. In 2018, we recognized additional impairment in relation to Izhstal of RUB 782 million and other companies of RUB 37 million.

Allowance for expected credit losses on financial assets changed by RUB 427 million, or 160.5%, to RUB 161 million loss in the year ended December 31, 2018 from RUB 266 million income in the year ended

December 31, 2017. In 2017, we recognized income as a result of reversal of allowance recorded as of December 31, 2016, due to the decrease in outstanding doubtful accounts as of December 31, 2017 and collection of certain accounts receivable provided for as of December 31, 2016. In 2018, we recognized losses on financial assets on individual basis due to increase in overdue accounts receivable.

Taxes other than income taxes increased by RUB 279 million, or 18.2%, to RUB 1,809 million in the year ended December 31, 2018 from RUB 1,530 million in the year ended December 31, 2017, mainly due to increase in the amount of probable tax risks in respect of VAT in 2018. Property and land taxes increased by RUB 40 million to RUB 1,335 million in the year ended December 31, 2018 from RUB 1,295 million in the year ended December 31, 2017.

Administrative and other operating expenses increased by RUB 883 million, or 12.3%, to RUB 8,068 million in the year ended December 31, 2018 from RUB 7,185 million in the year ended December 31, 2017. Payroll and related social taxes increased by RUB 1,545 million, or 49.6%, to RUB 4,658 million in the year ended December 31, 2018 from RUB 3,113 million in the year ended December 31, 2017. Fines and penalties expenses on breach of trading contracts, provisions related to claims decreased by RUB 975 million, or 66.8%, to RUB 485 million in the year ended December 31, 2018 from RUB 1,460 million in the year ended December 31, 2017, mainly due to recognition of provision related to claim of Minmetals in 2017. Other administrative and operating expenses increased by RUB 312 million, or 12.0%, to RUB 2,925 million in the year ended December 31, 2018 from RUB 2,613 million in the year ended December 31, 2017.

Other operating income increased by RUB 365 million, or 129.9%, to RUB 646 million in the year ended December 31, 2018 from RUB 281 million in the year ended December 31, 2017, mainly due to increase of profit from sales of property, plant and equipment.

Power segment

Selling and distribution expenses consisted almost entirely of electricity transmission costs incurred by our Kuzbass Power Sales Company for the usage of the power grid through which electricity is distributed to end consumers. Such expenses increased by RUB 517 million, or 4.8%, to RUB 11,386 million in the year ended December 31, 2018 from RUB 10,869 million in the year ended December 31, 2017, due to an increase in transmission tariffs and sales volumes.

Other operating income was recognized in the amount of RUB 527 million mainly as a result of subsidies received from the governmental authorities as a compensation for operating activities (energy tariffs).

Operating profit

Operating profit decreased by RUB 7,387 million, or 12.9%, to RUB 49,780 million in the year ended December 31, 2018 from RUB 57,167 million in the year ended December 31, 2017. As a percentage of consolidated revenues, operating profit decreased to 15.9% in the year ended December 31, 2018 from 19.1% in the year ended December 31, 2017, mainly due to a decrease in consolidated gross profit and an increase in administrative and other operating expenses and impairment of goodwill and other non-current assets as explained above.

The table below sets out operating profit (loss) by segment, including as a percentage of segment revenues.

Operating Profit (Loss) by Segment	Year Ended December 31, 2018		Year Ended December 31, 2017	
	Amount	% of Segment Revenues	Amount	% of Segment Revenues
	(In millions of Russian rubles, except for percentages)			
Mining segment	32,574	24.2%	48,191	33.8%
Steel segment	19,831	10.2%	9,154	5.1%
Power segment	(3,240)	(7.5)%	1,266	3.0%
Elimination of intersegment unrealized profit ⁽¹⁾	615		(1,444)	
Consolidated operating profit	<u>49,780</u>		<u>57,167</u>	

- (1) Our management evaluates the performance of our segments before the elimination of unrealized profit in inventory balances of segments that was generated by the segments but not recognized as profit in our consolidated financial statements until the sale of such inventories to third parties. Therefore, we present our segments before such elimination, and such elimination is presented separately. The change in intersegment unrealized profit adjustment in the year ended December 31, 2018 as compared to the year ended December 31, 2017 was due to a decrease in gross profit of mining segment and an increase in gross profit of steel segment in 2018.

Mining segment

Mining segment operating profit decreased by RUB 15,617 million, or 32.4%, to RUB 32,574 million in the year ended December 31, 2018 from RUB 48,191 million in the year ended December 31, 2017. The operating profit margin decreased to 24.2% in the year ended December 31, 2018 from 33.8% in the year ended December 31, 2017, mainly due to the increase in cost of sales caused by the growth of stripping costs that was partially offset by the increase in selling prices.

Steel segment

Steel segment operating profit increased by RUB 10,677 million, or 116.6%, to RUB 19,831 million in the year ended December 31, 2018 from RUB 9,154 million in the year ended December 31, 2017. The operating profit margin increased to 10.2% in the year ended December 31, 2018 from 5.1% in the year ended December 31, 2017, due to the increase in sales prices for almost all steel segment products.

Power segment

Power segment operating (loss) profit changed by RUB 4,507 million, or 355.8%, to an operating loss of RUB 3,240 million in the year ended December 31, 2018 from an operating profit of RUB 1,266 million in the year ended December 31, 2017. The operating profit margin changed to negative 7.5% in the year ended December 31, 2018 from positive 3.0% in the year ended December 31, 2017, mainly due to impairment of goodwill and property, plant and equipment at Southern Kuzbass Power Plant and accrual of provision for legal claims.

Other income and expense, net

Other income and expense, net consists of share of gain of an associate, finance income, finance costs, other income and other expenses and foreign exchange gain (loss). The table below sets forth these costs for the years ended December 31, 2018 and 2017, including as a percentage of revenues.

	Year Ended December 31, 2018		Year Ended December 31, 2017	
	Amount	% of Revenues	Amount	% of Revenues
Other Income and Expense, Net				
	(In millions of Russian rubles, except for percentages)			
Finance income	34,056	10.9%	633	0.2%
Finance costs	(42,052)	(13.5)%	(47,610)	(15.9)%
Foreign exchange gain (loss)	(25,775)	(8.2)%	4,237	1.4%
Share of gain of an associate	10	0.0%	18	0.0%
Other income	512	0.2%	1,495	0.5%
Other expenses	(314)	(0.1)%	(220)	(0.1)%
Total	<u>(33,563)</u>	<u>(10.7)%</u>	<u>(41,447)</u>	<u>(13.9)%</u>

Finance income increased by RUB 33,423 million, or 5,280.1%, to RUB 34,056 million in the year ended December 31, 2018 from RUB 633 million in the year ended December 31, 2017, due to gain recognized as a result of debt restructuring and refinancing.

Finance costs decreased by RUB 5,558 million, or 11.7%, to RUB 42,052 million in the year ended December 31, 2018 from RUB 47,610 million in the year ended December 31, 2017, due to decrease in interest rates and repayment of loans in 2018.

In the year ended December 31, 2018, we generated foreign exchange loss amounted to RUB 25,775 million compared to foreign exchange gain amounted to RUB 4,237 million in the year ended December 31, 2017, mainly due to strengthening of the U.S. dollar against the ruble in 2018.

Share of gain of an associate decreased by RUB 8 million, or 44.4%, to RUB 10 million in the year ended December 31, 2018 from RUB 18 million in the year ended December 31, 2017, due to decrease of gain from investments in Tomusinsky Transportation Management Center and Tomusinsky Auto Repair Shop.

Other income decreased by RUB 983 million, or 65.8%, to RUB 512 million in the year ended December 31, 2018 from RUB 1,495 million in the year ended December 31, 2017, mainly due to gain from waiving of penalties from Novatek — Chelyabinsk OOO in the amount of RUB 442 million in 2017.

Other expenses increased by RUB 94 million, or 42.7%, to RUB 314 million in the year ended December 31, 2018 from RUB 220 million in the year ended December 31, 2017.

Income tax expense

Income tax expense decreased by RUB 469 million, or 14.9%, to RUB 2,681 million in the year ended December 31, 2018 from RUB 3,150 million in the year ended December 31, 2017. Our effective tax rate decreased to 16.5% from 20.0%. The decrease in current income tax expense is explained by the decrease in profit before tax in 2018. This decrease was partially offset by deferred tax expense from gain recognized as a result of refinancing of pre-export facilities. Decrease in effective tax rate is due to effect of restructuring and increase in non-deductible expenses.

Net profit attributable to non-controlling interests

Net profit attributable to non-controlling interests decreased by RUB 105 million, or 10.4%, to RUB 908 million in the year ended December 31, 2018 from RUB 1,013 million in the year ended December 31,

2017, mainly due to change in net profits in respective subsidiaries such as Chelyabinsk Metallurgical Plant, Urals Stampings Plant, Korshunov Mining Plant, Kuzbass Power Sales Company and Southern Kuzbass Coal Company.

Net profit attributable to equity holders of the parent

Net profit attributable to our equity holders increased by RUB 1,071 million, or 9.3%, to RUB 12,628 million in the year ended December 31, 2018 from RUB 11,557 million in the year ended December 31, 2017, mainly due to the increase in finance income and change in foreign exchange gain (loss).

Year ended December 31, 2017 compared to year ended December 31, 2016

Revenues

Consolidated revenues increased by RUB 23,104 million, or 8.4%, to RUB 299,113 million in the year ended December 31, 2017 from RUB 276,009 million in the year ended December 31, 2016.

The sales increase was due to an increase in sales prices across our major segments.

The following table sets forth our net revenues by segment, including a breakdown by sales to third parties and other segments.

<u>Revenues by Segment</u>	<u>Year Ended December 31,</u>	
	<u>2017</u>	<u>2016</u>
	<u>(In millions of Russian rubles, except for percentages)</u>	
Mining segment		
To third parties	100,129	89,647
To power segment	921	1,370
To steel segment	41,365	30,537
Total	<u>142,415</u>	<u>121,554</u>
Steel segment		
To third parties	172,760	161,639
To power segment	5,917	5,693
To mining segment	1,705	1,562
Total	<u>180,382</u>	<u>168,893</u>
Power segment		
To third parties	26,224	24,723
To steel segment	12,387	11,709
To mining segment	3,951	4,193
Total	<u>42,562</u>	<u>40,626</u>
Eliminations	<u>66,246</u>	<u>55,064</u>
Consolidated revenues	<u>299,113</u>	<u>276,009</u>
% from mining segment	33.5%	32.5%
% from steel segment	57.7%	58.5%
% from power segment	8.8%	9.0%

Mining segment

Our mining segment revenues increased by RUB 20,861 million, or 17.2%, to RUB 142,415 million in the year ended December 31, 2017 from RUB 121,554 million in the year ended December 31, 2016.

Coking coal concentrate sales to third parties increased by RUB 4,912 million, or 12.7%, to RUB 43,656 million in the year ended December 31, 2017 from RUB 38,744 million in the year ended December 31, 2016, as a result of an increase in sales prices of RUB 11,525 million that was partially offset by a decrease in sales volumes of RUB 6,613 million. The average contract price in 2017 was \$206 per tonne, 81% higher than the average contract price in 2016, according to CRU. The average spot price in 2017 was \$183 per tonne (FOB Australia), 31% higher than the average spot price in 2016, according to CRU.

The volume of coking coal concentrate sold to third parties decreased by 987 thousand tonnes, or 17.1%, to 4,797 thousand tonnes in the year ended December 31, 2017 from 5,784 thousand tonnes in the year ended December 31, 2016. The decrease in sales volumes of coking coal concentrate was mainly due to the decreased production of coking coal.

The volume of coking coal concentrate sold to third parties decreased both at Yakutugol and Southern Kuzbass Coal Company. Yakutugol's coking coal concentrate sales volumes decreased by 1,011 thousand tonnes, or 19.8%, to 4,109 thousand tonnes in the year ended December 31, 2017 from 5,120 thousand tonnes in the year ended December 31, 2016 due to lower coking coal output as a result of unfavorable geological conditions. Southern Kuzbass Coal Company's coking coal concentrate sales volumes decreased by 159 thousand tonnes, or 37.8%, to 262 thousand tonnes in the year ended December 31, 2017 from 421 thousand tonnes in the year ended December 31, 2016 due to decrease in production.

Coke sales to third parties increased by RUB 2,037 million, or 21.8%, to RUB 11,379 million in the year ended December 31, 2017 from RUB 9,342 million in the year ended December 31, 2016, as a result of an increase in sales prices of RUB 3,323 million that was partially offset by a decrease in sales volumes of RUB 1,286 million. In 2017, coke prices increased from \$278 per tonne (FOB China basis) in the first quarter of 2017 to \$315 per tonne (FOB China basis) in the fourth quarter of 2017, according to CRU. The average domestic coke price in 2017 was RUB 17,902 per tonne (including VAT, FCA basis), which was 49% higher than the average price in 2016, according to Metal Expert.

Coke supplied to the steel segment increased by RUB 6,110 million, or 29.0%, to RUB 27,196 million in the year ended December 31, 2017 from RUB 21,086 million in the year ended December 31, 2016. The increase was due to an increase in sales prices of RUB 6,589 million that was partially offset by a decrease in sales volumes of RUB 479 million. Coke sales volumes from Mechel Coke to Chelyabinsk Metallurgical Plant slightly decreased by 24 thousand tonnes, or 1.3%, to 1,897 thousand tonnes in the year ended December 31, 2017 from 1,921 thousand tonnes in the year ended December 31, 2016.

Chemical products sales to third parties increased by RUB 380 million, or 19.1%, to RUB 2,368 million in the year ended December 31, 2017 from RUB 1,988 million in the year ended December 31, 2016, mainly as a result of an increase in sales prices.

Anthracite and PCI sales to third parties increased by RUB 2,700 million, or 14.4%, to RUB 21,437 million in the year ended December 31, 2017 from RUB 18,737 million in the year ended December 31, 2016, as a result of an increase in sales prices of RUB 4,335 million that was partially offset by a decrease in sales volumes of RUB 1,635 million. The decrease in sales volumes of anthracite and PCI was due to drop in coal extraction as a result of a decrease in transportation capacity.

Steam coal sales to third parties increased by RUB 860 million, or 6.8%, to RUB 13,447 million in the year ended December 31, 2017 from RUB 12,587 million in the year ended December 31, 2016, as a result of an increase in sales prices of RUB 1,284 million that was partially offset by a decrease in sales volumes of RUB 424 million. In the first half of 2017, steam coal price fluctuated around \$75 per tonne (5,500 NAR CFR China) and then started to grow reaching \$88 per tonne (5,500 NAR CFR China) in October 2017 due to strong Chinese coal demand during the summer. The average price in 2017 was \$79 per tonne (5,500 NAR CFR China), 34% higher than the average price in 2016, according to Platts.

Steam coal supplied to the power segment decreased by RUB 176 million, or 50.3%, to RUB 174 million in the year ended December 31, 2017 from RUB 350 million in the year ended December 31, 2016, as a result of a decrease in sales volumes. Sales of steam coal to Southern Kuzbass Power Plant decreased by 187 thousand tonnes, or 51.6%, to 175 thousand tonnes in the year ended December 31, 2017 from 362 thousand tonnes in the year ended December 31, 2016 due to steam coal production decrease.

Sales of iron ore concentrate to third parties increased by RUB 94 million, or 74.6%, to RUB 220 million in the year ended December 31, 2017 from RUB 126 million in the year ended December 31, 2016, as a result of an increase in sales volumes of RUB 19 million and an increase in sales prices of RUB 75 million. Strong Chinese steel sector supported iron ore prices in 2017 and the average spot price reached \$71 per dry metric tonne (62% Fe, CFR China) which was 22% higher than the average price in 2016, according to MMI. Throughout the year prices fluctuated from \$54 to \$93 per dry metric tonne (62% Fe, CFR China), according to MMI.

Supplies of iron ore concentrate to the steel segment increased by RUB 2,576 million, or 30.5%, to RUB 11,020 million in the year ended December 31, 2017 from RUB 8,444 million in the year ended December 31, 2016, as a result of an increase in sales prices of RUB 3,320 million that was partially offset by a decrease in sales volumes of RUB 744 million. Sales volumes decreased due to decrease in production.

Excluding intersegment sales, export sales were stable at 77.8% of mining segment sales in the year ended December 31, 2017, compared to 74.6% in the year ended December 31, 2016.

Steel segment

Our steel segment revenues increased by RUB 11,489 million, or 6.8%, to RUB 180,382 million in the year ended December 31, 2017 from RUB 168,893 million in the year ended December 31, 2016.

Semi-finished products sales decreased by RUB 2,942 million, or 85.7%, to RUB 492 million in the year ended December 31, 2017 from RUB 3,434 million in the year ended December 31, 2016, as a result of a decrease of RUB 3,075 million in sales volumes and an increase of RUB 133 million in sales prices. The decrease in third-party sales volumes was due to increase in consumption within our steel segment related to expansion of the universal rolling mill's production. In 2017, the annual average domestic price for billets (including VAT, FCA basis) was RUB 25,780 per tonne, 18.1% higher than the average domestic price in 2016.

Other long products sales increased by RUB 9,632 million, or 24.6%, to RUB 48,731 million in the year ended December 31, 2017 from RUB 39,099 million in the year ended December 31, 2016, as a result of an increase of RUB 5,133 million in sales prices and an increase of RUB 4,499 million in sales volumes. The increase in sales prices was due to increase in purchase prices for steelmaking raw materials (iron ore feed, coke, etc.). Sales volumes increased due to strengthening demand in the Russian market and increase in the range of the universal rolling mill's products.

Other flat products sales increased by RUB 4,584 million, or 27.4%, to RUB 21,307 million in the year ended December 31, 2017 from RUB 16,723 million in the year ended December 31, 2016, as a result of an increase of RUB 1,636 million in sales prices and an increase of RUB 2,948 million in sales volumes. In 2017, the annual average price for flat steel products (including VAT, FCA basis) was RUB 37,757 per tonne, 4.9% higher than the average price in 2016. The sales volume increased mainly due to strengthening of consumer demand in the Russian market.

Wire sales increased by RUB 1,968 million, or 12.7%, to RUB 17,498 million in the year ended December 31, 2017 from RUB 15,530 million in the year ended December 31, 2016, as a result of an increase of RUB 2,540 million in sales prices that was partially offset by a decrease of RUB 572 million in sales volumes. The increase in sales prices was driven by strong domestic demand and increase in the prices of wire rod used as the main input for wire production. Sales volumes declined due to decrease in production as a result of equipment repairs.

Rebar sales decreased by RUB 2,469 million, or 5.5%, to RUB 42,735 million in the year ended December 31, 2017 from RUB 45,204 million in the year ended December 31, 2016, as a result of a decrease of RUB 4,910 million in sales volumes that was partially offset by an increase of RUB 2,441 million in sales prices. Sales volumes decreased due to high competition between domestic producers for construction sector. In 2017, the Russian domestic price for rebar increased mainly due to increase in purchase prices for raw materials.

Steel pipes sales decreased by RUB 553 million, or 16.8%, to RUB 2,733 million in the year ended December 31, 2017 from RUB 3,286 million in the year ended December 31, 2016, as a result of a decrease of RUB 934 million in sales volumes that was offset by an increase of RUB 381 million in sales prices. The price increased mainly due to an increase in purchase prices for raw materials. The sales volume decreased due to shifting of our focus to high value-added products.

Pig iron sales decreased by RUB 565 million, or 83.2%, to RUB 114 million in the year ended December 31, 2017 from RUB 679 million in the year ended December 31, 2016, as a result of a decrease of RUB 604 million in sales volumes and an increase of RUB 39 million in sales prices. The decrease in third-party sales volumes was due to the increase in consumption within our steel segment.

Stampings sales increased by RUB 911 million, or 12.6%, to RUB 8,146 million in the year ended December 31, 2017 from RUB 7,235 million in the year ended December 31, 2016, as a result of an increase of RUB 2,022 million in sales volumes that was partially offset by a decrease of RUB 1,111 million in sales prices. The decrease in sales prices was driven by the decrease in domestic and export prices during 2017. The increase in sales volumes was due to ongoing recovery of demand from the key consuming industries (engineering and transport industries).

Ferrosilicon sales decreased by RUB 561 million, or 16.7%, to RUB 2,807 million in the year ended December 31, 2017 from RUB 3,368 million in the year ended December 31, 2016, as a result of a decrease of RUB 661 million in sales volumes and an increase of RUB 100 million in sales prices. The increase in sales prices was driven by the growth of quotation in the Asian market. The average price for ferrosilicon in 2017 was \$1,362 per tonne (75% Si, CIF Japan), an increase of 14% compared to 2016, according to TEX. The decrease in sales volumes was due to temporary suspension of production as a result of furnaces repair at Bratsk Ferroalloy Plant.

Sales of non-core products and services increased by RUB 681 million, or 10.0%, to RUB 7,516 million in the year ended December 31, 2017 from RUB 6,835 million in the year ended December 31, 2016, due to ongoing overall revival of domestic market.

Excluding intersegment sales, export sales were 12.1% of steel segment sales in the year ended December 31, 2017, compared to 14.0% in the year ended December 31, 2016.

Power segment

Our power segment revenues increased by RUB 1,937 million, or 4.8%, to RUB 42,562 million in the year ended December 31, 2017 from RUB 40,625 million in the year ended December 31, 2016.

Electricity sales to third parties increased by RUB 1,770 million, or 7.9%, to RUB 24,297 million in the year ended December 31, 2017 from RUB 22,527 million in the year ended December 31, 2016, as a result of an increase of RUB 251 million in sales volumes and RUB 1,519 million in sales prices.

Other revenue, which consists mostly of capacity and heat energy, decreased by RUB 269 million, or 12.2%, to RUB 1,927 million in the year ended December 31, 2017 from RUB 2,196 million in the year ended December 31, 2016, due to a decrease in capacity sales volumes of Southern Kuzbass Power Plant.

Intersegment sales increased by RUB 435 million, or 2.7%, to RUB 16,338 million in the year ended December 31, 2017 from RUB 15,903 million in the year ended December 31, 2016, mainly as a result of an increase in electricity tariffs.

Cost of sales and gross profit

The consolidated cost of sales was 53.6% of consolidated revenues in the year ended December 31, 2017, as compared to 53.0% of consolidated revenues in the year ended December 31, 2016, resulting in a decrease in consolidated gross profit to 46.4% in the year ended December 31, 2017 from 47.0% for the year ended December 31, 2016. Cost of sales primarily consists of costs relating to raw materials (including products purchased for resale), direct payroll, depreciation and energy. The table below sets forth cost of sales and gross profit by segment for the years ended December 31, 2017 and 2016, including as a percentage of segment revenues.

<u>Cost of Sales and Gross Profit by Segment</u>	<u>Year Ended December 31, 2017</u>		<u>Year Ended December 31, 2016</u>	
	<u>Amount</u>	<u>% of Segment Revenues</u>	<u>Amount</u>	<u>% of Segment Revenues</u>
	<u>(In millions of Russian rubles, except for percentages)</u>			
Mining segment				
Cost of sales	48,952	34.4%	45,040	37.1%
Gross profit	93,464	65.6%	76,515	62.9%
Steel segment				
Cost of sales	146,369	81.1%	126,745	75.0%
Gross profit	34,013	18.9%	42,148	25.0%
Power segment				
Cost of sales	29,838	70.1%	29,047	71.5%
Gross profit	12,724	29.9%	11,578	28.5%

Mining segment

Mining segment cost of sales increased by RUB 3,912 million, or 8.7%, to RUB 48,952 million in the year ended December 31, 2017 from RUB 45,040 million in the year ended December 31, 2016. The gross profit percentage increased to 65.6% in the year ended December 31, 2017 compared to 62.9% in the year ended December 31, 2016, mainly due to the increase in selling prices caused by coal prices dramatic volatility.

Coal production cash costs per tonne (see “— “Cash Costs per Tonne” Measure”) at Southern Kuzbass Coal Company increased by RUB 430 per tonne, or 25.1%, from RUB 1,715 in the year ended December 31, 2016 to RUB 2,145 in the year ended December 31, 2017, mainly due to the increase in fixed costs share per tonne stimulated by production volumes decrease.

Coal production cash costs at Yakutugol increased by RUB 4 per tonne, or 0.5%, from RUB 825 in the year ended December 31, 2016 to RUB 829 in the year ended December 31, 2017, mainly due to the increase in fixed costs share per tonne stimulated by production volumes decrease.

Coke production cash costs increased by 41.8% at Moscow Coke and Gas Plant and 18.8% at Mechel Coke following the increase in coking coal concentrate purchase prices.

Iron ore production cash costs increased by 15.8% mainly due to increase in transportation cost per tonne and growth of stripping costs.

Steel segment

Steel segment cost of sales increased by RUB 19,624 million, or 15.5%, to RUB 146,369 million in the year ended December 31, 2017 from RUB 126,745 million in the year ended December 31, 2016. Steel segment cost

of sales was 81.1% of the segment's revenues in the year ended December 31, 2017, as compared to 75.0% in the year ended December 31, 2016. The decrease in gross profit from 25.0% to 18.9% is explained by the increase in purchase prices for raw materials (iron ore feed, coke, ferroalloys and electrodes).

Power segment

Power segment cost of sales increased by RUB 791 million, or 2.7%, to RUB 29,838 million in the year ended December 31, 2017 from RUB 29,047 million in the year ended December 31, 2016, due to increase in electricity tariffs and sales volumes. The power segment gross profit percentage increased to 29.9% in the year ended December 31, 2017 from 28.5% in the year ended December 31, 2016 due to sales price increase.

“Cash Costs per Tonne” Measure

In this document, we present cash costs per tonne for coal, coke and iron ore production for each significant production facility of our mining segment. Cash costs per tonne is a performance indicator that is not defined according to IFRS or U.S. GAAP. Cash costs per tonne includes various production costs, such as raw materials, auxiliary materials, wages and social taxes of production personnel, electricity, gas and fuel costs, repairs and maintenance of production equipment, costs of mining works, mineral extraction tax and royalty payments, but excludes non-cash items such as depreciation and amortization and write-down of inventories to their net realizable value. We use this indicator to evaluate the performance of individual production subsidiaries and their respective ability to generate cash. Cash costs per tonne is a widely used performance indicator in the mining industry to evaluate the cost-effectiveness of mining operations. We believe that investors use this indicator in addition to the financial information prepared in accordance with IFRS to evaluate the performance of our companies. Consequently, this information must be considered supplementary and should not be regarded as a substitute for the performance indicators prepared in accordance with IFRS.

The reconciliation of mining segment production cash costs per tonne for the year ended December 31, 2017 is presented below:

	In thousands of tonnes	Cash cost, in thousands of Russian rubles per tonne	In millions of Russian rubles
Coal — Southern Kuzbass Coal Company — sales to third parties . . .	4,182	2.1	8,971
Coal — Southern Kuzbass Coal Company — intersegment sales	833	2.1	1,788
Coal — Yakutugol — sales to third parties	7,357	0.8	6,100
Coal — Yakutugol — intersegment sales	0	0.8	0
Coal — Elgaugol — sales to third parties	1,515	1.5	2,216
Coal — Elgaugol — intersegment sales	87	1.5	127
Iron ore — Korshunov Mining Plant — sales to third parties	30	2.3	69
Iron ore — Korshunov Mining Plant — intersegment sales	2,448	2.3	5,566
Coke — Moscow Coke and Gas Plant — sales to third parties ⁽¹⁾	556	12.0	6,670
Coke — Moscow Coke and Gas Plant — intersegment sales	1	12.0	15
Coke — Mechel Coke — sales to third parties ⁽²⁾	214	7.0	1,497
Coke — Mechel Coke — intersegment sales	1,914	7.0	13,384
Depreciation and amortization			6,940
Write-down of inventory to their net realizable value			67
Cost of coal produced by third companies and re-sold by our trading subsidiaries, including intersegment sales			69
Stockholding year to year movements, costs of other products and services (coking products, washing services) and costs of other subsidiaries ⁽³⁾			(4,525)
Total mining segment cost of sales			<u>48,952</u>

- (1) Cash costs per tonne for coke were reduced by by-products credits. The amount of by-products credits in the total cash costs per tonne was RUB 125, or 1%, at Moscow Coke and Gas Plant in the year ended December 31, 2017.
- (2) Cash costs per tonne for coke were reduced by by-products credits. The amount of by-products credits in the total cash costs per tonne was RUB 833, or 12%, at Mechel Coke in the year ended December 31, 2017.
- (3) Costs of other products and services were increased by the amount of by-products credits of RUB 799 million in the year ended December 31, 2017.

The reconciliation of mining segment production cash costs per tonne for the year ended December 31, 2016 is presented below:

	In thousands of tonnes	Cash cost, in thousands of Russian rubles per tonne	In millions of Russian rubles
Coal — Southern Kuzbass Coal Company — sales to third parties . . .	4,464	1.7	7,655
Coal — Southern Kuzbass Coal Company — intersegment sales	1,021	1.7	1,751
Coal — Yakutugol — sales to third parties	8,664	0.8	7,152
Coal — Yakutugol — intersegment sales	—	0.8	—
Coal — Elgaugol — sales to third parties	1,673	0.9	1,529
Coal — Elgaugol — intersegment sales	44	0.9	41
Iron ore — Korshunov Mining Plant — sales to third parties	26	2.0	52
Iron ore — Korshunov Mining Plant — intersegment sales	2,684	2.0	5,272
Coke — Moscow Coke and Gas Plant — sales to third parties ⁽¹⁾	682	8.5	5,769
Coke — Moscow Coke and Gas Plant — intersegment sales	5	8.5	40
Coke — Mechel Coke — sales to third parties ⁽²⁾	211	5.9	1,244
Coke — Mechel Coke — intersegment sales	1,938	5.9	11,405
Depreciation and amortization			6,981
Write-down of inventory to their net realizable value			23
Cost of coal produced by third companies and re-sold by our trading subsidiaries, including intersegment sales			170
Stockholding year to year movements, costs of other products and services (coking products, washing services) and costs of other subsidiaries ⁽³⁾			(4,043)
Total mining segment cost of sales			<u>45,040</u>

- (1) Cash costs per tonne for coke were reduced by by-products credits. The amount of by-products credits in the total cash costs per tonne was RUB 343, or 4%, at Moscow Coke and Gas Plant in the year ended December 31, 2016.
- (2) Cash costs per tonne for coke were reduced by by-products credits. The amount of by-products credits in the total cash costs per tonne was RUB 755, or 13%, at Mechel Coke in the year ended December 31, 2016.
- (3) Costs of other products and services were increased by the amount of by-products credits of RUB 831 million in the year ended December 31, 2016.

Selling, distribution and operating income and (expenses), net

Selling, distribution and operating income and (expenses), net decreased by RUB 5,407 million, or 6.2%, to RUB 81,590 million in the year ended December 31, 2017 from RUB 86,997 million in the year ended December 31, 2016, as a result of a decrease in administrative and other operating expenses in the mining and steel segments, selling and distribution expenses in the steel and mining segments and loss on write-off of non-current assets in the steel and mining segments in the year ended December 31, 2017. As a percentage of consolidated revenues, selling, distribution and operating income and (expenses), net decreased to 27.3% in the

year ended December 31, 2017 from 31.5% in the year ended December 31, 2016. Our selling, distribution and operating income and (expenses), net consist primarily of selling and distribution expenses, loss on write-off of non-current assets, impairment of goodwill and other non-current assets, allowance for expected credit losses on financial assets, taxes other than income taxes, administrative and other operating expenses and other operating income. The table below sets forth these costs by segment for the years ended December 31, 2017 and 2016, including as a percentage of segment revenues.

Selling, Distribution and Operating Income and (Expenses), Net by Segment	Year Ended December 31, 2017		Year Ended December 31, 2016	
	Amount	% of Segment Revenues	Amount	% of Segment Revenues
(In millions of Russian rubles, except for percentages)				
Mining segment				
Selling and distribution expenses	30,551	21.5%	31,132	25.6%
Loss on write-off of non-current assets	135	0.1%	863	0.7%
Impairment of goodwill and other non-current assets	3,801	2.7%	1,335	1.1%
Allowance for expected credit losses on financial assets	156	0.1%	83	0.1%
Taxes other than income taxes	3,329	2.3%	3,959	3.3%
Administrative and other operating expenses	7,789	5.5%	9,538	7.8%
Other operating income	(488)	(0.3%)	(1,407)	(1.2%)
Total	<u>45,273</u>	<u>31.8%</u>	<u>45,503</u>	<u>37.4%</u>
Steel segment				
Selling and distribution expenses	14,266	7.9%	15,392	9.1%
Loss on write-off of non-current assets	145	0.1%	1,089	0.6%
Impairment of goodwill and other non-current assets	2,280	1.3%	3,866	2.3%
Allowance for expected credit losses on financial assets	(266)	(0.1%)	231	0.1%
Taxes other than income taxes	1,530	0.8%	1,826	1.1%
Administrative and other operating expenses	7,185	4.0%	8,569	5.1%
Other operating income	(281)	(0.2%)	(356)	(0.2%)
Total	<u>24,859</u>	<u>13.8%</u>	<u>30,617</u>	<u>18.1%</u>
Power segment				
Selling and distribution expenses	10,869	25.5%	9,710	23.9%
Loss on write-off of non-current assets	41	0.1%	1	0.0%
Impairment of goodwill and other non-current assets	—	0.0%	—	0.0%
Allowance for expected credit losses on financial assets	442	1.0%	443	1.1%
Taxes other than income taxes	108	0.3%	129	0.3%
Administrative and other operating expenses	616	1.4%	685	1.7%
Other operating income	(618)	(1.5%)	(91)	(0.2%)
Total	<u>11,458</u>	<u>26.9%</u>	<u>10,877</u>	<u>26.8%</u>

Mining segment

Selling and distribution expenses consisted almost entirely of transportation expenses related to our selling activities. Such expenses decreased by RUB 581 million, or 1.9%, to RUB 30,551 million in the year ended December 31, 2017 from RUB 31,132 million in the year ended December 31, 2016, mainly due to the decrease in segment export sales volumes by 6%. As a percentage of mining segment revenues, selling and distribution expenses decreased from 25.6% to 21.5% due to an increase in sales prices.

Loss on write-off of non-current assets decreased by RUB 728 million, or 84.3%, to RUB 135 million in the year ended December 31, 2017 from RUB 863 million in the year ended December 31, 2016, due to the decrease

in the number of property, plant and equipment objects that are not planned for further use in production process at our mining service subsidiaries.

Impairment of goodwill and other non-current assets increased by RUB 2,466 million, or 184.7%, to RUB 3,801 million in the year ended December 31, 2017 from RUB 1,335 million in the year ended December 31, 2016. In 2017, we recognized impairment of property, plant and equipment and mineral licenses in relation to (i) Korshunov Mining Plant of RUB 2,271 million due to the decline in long-term forecast for iron ore prices and growth of stripping costs required for removal of landslide deformations and (ii) Southern Kuzbass Coal Company of RUB 1,529 million due to the refusal by the regulatory authorities to extend the term of mineral license for exploration and extraction. See note 18 to the consolidated financial statements.

Allowance for expected credit losses on financial assets increased by RUB 73 million to RUB 156 million in the year ended December 31, 2017 from RUB 83 million in the year ended December 31, 2016, due to the increase in overdue accounts receivable.

Taxes other than income taxes decreased by RUB 630 million, or 15.9%, to RUB 3,329 million in the year ended December 31, 2017 from RUB 3,959 million in the year ended December 31, 2016, due to obtainment of property tax benefit in respect of the rail line by Elga-road in 2017.

Administrative and other operating expenses consist of payroll and payroll taxes, depreciation, rent and maintenance, legal and consulting expenses, office overheads and other expenses. These expenses decreased by RUB 1,749 million, or 18.3%, to RUB 7,789 million in the year ended December 31, 2017 from RUB 9,538 million in the year ended December 31, 2016, mainly as a result of a decrease in salaries and related social taxes by RUB 2,067 million, or 32.0%, to RUB 4,386 million in the year ended December 31, 2017 from RUB 6,453 million in the year ended December 31, 2016.

Other operating income decreased by RUB 919 million to RUB 488 million in the year ended December 31, 2017 from RUB 1,407 million in the year ended December 31, 2016, mainly due to insurance compensation for long-lived assets loss and revision of pension obligations and rehabilitation provisions in our mining subsidiaries in 2016.

Steel segment

Selling and distribution expenses consisted almost entirely of transportation expenses related to our selling activities. Such expenses decreased by RUB 1,126 million, or 7.3%, to RUB 14,266 million in the year ended December 31, 2017 from RUB 15,392 million in the year ended December 31, 2016, mainly due to the overall decrease in sales volumes of steel segment products. As a percentage of steel segment revenues, selling and distribution expenses decreased to 7.9% in the year ended December 31, 2017 from 9.1% in the year ended December 31, 2016.

Loss on write-off of non-current assets decreased by RUB 944 million, or 86.7%, to RUB 145 million in the year ended December 31, 2017 from RUB 1,089 million in the year ended December 31, 2016, due to the decrease in a number of idled property, plant and equipment written off by our steel production subsidiaries.

Impairment of goodwill and other non-current assets decreased by RUB 1,586 million, or 41.0%, to RUB 2,280 million in the year ended December 31, 2017 from RUB 3,866 million in the year ended December 31, 2016. In 2016, we recognized impairment of goodwill and other non-current assets in relation to Bratsk Ferroalloy Plant of RUB 3,627 million due to changes in expectations of long-term prices for ferrosilicon and in forecasted production volumes accompanied by increased forecasted costs. In 2017, we recognized impairment of property, plant and equipment and construction in progress in relation to Izhstal of RUB 2,130 million and additional impairment in relation to Bratsk Ferroalloy Plant of RUB 151 million.

Allowance for expected credit losses on financial assets changed by RUB 497 million, or 215.2%, to RUB 266 million income from the effect of reversal in the year ended December 31, 2017 from RUB 231 million loss in the year ended December 31, 2016, due to the decrease in outstanding doubtful accounts as of December 31, 2017 and collection of certain accounts receivable provided for as of December 31, 2016.

Taxes other than income taxes decreased by RUB 296 million, or 16.2%, to RUB 1,530 million in the year ended December 31, 2017 from RUB 1,826 million in the year ended December 31, 2016, mainly due to recognition of probable tax risks in respect of penalties on personal income tax in the amount of RUB 181 million in 2016. In 2017, these risks were reversed based on the tax audit conclusion. Property and land taxes decreased by RUB 34 million to RUB 1,295 million in the year ended December 31, 2017 from RUB 1,329 million in the year ended December 31, 2016.

Administrative and other operating expenses decreased by RUB 1,384 million, or 16.1%, to RUB 7,185 million in the year ended December 31, 2017 from RUB 8,569 million in the year ended December 31, 2016. Payroll and related social taxes decreased by RUB 1,730 million, or 35.7%, to RUB 3,113 million in the year ended December 31, 2017 from RUB 4,843 million in the year ended December 31, 2016, due to optimization of the number of employees. Fines and penalties expenses on breach of trading contracts, provisions related to claims increased by RUB 1,157 million, or 381.8%, to RUB 1,460 million in the year ended December 31, 2017 from RUB 303 million in the year ended December 31, 2016, mainly due to recognition of provision related to claim of Minmetals. Other administrative and operating expenses decreased by RUB 811 million, or 23.7%, to RUB 2,613 million in the year ended December 31, 2017 from RUB 3,424 million in the year ended December 31, 2016, due to cost-cutting measures implemented by our management.

Other operating income decreased by RUB 75 million, or 21.1%, to RUB 281 million in the year ended December 31, 2017 from RUB 356 million in the year ended December 31, 2016, mainly due to revision of rehabilitation provision.

Power segment

Selling and distribution expenses consisted almost entirely of electricity transmission costs incurred by our Kuzbass Power Sales Company for the usage of the power grid through which electricity is distributed to end consumers. Such expenses increased by RUB 1,159 million, or 11.9%, to RUB 10,869 million in the year ended December 31, 2017 from RUB 9,710 million in the year ended December 31, 2016, due to an increase in transmission tariffs and sales volumes.

Other operating income was recognized in the amount of RUB 619 million mainly as a result of subsidies received from the governmental authorities as a compensation for operating activities (energy tariffs).

Operating profit

Operating profit increased by RUB 14,477 million, or 33.9%, to RUB 57,167 million in the year ended December 31, 2017 from RUB 42,690 million in the year ended December 31, 2016. As a percentage of consolidated revenues, operating profit increased to 19.1% in the year ended December 31, 2017 from 15.5% in the year ended December 31, 2016, mainly due to an increase in consolidated gross profit and a decrease in administrative and other operating expenses and loss on write-off of non-current assets as explained above.

The table below sets out operating profit by segment, including as a percentage of segment revenues.

Operating Profit by Segment	Year Ended December 31, 2017		Year Ended December 31, 2016	
	Amount	% of Segment Revenues	Amount	% of Segment Revenues
	(In millions of Russian rubles, except for percentages)			
Mining segment	48,191	33.8%	31,012	25.5%
Steel segment	9,154	5.1%	11,531	6.8%
Power segment	1,266	3.0%	701	1.7%
Elimination of intersegment unrealized profit ⁽¹⁾	(1,444)		(554)	
Consolidated operating profit	<u>57,167</u>		<u>42,690</u>	

- (1) Our management evaluates the performance of our segments before the elimination of unrealized profit in inventory balances of segments that was generated by the segments but not recognized as profit in our consolidated financial statements until the sale of such inventories to third parties. Therefore, we present our segments before such elimination, and such elimination is presented separately. The increase in intersegment unrealized profit adjustment in the year ended December 31, 2017 as compared to the year ended December 31, 2016 was due to the increase in gross profit of our mining segment in 2017.

Mining segment

Mining segment operating profit increased by RUB 17,179 million, or 55.4%, to RUB 48,191 million in the year ended December 31, 2017 from RUB 31,012 million in the year ended December 31, 2016. The operating profit margin increased to 33.8% in the year ended December 31, 2017 from 25.5% in the year ended December 31, 2016, mainly due to the increase in selling prices caused by coal prices dramatic volatility.

Steel segment

Steel segment operating profit decreased by RUB 2,377 million, or 20.6%, to RUB 9,154 million in the year ended December 31, 2017 from RUB 11,531 million in the year ended December 31, 2016. The operating profit margin decreased to 5.1% in the year ended December 31, 2017 from 6.8% in the year ended December 31, 2016, due to the factors that affected operating income in 2017, such as the recognition of losses from the impairment of non-current assets of Izhstal and Bratsk Ferroalloy Plant and the increase in cost of sales caused by the increase in purchase prices for main raw materials.

Power segment

Power segment operating profit increased by RUB 565 million, or 80.6%, to RUB 1,266 million in the year ended December 31, 2017 from RUB 701 million in the year ended December 31, 2016. The operating profit margin increased to 3.0% in the year ended December 31, 2017 from 1.7% in the year ended December 31, 2016, mainly due to increase in gross margin caused by the increase in sales prices and receiving of subsidies from the governmental authorities as a compensation for operating activities (energy tariffs).

Other income and expense, net

Other income and expense, net consists of share of gain (loss) of an associate, finance income, finance costs, other income and other expenses and foreign exchange gain. The table below sets forth these costs for the years ended December 31, 2017 and 2016, including as a percentage of revenues.

	Year Ended December 31, 2017		Year Ended December 31, 2016	
	Amount	% of Revenues	Amount	% of Revenues
Other Income and Expense, Net				
	(In millions of Russian rubles, except for percentages)			
Finance income	633	0.2%	1,176	0.4%
Finance costs	(47,610)	(15.9)%	(54,240)	(19.7)%
Foreign exchange gain	4,237	1.4%	25,947	9.4%
Share of gain (loss) of an associate	18	0.0%	(17)	0.0%
Other income	1,495	0.5%	598	0.2%
Other expenses	(220)	(0.1)%	(1,999)	(0.7)%
Total	<u>(41,447)</u>	<u>(13.9)%</u>	<u>(28,535)</u>	<u>(10.3)%</u>

Finance income decreased by RUB 543 million, or 46.2%, to RUB 633 million in the year ended December 31, 2017 from RUB 1,176 million in the year ended December 31, 2016, due to waiving of fines and penalties on finance leases as a result of restructuring primarily with Sberbank in 2016. In 2017, restructuring effect was not significant.

Finance costs decreased by RUB 6,630 million, or 12.2%, to RUB 47,610 million in the year ended December 31, 2017 from RUB 54,240 million in the year ended December 31, 2016, due to the restructuring of overdue borrowings in 2016 and decrease in fines and penalties and interest rates in 2017.

Foreign exchange gain decreased by RUB 21,710 million, or 83.7%, to RUB 4,237 million in the year ended December 31, 2017 from RUB 25,947 million in the year ended December 31, 2016, mainly due to moderate appreciation of the ruble against the U.S. dollar in 2017 as compared to 2016.

Share of gain (loss) of an associate changed by RUB 35 million, or 205.9%, to RUB 18 million gain in the year ended December 31, 2017 from RUB 17 million loss in the year ended December 31, 2016, mainly due to loss in the amount of RUB 42 million from investments in Mechel Somani Carbon Private Limited in 2016.

Other income increased by RUB 897 million, or 150.0%, to RUB 1,495 million in the year ended December 31, 2017 from RUB 598 million in the year ended December 31, 2016, mainly due to gain from waiving of penalties from Novatek — Chelyabinsk OOO in the amount of RUB 442 million and a gain on the write-off of payable amounts that were written-off due to liquidation of the creditors or expiration of the statute of limitation in the amount of RUB 310 million.

Other expenses decreased by RUB 1,779 million, or 89.0%, to RUB 220 million in the year ended December 31, 2017 from RUB 1,999 million in the year ended December 31, 2016. In 2016, there was a write-off of Vnesheconombank's commission in the amount of RUB 1,411 million and recognition of a provision for non-recoverable advances to pension funds in the amount of RUB 408 million. There were no such operations in 2017.

Income tax expense

Income tax expense decreased by RUB 1,743 million, or 35.6%, to RUB 3,150 million in the year ended December 31, 2017 from RUB 4,893 million in the year ended December 31, 2016. Our effective tax rate decreased to 20.0% from 34.6%. The decrease in income tax expense and effective tax rate was mainly due to

recognition of deferred tax asset on tax loss from the consolidated group of taxpayers. This decrease was partially offset by the increase in current income tax expense because of the increase in the tax base as a result of the rise in prices. In addition, income tax risk related to the consolidated group of taxpayers was accrued in 2017.

Net profit attributable to non-controlling interests

Net profit attributable to non-controlling interests decreased by RUB 693 million, or 40.6%, to RUB 1,013 million in the year ended December 31, 2017 from RUB 1,706 million in the year ended December 31, 2016, mainly due to decrease in net profit attributable to non-controlling interests in our subsidiaries Chelyabinsk Metallurgical Plant in the amount of RUB 501.2 million (loss) and Izhstal in the amount of RUB 212.8 million (loss).

Net profit attributable to equity holders of the parent

Net profit attributable to our equity holders increased by RUB 4,431 million, or 62.2%, to RUB 11,557 million in the year ended December 31, 2017 from RUB 7,126 million in the year ended December 31, 2016, mainly due to the increase in operating margin.

Liquidity and Capital Resources

Capital requirements

We expect that our principal capital requirements in the near future will be for financing the repayment of maturing debt, interest payments and regular maintenance capital expenditures.

Our business is heavily dependent on machinery for the production of steel and steel products, as well as investments in our mining operations. Investments to maintain and expand production facilities are, accordingly, an important priority and have a significant effect on our cash flows and future results of operations. We intend to focus our capital spending on the implementation of projects that we view as key to carrying out our business strategy and improve free cash flow. See “Item 4. Information on the Company — Capital Investment Program” for the objectives of our capital investment program and its details. Over the next three years, i.e., 2019-2021, we expect our overall capital expenditures to total approximately RUB 33.0 billion, approximately 65% of which will be in 2019-2020 and approximately 35% in 2021. We intend to finance our capital investments with cash flow from operations and external long-term financing sources.

Our total outstanding debt as of December 31, 2018 and 2017 was RUB 418,832 million and RUB 439,893 million, respectively. See “Item 11. Quantitative and Qualitative Disclosures about Market Risk” for information regarding the type of financial instruments, currency and interest rate structure.

In 2018 and 2017, we paid dividends on preferred shares of RUB 1,386.1 million and RUB 855.6 million, respectively. In each case we could not pay insignificant amounts of dividends to those shareholders who did not provide us with their bank account details and/or due to the restriction of shareholders’ rights to receive dividends in certain cases provided for by Russian law. See “Item 8. Financial Information — Dividend Distribution Policy” for a description of our dividend policy.

Capital resources

Our strategy has shifted from growing our business through acquisition and expansion opportunities to extracting the maximum value from our existing core assets. We now intend to concentrate on efficiency improvements and modernization of the business lines, which we expect will increase the business’ overall profitability.

Historically, our major sources of cash have been cash generated from operations, bank loans and public debt, and we expect these sources will continue to be our principal sources of cash in the future. For financing of

our capital investment program we have also relied on financings secured by foreign export credit agency guarantees. We do not use off-balance sheet financing arrangements.

The table below summarizes our cash flows for the periods indicated.

	Year Ended December 31,		
	2018	2017	2016
	(In millions of Russian rubles)		
Net cash provided by operating activities	68,118	63,282	53,207
Net cash used in investing activities	(5,647)	(7,138)	(4,969)
Net cash used in financing activities	(63,286)	(55,737)	(45,869)

Net cash provided by operating activities was RUB 68,118 million in the year ended December 31, 2018 as compared to RUB 63,282 million in the year ended December 31, 2017 and RUB 53,207 million in the year ended December 31, 2016. The operating cash inflows were derived from payments received from sales of our mining, steel and power products, reduced by cash disbursements for direct labor, raw materials and parts, selling, distribution and operating income and (expenses), net and income taxes.

Net cash from operating activities before changes in working capital items was RUB 73,717 million in the year ended December 31, 2018. Income taxes paid amounted to RUB 3,562 million. Below we analyze major changes in working capital items which in the aggregate accounted for RUB 2,037 million in cash used in operating activities, resulting in net cash provided by operating activities of RUB 68,118 million.

Working capital items accretive to operating cash flows:

- a decrease in accounts receivable of RUB 1,354 million due to the growth of turnover of accounts receivable;
- an increase in accounts payable of RUB 4,150 million of Yakutugol, Southern Kuzbass Coal Company, Elgaugol and Mecheltrans;
- an increase in advances received of RUB 485 million of Urals Stampings Plant; and
- an increase in accrued taxes and other liabilities of RUB 683 million mainly due to change in tax liabilities.

Working capital items reducing operating cash flows:

- an increase in inventories of RUB 7,858 million mainly due to an increase in work in progress, finished goods and goods for resale of Chelyabinsk Metallurgical Plant, Yakutugol, Elgaugol, Southern Kuzbass Coal Company and Mechel Carbon as of December 31, 2018 as compared to December 31, 2017. The main reason for the change was increase in coal production at Elgaugol and growth of the cost price of raw materials and semi-finished goods in steel and mining segments; and
- an increase in other current assets of RUB 851 million primarily due to an increase in advances paid mainly by Mecheltrans, Yakutugol and Mechel Carbon.

Net cash from operating activities before changes in working capital items was RUB 76,501 million in the year ended December 31, 2017. Income taxes paid amounted to RUB 4,530 million. Below we analyze major changes in working capital items which in the aggregate accounted for RUB 8,689 million in cash used in operating activities, resulting in net cash provided by operating activities of RUB 63,282 million.

Working capital items accretive to operating cash flows:

- an increase in advances received of RUB 625 million mainly of Chelyabinsk Metallurgical Plant, Kuzbass Power Sales Company and Izhstal due to growth of sales in the year ended December 31, 2017 as compared to the year ended December 31, 2016.

Working capital items reducing operating cash flows:

- a decrease in accounts payable of RUB 3,435 million due to the growth of turnover of accounts payable;
- an increase in inventories of RUB 4,508 million mainly due to an increase in raw materials and work in progress of Chelyabinsk Metallurgical Plant, Beloretsk Metallurgical Plant, Izhstal and Yakutugol as of December 31, 2017 as compared to December 31, 2016. The main reason for the change was growth of the cost price of raw materials and semi-finished goods in steel and mining segments; and
- an increase in other current assets of RUB 895 million primarily due to an increase in VAT on advances received mainly by Chelyabinsk Metallurgical Plant, Beloretsk Metallurgical Plant and Southern Kuzbass Coal Company.

Net cash from operating activities before changes in working capital items was RUB 65,788 million in the year ended December 31, 2016. Net operating cash outflow of discontinued operations amounted to RUB 436 million. Income taxes paid amounted to RUB 2,101 million. Below we analyze major changes in working capital items which in the aggregate accounted for RUB 10,044 million in cash used in operating activities, resulting in net cash provided by operating activities of RUB 53,207 million.

Working capital items accretive to operating cash flows:

- an increase in advances received of RUB 588 million of Beloretsk Metallurgical Plant, Mechel Service, Urals Stampings Plant and Izhstal due to growth of sales in the year ended December 31, 2016; and
- an increase in accrued taxes and other liabilities of RUB 1,122 million mainly due to change in tax liabilities.

Working capital items reducing operating cash flows:

- an increase in accounts receivable of RUB 5,542 million primarily due to the increase in sales of Mechel Carbon and Mechel Service;
- a decrease in accounts payable of RUB 4,259 million due to the growth of turnover of accounts payable and activated payments;
- an increase in inventories of RUB 1,070 million due to an increase in raw materials of Mechel Coke, Elgaugol and Chelyabinsk Metallurgical Plant as of December 31, 2016. The main reason for the change in the stock level was the increase in production volumes in steel and mining segments as a result of the growth of sales; and
- an increase in other current assets of RUB 883 million primarily due to an increase in advances paid of Mechel Carbon and Mecheltrans.

Net cash used in investing activities was RUB 5,647 million in the year ended December 31, 2018 as compared to RUB 7,138 million in the year ended December 31, 2017 and RUB 4,969 million in the year ended December 31, 2016. Substantially all of the cash used in investing activities in the years ended December 31, 2018, 2017 and 2016 related to capital expenditures. Capital expenditures relating to purchases of property, plant and equipment, purchases of mineral licenses and interest paid, capitalized amounted to RUB 5,912 million, RUB 7,047 million and RUB 5,524 million in the years ended December 31, 2018, 2017 and 2016, respectively. Purchases of intangible assets amounted to RUB 150 million in the year ended December 31, 2018 as compared to RUB 771 million in the year ended December 31, 2017 and RUB nil in the year ended December 31, 2016. Cash provided by investing activities related to disposal of businesses and investments amounted to RUB 3 million, RUB 568 million and RUB 248 million in the years ended December 31, 2018, 2017 and 2016, respectively.

Net cash used in financing activities was RUB 63,286 million in the year ended December 31, 2018 as compared to RUB 55,737 million in the year ended December 31, 2017 and RUB 45,869 million in the year

ended December 31, 2016. Expenditures related to deferred consideration payments amounted to RUB 4,597 million, RUB 4,107 million and RUB 4,732 million in the years ended December 31, 2018, 2017 and 2016, respectively. Debt proceeds amounted to RUB 76,504 million and we repaid debt of RUB 97,269 million in the year ended December 31, 2018 as compared to debt proceeds of RUB 23,200 million and repayment of debt of RUB 35,033 million in the year ended December 31, 2017; and debt proceeds of RUB 4,002 million and proceeds from the sale of a 49% stake in the Elga coal complex, with a put option granted of RUB 34,300 million and repayment of debt of RUB 42,322 million in the year ended December 31, 2016.

Liquidity

We had cash and cash equivalents of RUB 1,803 million, RUB 2,452 million and RUB 1,689 million as of December 31, 2018, 2017 and 2016, respectively. Our cash and cash equivalents were held in rubles (20.0%, 25.3% and 40.9% as of December 31, 2018, 2017 and 2016, respectively), U.S. dollars (42.1%, 56.2% and 28.5% as of December 31, 2018, 2017 and 2016, respectively), euros (32.3%, 12.5% and 23.9% as of December 31, 2018, 2017 and 2016, respectively) and other currencies.

The unused portion under the group's credit facilities as of December 31, 2018, 2017 and 2016 was RUB 573 million, RUB 475 million and RUB 373 million, respectively. As of December 31, 2018, 2017 and 2016, the group's credit facilities provided aggregated borrowing capacity of RUB 419,405 million (of which RUB 42,070 million is repayable during 2019 and RUB 361,328 million represented long-term debt that was reclassified as short-term liabilities as of that date because of covenant violations), RUB 440,369 million and RUB 446,181 million, respectively. The group's borrowings under these credit facilities (except for special-purpose borrowings such as pre-export facilities, Vnesheconombank's facility as well as factoring and overdraft facilities) carried a weighted average interest rate of approximately 8.6%, 9.7% and 10.3% as of December 31, 2018, 2017 and 2016, respectively. See "— Restrictive Covenants" for further information about our covenant violations.

The following table summarizes our liquidity as of December 31, 2018, 2017 and 2016.

<u>Estimated Liquidity</u>	<u>Year Ended December 31,</u>		
	<u>2018</u>	<u>2017</u>	<u>2016</u>
	<u>(In millions of Russian rubles)</u>		
Cash and cash equivalents	1,803	2,452	1,689
Amounts available under credit facilities	573	475	373
Total estimated liquidity	<u>2,376</u>	<u>2,927</u>	<u>2,062</u>

Short-term debt (short-term borrowings and current portion of long-term debt) decreased by RUB 10,239 million, or 2.4%, to RUB 412,294 million as of December 31, 2018 from RUB 422,533 million as of December 31, 2017, as a result of gain from restructuring of loans primarily related to VTB Bank, Gazprombank and the refinancing of pre-export facilities, which was partially eliminated by the foreign exchange loss.

Long-term debt net of current portion decreased by RUB 10,822 million, or 62.3%, to RUB 6,538 million as of December 31, 2018 from RUB 17,360 million as of December 31, 2017. The decrease was primary attributable to reclassification into short-term debt as a result of covenant violation, as well as due to the fact that significant part of long-term bonds approaches maturity.

Our working capital remained negative but the deficit during the year decreased by RUB 12,631 million, or 3.0%, to RUB 404,055 million as of December 31, 2018 from RUB 416,686 million as of December 31, 2017. The main reason for decrease in working capital deficit was reduction of financial indebtedness as a result of repayment of our debts and trade and other payables.

Restructuring of financial indebtedness

In the first half of 2014, we experienced a shortage of liquidity and difficulties with refinancing of our debt; as a result, we failed to fulfill our payment obligations in connection with the servicing of interest and the repayment of our indebtedness. Since 2014, we have negotiated restructuring terms with our major Russian lenders, such as Gazprombank, Sberbank and VTB Bank, and other lenders. As a result, in August, September and December 2015, we signed agreements with VTB Bank and Gazprombank contemplating, among other things, extension of the loan tenors, decrease in the interest rates, revision of the collateral requirements and dismissal of all court proceedings. During the period from December 2015 to April 2016, we signed agreements with Sberbank contemplating, among other things, extension of the loan tenors, decrease in the interest rates and dismissal of all court proceedings. These agreements were conditional upon certain undertakings, which we have managed to fulfill. See “— Description of Certain Indebtedness” and “Item 10. Additional Information — Material Contracts.”

VTB Bank restructuring became effective in October 2015. Gazprombank restructuring became partially effective in the first quarter of 2016 after conversion of the U.S. dollar-denominated credit facilities into Russian rubles. Restructuring under all facilities with Gazprombank became effective in June 2016 after obtaining approval on the suretyship provision by Mechel at our general shareholders’ meeting. Restructuring agreements with Sberbank came into effect upon signing. In April 2016, Southern Kuzbass Coal Company’s debt was assigned from Sberbank to Gazprombank in the amount of 31.5 billion rubles (\$423.1 million or 28.4 billion rubles at the CBR exchange rate on April 12, 2016 and 3.1 billion rubles).

In April 2016, we signed option agreements with Gazprombank providing the bank with an option to acquire a 49% stake in the Elga coal complex for a total consideration of 34.3 billion rubles. According to these agreements, in June 2016, we sold to Gazprombank a 49% stake in Elgaugol OOO, the owner of the subsoil license for the Elga coal deposit, a 49% stake in Elga-road OOO, the owner of the Ulak-Elga rail line which had been contributed to the registered capital of this newly established company in March 2016, and a 49% stake in MecheltransVostok OOO, the rail line’s transport operator (collectively, the “**target companies**”). All proceeds from the sale of these stakes were used for repayment of our debt to Gazprombank, Sberbank and Sberbank Leasing AO. Gazprombank has a put option to sell its stakes (in full or in part) in the Elga coal complex within three years following a five-year period or in case of a breach of conditions stipulated by such agreement. Put options were signed by Yakutugol and Mecheltrans (sellers of the stakes in the target companies) and are guaranteed by Mechel Mining and Southern Kuzbass Coal Company. If we fail to perform under these put options Gazprombank will have the right to buy out (call option) the remaining stakes owned by us in the target companies. A 1.99% stake in each of the target companies is pledged in favor of Gazprombank as a security for the call option.

In December 2016, we signed the last set of the agreements with VTB Bank which provide for extension of maturity of our credit lines until April 2022. In April 2017, Gazprombank, VTB Bank and Sberbank confirmed the restructuring terms, including an extension of the repayment grace period until 2020 and the final maturity until 2022, interest rate of the CBR key rate plus 1.5% per year for ruble-denominated credit facilities and 3M LIBOR plus 7% per year for U.S. dollar-denominated credit facilities, and partial capitalization of interest payments.

As part of the restructuring, in January 2017, VTB Capital Plc and Skyblock Limited entered into a call option agreement for 6,937,846 preferred shares representing 5% of issued preferred shares in the share capital of Mechel (the “**option shares**”), which we have pledged in favor of VTB Capital Plc to secure performance of our obligations under the call option agreement. The strike price is 47.3682 rubles per share. Initially, VTB Capital Plc had a right to exercise this call option during the period from April 1, 2017 to December 31, 2020. In April 2017, VTB Capital Plc exercised its option right to buy all option shares, but we have requested to extend the start date of the option period by one year until April 1, 2018. Skyblock Limited did not fulfill its obligations under the option notice. In August 2017, VTB Capital Plc and Skyblock Limited entered into an amendment

agreement postponing the option period start date until April 1, 2018, revoking the option notice and granting VTB Capital Plc the right to receive a cash sum equal to the higher of RUB 620 million or the amount calculated as a difference between the weighted average market value of preferred shares for the last six months prior to the date of delivery of the option notice and the number of option shares multiplied by the strike price. On August 10, 2018, VTB Capital Plc notified us of its decision to exercise the option and receive cash of approximately 442.5 million rubles. On August 22, 2018, we have paid this amount in full. Following the performance of our obligations under the call option agreement, our preferred shares were released from the pledge.

In September 2017, Vnesheconombank refinanced our existing indebtedness under the project financing for the development of the Elga coal deposit. The loan provides for final repayment in April 2022.

In July 2018, we signed a new euro-denominated loan agreement with VTB Bank to refinance existing pre-export credit facilities with a syndicate of banks. As of December 31, 2018, we had refinanced 99.99% of the pre-export facilities by using funds attracted under the new loan. In January 2019, the pre-export facilities were fully refinanced.

In September 2015, we restructured the debt under two series of Russian ruble bonds in an aggregate amount of 10.0 billion rubles. In June-July 2016, we restructured the debt under four series of Russian ruble bonds in an aggregate amount of approximately 18.4 billion rubles. See “— Description of Certain Indebtedness” for a description of the terms of restructuring.

During the period from December 2015 to May 2016, we signed settlement agreements with Sberbank Leasing AO which waived our previous defaults and restructured our future payment schedules. The settlement agreements were approved by the court in March-September 2016. In November 2016 and February 2017, we signed settlement agreements with VTB Leasing JSC which restructured our overdue payments. The settlement agreements became effective upon approval by the court in January-April 2017. During 2017, Caterpillar Financial OOO restructured part of our overdue lease payments by means of settlement agreements which were approved by the courts. In 2018, we fully repaid the overdue lease payments to Caterpillar Financial OOO.

We continue to negotiate financial restructuring with international lenders under our export credit facility agreements.

Outlook for 2019

Our objective is to ensure that our group meets its liquidity requirements and payment obligations to creditors, continues capital expenditures, properly services its debt, restructures the remaining non-restructured part of the indebtedness with ECA-lenders, and continues as a going concern.

Although we have a negative working capital, we believe that cash generated from operations, subject to successful completion of the above-mentioned debt restructuring, improved market conditions and reduced costs, will be sufficient to meet our capital expenditures and debt service payments in 2019. Furthermore, we believe that we have the flexibility in deferring our non-critical capital expenditures and in managing our working capital to provide further financial flexibility as needed.

We believe we will not be able to obtain significant new borrowings in the near future (except for the purpose of refinancing of current liabilities); however we may consider certain divestments and invite financial or strategic investors into our businesses in order to reduce our debt burden. In 2019, we plan to approach to our lenders to discuss our debt repayment schedules amendment.

Debt Financings in 2019

We have not entered into new material debt financings as of the date hereof. For developments relating to existing financings, please refer to “— Description of Certain Indebtedness” and “Item 10. Additional Information — Material Contracts.”

Debt Financings in 2018

In July 2018, Chelyabinsk Metallurgical Plant entered into a syndicated credit facility agreement with VTB Bank and VTB Bank (Europe) SE for a total amount of up to €950.0 million to refinance the Yakutugol and Southern Kuzbass Coal Company pre-export facilities. The grace period for principal repayment is granted until April 2020. The final maturity of the credit facility is in April 2022. See “Item 10. Additional Information — Material Contracts.”

Debt Financings in 2017

In September 2017, our subsidiary Elgaugol and Vnesheconombank entered into a credit facility agreement for a total amount of up to \$190.0 million to refinance our debt obligations under the project financing for the development of the Elga coal deposit. See “— Description of Certain Indebtedness.”

In April 2017, the \$100.0 million credit facility obtained by Mechel Trading from Sberbank was assigned to VTB Bank. The terms and conditions of the facility agreement remained unchanged, except for the security package which was not assigned.

Debt Financings in 2016

During the course of 2016, we reached further agreement with VTB Bank to extend the final maturity of the loans until 2022 (similar to our agreements with Gazprombank and Sberbank), finalized the restructuring of Russian ruble bonds, signed settlement agreements with Sberbank which assigned part of Sberbank’s debt to Gazprombank and finalized the restructuring with Gazprombank. See “— Description of Certain Indebtedness” and “Item 10. Additional Information — Material Contracts.”

In December 2016, Yakutugol, Southern Kuzbass Coal Company and Chelyabinsk Metallurgical Plant signed amendments to their credit facility agreements with VTB Bank totaling approximately 25.4 billion rubles (approximately \$419.9 million as of December 31, 2016) which provide for an extension of the repayment grace period until April 2020 and the final maturity until April 2022.

In December 2016, Mechel signed an amendment to its credit facility agreement with VTB Bank totaling 44.8 billion rubles (approximately \$738.1 million as of December 31, 2016) which provides for an extension of the repayment grace period until April 2020 and the final maturity until April 2022. In addition, in December 2016, Chelyabinsk Metallurgical Plant entered into a credit facility agreement with VTB Bank with a credit limit of 30.0 billion rubles (approximately \$494.6 million as of December 31, 2016) to refinance Mechel’s debt under the credit facility agreement with VTB Bank. The facility also has a grace period until April 2020 and the final maturity until April 2022.

In June-July 2016, we restructured the debt under Russian bonds of the 04, 17, 18 and 19 series in the aggregate amount of approximately 18.4 billion rubles.

In June 2016, our subsidiaries amended their credit facility agreements with Gazprombank to capitalize accrued and unpaid interests. We repaid these amounts and interests accrued on them during the period from April 15, 2017 to March 30, 2018.

In April 2016, Southern Kuzbass Coal Company signed new settlement agreements with Sberbank which assigned part of the principal amount to Gazprombank. The principal amounts of \$423.1 million and 3.1 billion rubles were assigned to Gazprombank and \$254.9 million remained with Southern Kuzbass Coal Company under credit facilities with Sberbank. The remaining debt was restructured with extension of grace period and final repayment, new interest rates and levels of financial covenants.

In March 2016, Yakutugol’s loan from Gazprombank in the amount of \$103.1 million was converted into rubles resulting in the debt of 6.9 billion rubles. Restructuring of this credit facility became effective.

In February 2016, we signed restructuring agreements with Sberbank for Chelyabinsk Metallurgical Plant, Izhtal, Bratsk Ferroalloy Plant, Yakutugol, Korshunov Mining Plant, Mechel Trading and Southern Kuzbass Coal Company facilities totaling approximately 29.3 billion rubles and \$100.0 million. Restructuring granted an extension of grace period and final maturity, new interest rates, partial capitalization of interests, as well as new levels of financial covenants.

In January 2016, part of Gazprombank debt, namely \$400.0 million and \$200.0 million credit facilities for Southern Kuzbass Coal Company and \$385.8 million and \$300.0 million credit facilities for Yakutugol were converted into rubles resulting in total debt of approximately 99.0 billion rubles, and the restructuring of these credit facilities became effective.

Restrictive Covenants

Almost all of our loan agreements contain a number of covenants and restrictions. Such covenants and restrictions include, but are not limited to, financial ratios, various limitations, as well as acceleration and cross-default provisions. Unless a breach is remedied or a waiver is obtained, a breach of such covenants and restrictions generally permits lenders to demand accelerated repayment of principal and interest under their respective loan agreements. In addition, in the event of a payment default or the violation of certain other covenants and restrictions, creditors under other loan agreements can demand accelerated repayment of principal and interest under such other loan agreements pursuant to the cross-default provisions in such other agreements. See “Item 3. Key Information — Risk Factors — Risks Relating to Our Financial Condition and Financial Reporting — Our creditors have accelerated and in the future may accelerate amounts due under our loan agreements due to our failure to comply with our payment and other obligations,” “Item 3. Key Information — Risk Factors — Risks Relating to Our Financial Condition and Financial Reporting — We may be unable to restructure all of our indebtedness or we may fail to comply with the new terms of the restructured indebtedness” and “Item 3. Key Information — Risk Factors — Risks Relating to Our Financial Condition and Financial Reporting — We have a substantial amount of outstanding indebtedness with restrictive financial covenants and most shares and assets in our subsidiaries are pledged.”

The table below sets out restrictive financial covenants we were required to comply with under our most significant loan agreements with Russian state banks as of December 31, 2018.

<u>Restrictive Covenant</u>	<u>Requirement</u>	<u>Actual as of December 31, 2018</u>
Mechel’s Net Borrowings ⁽¹⁾ to EBITDA ratio	Shall not exceed 6.0:1	6.39:1
Mechel’s Total Borrowings to EBITDA ratio	Shall not exceed 4.5:1	6.25:1
Mechel’s EBITDA ⁽²⁾ to Net Interest Expense ratio	Shall not be less than 1.75:1	1.79:1
Mechel’s EBITDA to Consolidated Financial Expense ratio . . .	Shall not be less than 1.75:1	1.82:1
Mechel’s Cash flow from operating activities to EBITDA ratio	Shall not be less than 0.8:1	0.90:1
Mechel’s EBITDA to Revenues ratio	Shall not be less than 0.2:1	0.24:1

(1) Net Borrowings and Total Borrowings are calculated according to the respective definitions set by the credit agreements. Generally, Total Borrowings includes outstanding loans, finance lease, bonds and other financial liability balances; Net Borrowings is equal to Total Borrowings less cash and cash equivalents.

(2) EBITDA is calculated according to the respective definitions set by the credit agreements and may differ from the disclosed Consolidated Adjusted EBITDA.

As of December 31, 2018, we were in compliance with the financial covenants contained in the group’s restructured loan agreements with Russian state banks, except for the Net Borrowings to EBITDA ratio and the Total Borrowings to EBITDA ratio which were breached. We have requested the relevant lenders to waive our financial covenants breaches. As of the date hereof, we did not obtain the required waivers with respect to the breaches of the financial covenants.

Our restructured loan agreements contain a number of non-financial covenants, including but not limited to restrictions on new debt, intra-group loans, new guarantees and/or security, maximum level of indebtedness in respect of various payment obligations, minimum level of net assets, maximum allowed level of legal claims, various information and certain other covenants. The covenants also include limitations on the amount of dividends on our common and preferred shares, and amounts that can be spent for capital expenditures, new investments and acquisitions.

As of December 31, 2018, we were in breach of a number of non-financial covenants under our restructured loan agreements. Such covenant breaches include, among others, the breach of minimum level of the borrowers' net assets, share pledge without the prior consent of the lenders and guarantees provision. We have requested the lenders to waive certain breaches of the non-financial covenants under the group's restructured loan agreements.

As of December 31, 2018, we failed to pay scheduled principal and interest amounts and we were in breach of most financial and non-financial covenants under the group's non-restructured loan agreements with ECA-lenders. In particular, financial covenants we were not in compliance with include the Net Borrowings to EBITDA ratio and the EBITDA to Net Interest Expense ratio, as well as the targeted amount of Adjusted Shareholder Equity. As of the date hereof, we did not remedy or obtain the required waivers with respect to the failure to pay amounts due and the breaches of the financial and non-financial covenants under the applicable loan agreements.

The failure to pay the scheduled principal and interest amounts as described above, as well as the breach of financial and other covenants in our loan agreements, which were not remedied by us or waived by our creditors, permit the creditors under those loan agreements to accelerate the payment of principal and interest under those loan agreements, as well as trigger cross-default provisions under a number of other facilities, permitting the respective lenders under such other facilities to accelerate the payment of principal and interest under their loans. For a description of the current terms of our loan agreements, see “— Description of Certain Indebtedness” and “Item 10. Additional Information — Material Contracts.”

The failure to pay amounts due, the non-compliance with financial and non-financial covenants and the triggering of the cross-default provisions resulted in the reclassification of our group's long-term debt into short-term liabilities in the amount of RUB 361,328 million as of December 31, 2018.

For a description of the existing payment defaults, breaches of covenants and restrictions, see “Item 13. Defaults, Dividend Arrearages and Delinquencies.”

Our ability to meet the debt covenants has been estimated on the basis of our short-term budgets and long-term projection (the “**Projection**”) of the company. The Projection combines production plans by entities, key products and cost items price dynamics, maintenance and project capital investment program, loans portfolio and repayment schedule and other budgeted and projected items. It includes income and cash flow statements on consolidated level which is being used for purposes of debt covenants calculation. The Projection is prepared using assumptions that comparable market participants would use.

To forecast key product prices, exchange rates dynamics and inflation rates we use a wide variety of sources including the following institutions: Ministry of Economic Development of the Russian Federation, leading investment banks, CRU, Metal Expert, MMI, World Bank, Oxford Economics, Consensus Economics, etc. along with our own estimates.

As of December 31, 2018, we projected the following financial covenant ratios for the forthcoming six-month and 12-month periods, which we are required to comply with under our most significant loan agreements:

<u>Restrictive Covenant</u>	<u>Requirement</u>	<u>Projection as of June 30, 2019</u>	<u>Projection as of December 31, 2019</u>
Mechel's Net Borrowings to EBITDA ratio	Shall not exceed 6.0:1	6.2:1	5.7:1
Mechel's Total Borrowings to EBITDA ratio	Shall not exceed 3.5:1	6.3:1	5.7:1
Mechel's EBITDA to Net Interest Expense ratio	Shall not be less than 2.0:1	2.4:1	2.6:1
Mechel's EBITDA to Consolidated Financial Expense ratio	Shall not be less than 2.0:1	2.4:1	2.6:1
Mechel's Cash flow from operating activities to EBITDA ratio	Shall not be less than 0.8:1	0.9:1	0.8:1
Mechel's EBITDA to Revenues ratio	Shall not be less than 0.2:1	0.22:1	0.21:1

The significant assumptions underlying our debt covenant determination are projected product prices, sales volumes, cost dynamics, inflation rates and discount rates. Some of these assumptions may deviate from our historical results primarily due to the market upturns in recent years. All these material assumptions are based on our projections and are subject to risk and uncertainty. See "Item 3. Key Information — Risk Factors — Risks Relating to Our Financial Condition and Financial Reporting — Our creditors have accelerated and in the future may accelerate amounts due under our loan agreements due to our failure to comply with our payment and other obligations."

Description of Certain Indebtedness

See "Item 10. Additional Information — Material Contracts" for a summary description of material contracts related to our indebtedness. In addition, we have described below certain additional contracts related to our indebtedness. For more information, see "Item 5. Operating and Financial Review and Prospects — Liquidity and Capital Resources — Restrictive Covenants," "Item 13. Defaults, Dividend Arrearages and Delinquencies" and note 11.1 to the consolidated financial statements.

Credit Facility Agreement for Yakutugol from Gazprombank

General

On February 6, 2009, our subsidiary Yakutugol entered into a credit facility agreement with Gazprombank for a total amount of \$550.0 million for the purposes of funding financial and operating activities, including funding affiliates and credit repayments. The facility was initially repayable in quarterly installments starting from the first quarter of 2010 through the first quarter of 2012, however in February 2010 the final maturity was extended until February 2015.

In August and December 2015, Yakutugol signed amendments to the credit facility agreement with Gazprombank to restructure debt totaling \$103.1 million. In March 2016, the loan amount was converted into rubles resulting in the debt of 6.9 billion rubles, and the restructuring of the credit facility became effective.

In June 2016, Yakutugol entered into an amendment to its credit facility agreement under which accrued and unpaid interest in the amount of 584.7 million rubles was capitalized. We repaid this amount and interest accrued on it during the period from April 15, 2017 to March 30, 2018.

Interest rate and interest period

Starting from the effective date, the interest is payable monthly at the CBR key rate plus 1.5% per year.

During the grace period, we apply payable interest rate for interest repayment. The remaining unpaid interest is being capitalized and paid in accordance with the principal repayment schedule. Payable interest rate: 8.75% if our Total Borrowings/EBITDA ratio is equal to 6.01 or above; 9.50% if our Total Borrowings/EBITDA ratio is equal to or above 5.01 and less than 6.00; and 10.50% if our Total Borrowings/EBITDA ratio is equal to or above 4.01 and less than 5.00. If our Total Borrowings/EBITDA ratio is 4.00 or less, the accrued interest shall be paid in full. In all of the above cases, payable interest rate shall not exceed the CBR key rate plus 1.5% per year.

Repayment and prepayments

The final maturity date is April 20, 2022. Repayment is to be made in equal monthly installments starting from April 15, 2020. The borrower may prepay the loan in full or in part with a 30 day prior notice to the lender.

Guarantee

The borrower's obligations under the credit facility are guaranteed by Mechel Mining, Mechel Carbon, Korshunov Mining Plant, Urals Stampings Plant, Chelyabinsk Metallurgical Plant, Mechel and Southern Kuzbass Coal Company.

Security

The borrower's obligations are secured by a pledge of 25%+1 share in each of Korshunov Mining Plant, Port Posiet, Izhstal, Chelyabinsk Metallurgical Plant, Beloretsk Metallurgical Plant and Urals Stampings Plant, 45%+1 share of Southern Kuzbass Coal Company, 50%+1 share of Yakutugol, 25%+1 share of Mechel Mining and 25% of registered capital of Port Temryuk. In March 2016, we mortgaged the Ulak-Elga rail line under the credit facility agreement.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain financial and non-financial covenants.

Under the credit facility agreement, Mechel group's ratio of Total Borrowings to EBITDA shall not exceed 4.5:1 in 2018, 3.5:1 in 2019 and 3.0:1 in 2020. Mechel group's ratio of EBITDA to Consolidated Financial Expense shall not be less than 1.75:1 in 2018, 2.0:1 in 2019 and 2.5:1 in 2020. During the period from 2017 to 2020, we also have to comply with the ratios of Cash flow from operating activities to EBITDA and EBITDA to Revenues at the levels of 80% and 20%, respectively.

The credit facility contains certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control provisions and cross-defaults relating to other debt.

The credit facility agreement is governed by Russian law.

Credit Facility Agreements for Yakutugol and Southern Kuzbass Coal Company from VTB Bank

General

In September 2010, our subsidiaries Yakutugol and Southern Kuzbass Coal Company each entered into agreements further amending the one-year credit facility agreements executed with VTB Bank in November 2008 and further amended in November 2009, for the total amount of 13.6 billion rubles. In April 2012, we amended the credit facility agreements to extend their term until 2015 and change certain financial covenants.

In April 2014, VTB Bank converted the 13.6 billion ruble loan into U.S. dollars; as a result the debt of Yakutugol and Southern Kuzbass Coal Company amounted to \$461.8 million. In July 2014, the debt was converted back into rubles and Yakutugol and Southern Kuzbass Coal Company signed amendments to the credit facility agreements in the amount of 5.8 billion rubles and 10.0 billion rubles (approximately \$103.4 million and \$177.9 million as of December 31, 2014), respectively, providing for an extension of the repayment grace period until April 2015 and the final maturity until April 2018.

In September 2015, Yakutugol and Southern Kuzbass Coal Company signed amendments to their credit facility agreements with VTB Bank to restructure debt in the total amount of 15.8 billion rubles (approximately \$217.1 million as of December 31, 2015), providing for an extension of the repayment grace period until April 2017 and the final maturity until April 2020. The restructuring came into effect on October 13, 2015.

In December 2016, Yakutugol and Southern Kuzbass Coal Company signed amendments to their credit facility agreements with VTB Bank which provide for an extension of the repayment grace period until April 2020 and the final maturity until April 2022.

Interest rate and interest period

Interest under the credit facilities is payable monthly at the CBR key rate plus 1.5% per year. The lender may increase the interest rate by 1% per year if the borrowers fail to meet certain obligations under the credit facilities.

During the grace period, we apply payable interest rate for interest repayment. The remaining unpaid interest is being capitalized and paid on the final maturity date. Payable interest rate: 8.75% if our Net Borrowings/EBITDA ratio is equal to 6.01 or above; 9.50% if our Net Borrowings/EBITDA ratio is equal to or above 5.01 and less than 6.00; and 10.50% if our Net Borrowings/EBITDA ratio is equal to or above 4.01 and less than 5.00. If our Net Borrowings/EBITDA ratio is 4.00 or less, the accrued interest shall be paid in full.

Repayment and prepayments

The final maturity of the credit facilities for both Southern Kuzbass Coal Company and Yakutugol is April 6, 2022. Each of the facilities is to be repaid in equal monthly installments starting on April 6, 2020. Prepayment for all or part of the loan amounts is allowed subject to simultaneous compliance with certain requirements.

Guarantee

The borrowers' obligations are guaranteed by Mechel Mining, Mechel Carbon, Mechel Carbon Singapore, Mechel Trading, Korshunov Mining Plant, Urals Stampings Plant, Chelyabinsk Metallurgical Plant, Mechel and cross guarantee between Southern Kuzbass Coal Company and Yakutugol.

Security

The borrowers' obligations are secured by a pledge of 25%-3 shares of Yakutugol, 25%+1 share of Southern Kuzbass Coal Company, 25%+1 share of Korshunov Mining Plant, 25%+1 share of Urals Stampings Plant and 46.66%-1 share of Chelyabinsk Metallurgical Plant.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain non-financial covenants.

Under the credit facility agreements, Mechel group's ratio of Net Borrowings to EBITDA shall not exceed 7.00:1 until December 31, 2018, 6.00:1 until December 31, 2019, 5.00:1 until December 31, 2020 and thereafter. Mechel group's ratio of EBITDA to Net Interest Expense shall not be less than 1.75:1 until December 31, 2018, 2.00:1 until December 31, 2019, 2.25:1 until December 31, 2020 and thereafter. Financial covenants are tested semi-annually.

The credit facility agreements contain certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control and cross-defaults relating to other debt, as well as limitations on payment of dividends, acquisitions and disposals and non-core transactions.

The credit facility agreements are governed by Russian law.

Credit Facility Agreement for Chelyabinsk Metallurgical Plant from Sberbank

General

On October 13, 2010, Sberbank opened a credit line for Chelyabinsk Metallurgical Plant in the total amount of 15.0 billion rubles to refinance short-term debt. On December 19, 2013, the borrower and Sberbank entered into an amendment agreement by extending the term of the facility by five years with a repayment grace period until March 30, 2015 and amending the security structure. As of December 31, 2015, the facility was fully drawn.

In February 2016, Chelyabinsk Metallurgical Plant signed an amendment to its credit facility agreement with Sberbank to restructure debt in the total amount of 15.0 billion rubles. The amendment became effective upon signing, and all overdue interest payments were capitalized, except for an agreed amount which was paid in June 2016.

In December 2016, part of the principal was restructured to be paid according to the agreed schedule (final repayment month is October 2017). In 2016-2017, we repaid 4.5 billion rubles reducing the loan principal amount to 10.5 billion rubles. In October 2017, Chelyabinsk Metallurgical Plant entered into an amendment to the credit facility agreement under which we are required to repay 123.6 million rubles in May 2018 and 4.4 billion rubles starting from January 10, 2020. In May 2018, we repaid the required amount.

Interest rate and interest period

Interest under the credit facility is payable monthly at the CBR key rate plus 1.5% per year. The lender may change the interest rate to the CBR key rate plus 3.5% per year if our Total Borrowings/EBITDA ratio is 4.00 or less.

During the grace period, we apply payable interest rate for interest repayment. The remaining unpaid interest is being capitalized and paid on the final maturity date. Payable interest rate: (key rate + 1.5%) \times 0.6 if our Total Borrowings/EBITDA ratio is above 6.01; (key rate + 1.5%) \times 0.7 if our Total Borrowings/EBITDA ratio is above 5.01 and equal to or less than 6.01; and (key rate + 1.5%) \times 0.8 if our Total Borrowings/EBITDA ratio is above 4.01 and equal to or less than 5.01. If our Total Borrowings/EBITDA ratio is 4.01 or less, the accrued interest shall be paid in full. In all of the above cases, payable interest rate shall not be less than 8.75% per year.

Repayment and prepayments

The final maturity date is April 10, 2022. Repayment is to be made in equal monthly installments starting from January 10, 2020. The borrower may prepay the loan in full or in part with prior notice to the lender.

Guarantee

The borrower's obligations under the credit facility agreement are guaranteed by Mechel, Mecheltrans, Mechel Service, Bratsk Ferroalloy Plant, Izhstal, Yakutugol, Korshunov Mining Plant, Southern Kuzbass Coal Company and Mechel Mining.

Security

Starting from March 2016, the credit facility shares one security package with other Sberbank credit facilities: a pledge of 25%+1 share of Mechel Mining, a pledge of 25%+1 share of Beloretsk Metallurgical Plant, pledges of movable assets and mortgage over immovable assets of other Sberbank borrowers within Mechel group.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain financial and non-financial covenants.

Under the credit facility agreement, Mechel group's ratio of Total Borrowings to EBITDA shall not exceed 4.5:1 as of December 31, 2018, 3.5:1 as of June 30, 2019 and December 31, 2019, 3.0:1 as of June 30, 2020 and thereafter. Mechel group's ratio of EBITDA to Consolidated Financial Expense shall not fall below 1.75:1 as of December 31, 2018, 2.0:1 as of June 30, 2019 and December 31, 2019, 2.5:1 as of June 30, 2020 and thereafter.

The credit facility agreement contains certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control and cross-defaults to other debt.

The credit facility agreement is governed by Russian law.

Credit Facility for Mechel Trading from VTB Bank

General

In December 2013, Mechel Trading and Sberbank entered into an amendment to the existing \$100.0 million credit facility (two tranches for \$25.0 million and \$75.0 million) by extending the term of the facility by five years with a repayment grace period until March 2015 and amending the security structure. The purpose of the credit facility was working capital, intra-group and pre-export financing. As of December 31, 2015, the facility was fully drawn.

In February 2016, Mechel Trading signed an amendment to its credit facility with Sberbank to restructure debt totaling \$100.0 million. The amendment became effective upon signing, and all overdue interest payments were capitalized, except for an agreed amount which was paid in June 2016.

In April 2017, the credit facility was assigned by Sberbank to VTB Bank. The terms and conditions of the facility agreement remained unchanged, except for the security package which was not assigned.

Interest rate and interest period

Interest under both tranches is payable monthly at 3M LIBOR plus a margin of 7% per year.

During the grace period, we apply payable interest rate for interest repayment. The remaining unpaid interest is being capitalized and paid on the final maturity date. Payable interest rate and capitalization depend on the ratio of our Total Borrowings to EBITDA: 3M LIBOR+5% and 2% is being capitalized if Total Borrowings/EBITDA ratio is above 6.01; 3M LIBOR+5.5% and 1.5% is being capitalized if Total Borrowings/EBITDA ratio is above 5.01 and equal to or less than 6.01; and 3M LIBOR+6% and 1% is being capitalized if Total Borrowings/EBITDA ratio is above 4.01 and equal to or less than 5.01. If our Total Borrowings/EBITDA ratio is 4.01 or less, the accrued interest shall be paid in full.

Repayment and prepayments

The final maturity date is April 10, 2022. Repayment is to be made in equal monthly installments starting from January 10, 2020. The borrower may prepay the loan in full or in part with prior notice to the lender.

Guarantee

The borrower's obligations under the credit facility are guaranteed by Mechel, Mecheltrans, Mechel Service, Bratsk Ferroalloy Plant, Izhstal, Yakutugol, Korshunov Mining Plant, Southern Kuzbass Coal Company, Chelyabinsk Metallurgical Plant and Mechel Mining.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain financial and non-financial covenants.

Under the credit facility agreement, Mechel group's ratio of Total Borrowings to EBITDA shall not exceed 4.5:1 as of December 31, 2018, 3.5:1 as of June 30, 2019 and December 31, 2019, 3.0:1 as of June 30, 2020 and thereafter. Mechel group's ratio of EBITDA to Consolidated Financial Expense shall not fall below 1.75:1 as of December 31, 2018, 2.0:1 as of June 30, 2019 and December 31, 2019, 2.5:1 as of June 30, 2020 and thereafter.

The credit facility agreement contains certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control and cross-defaults to other debt.

The credit facility agreement is governed by Russian law.

Credit Facility Agreement for Chelyabinsk Metallurgical Plant from Sberbank

General

On December 19, 2013, Sberbank opened a credit line for Chelyabinsk Metallurgical Plant in a total amount of 12.4 billion rubles for a period of five years with a repayment grace period until March 28, 2015. The purpose of the credit line was redemption of Mechel's bonds and financing of day-to-day operations. As of December 31, 2015, the facility was fully drawn.

In February 2016, Chelyabinsk Metallurgical Plant signed an amendment to its credit facility agreement with Sberbank to restructure debt in the total amount of 12.4 billion rubles. The amendment became effective upon signing, and all overdue interest payments were capitalized, except for an agreed amount which was paid in June 2016.

In December 2016, part of the principal was restructured to be paid according to the agreed schedule (final repayment month is July 2017). In 2017, we repaid 1.2 billion rubles reducing the loan principal amount to 11.2 billion rubles.

Interest rate and interest period

Interest under the credit facility is payable monthly at the CBR key rate plus 1.5% per year. The lender may change the interest rate to the CBR key rate plus 3.5% per year if our Total Borrowings/EBITDA ratio is 4.00 or less.

During the grace period, we apply payable interest rate for interest repayment. The remaining unpaid interest is being capitalized and paid on the final maturity date. Payable interest rate: (key rate +1.5%)×0.6 if our Total Borrowings/EBITDA ratio is above 6.01; (key rate +1.5%)×0.7 if our Total Borrowings/EBITDA ratio is above 5.01 and equal to or less than 6.01; and (key rate +1.5%)×0.8 if our Total Borrowings/EBITDA ratio is above 4.01 and equal to or less than 5.01. If our Total Borrowings/EBITDA ratio is 4.01 or less, the accrued interest shall be paid in full. In all of the above cases, payable interest rate shall not be less than 8.75% per year.

Repayment and prepayments

The final maturity date is April 10, 2022. Repayment is to be made in equal monthly installments starting from January 10, 2020. The borrower may prepay the loan in full or in part with prior notice to the lender.

Guarantee

The borrower's obligations under the credit facility agreement are guaranteed by Mechel, Mecheltrans, Mechel Service, Bratsk Ferroalloy Plant, Izhstal, Yakutugol, Korshunov Mining Plant, Southern Kuzbass Coal Company and Mechel Mining.

Security

Starting from March 2016, the credit facility shares one security package with other Sberbank credit facilities: a pledge of 25%+1 share of Mechel Mining, a pledge of 25%+1 share of Beloretsk Metallurgical Plant, pledges of movable assets and mortgage over immovable assets of other Sberbank borrowers within Mechel group.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain financial and non-financial covenants.

Under the credit facility agreement, Mechel group's ratio of Total Borrowings to EBITDA shall not exceed 4.5:1 as of December 31, 2018, 3.5:1 as of June 30, 2019 and December 31, 2019, 3.0:1 as of June 30, 2020 and thereafter. Mechel group's ratio of EBITDA to Consolidated Financial Expense shall not fall below 1.75:1 as of December 31, 2018, 2.0:1 as of June 30, 2019 and December 31, 2019, 2.5:1 as of June 30, 2020 and thereafter.

The credit facility agreement contains certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control and cross-defaults to other debt.

The credit facility agreement is governed by Russian law.

Credit Facility Agreement for Chelyabinsk Metallurgical Plant from VTB Bank

General

In September 2015, Chelyabinsk Metallurgical Plant entered into an approximately 8.0 billion ruble (as calculated based on the market spot rate as of October 27, 2015) credit facility agreement with VTB Bank to refinance debts of Skyblock Limited totaling \$107.7 million, consisting of principal and interest in the amount of \$101.9 million and \$5.8 million, respectively, and of HBL Holding GmbH totaling €14.5 million, provided by VTB Bank. The facility had a grace period until April 2017 and the final maturity until April 2020.

In December 2016, Chelyabinsk Metallurgical Plant signed an amendment to its credit facility agreement with VTB Bank which provides for an extension of the repayment grace period until April 2020 and the final maturity until April 2022.

Interest rate and interest period

Interest under the credit facility is payable monthly at the CBR key rate plus 1.5% per year. The lender may increase the interest rate by 1% per year if the borrower fails to meet certain obligations under the credit facility.

During the grace period, we apply payable interest rate for interest repayment. The remaining unpaid interest is being capitalized and paid on the final maturity date. Payable interest rate: 8.75% if our Net

Borrowings/EBITDA ratio is equal to 6.01 or above; 9.50% if our Net Borrowings/EBITDA ratio is equal to or above 5.01 and less than 6.00; and 10.50% if our Net Borrowings/EBITDA ratio is equal to or above 4.01 and less than 5.00. If our Net Borrowings/EBITDA ratio is 4.00 or less, the accrued interest shall be paid in full.

Repayment and prepayments

The credit facility is repayable in equal monthly installments starting on April 6, 2020. The final maturity date is April 6, 2022. The borrower may prepay the loan in full or in part subject to simultaneous compliance with certain requirements.

Guarantee

The borrower's obligations are guaranteed by Southern Kuzbass Coal Company, Korshunov Mining Plant, Urals Stampings Plant, Mechel, Yakutugol, Mechel Mining, Mechel Trading, Mechel Carbon Singapore and Mechel Carbon.

Security

The borrower's obligations are secured by a pledge of 25%-3 shares of Yakutugol, 25%+1 share of Southern Kuzbass Coal Company, 25%+1 share of Korshunov Mining Plant, 25%+1 share of Urals Stampings Plant and 46.66%-1 share of Chelyabinsk Metallurgical Plant.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain non-financial covenants.

Under the credit facility agreement, Mechel group's ratio of Net Borrowings to EBITDA shall not exceed 7.00:1 until December 31, 2018, 6.00:1 until December 31, 2019, 5.00:1 until December 31, 2020 and thereafter. Mechel group's ratio of EBITDA to Net Interest Expense shall not be less than 1.75:1 until December 31, 2018, 2.00:1 until December 31, 2019, 2.25:1 until December 31, 2020 and thereafter. Financial covenants are tested semi-annually.

The credit facility contains certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control and cross-defaults relating to other debt, as well as limitations on payment of dividends, acquisitions and disposals and non-core transactions.

The credit facility agreement is governed by Russian law.

Credit Facility for Elgaugol from Vnesheconombank

General

On September 20, 2017, our subsidiary Elgaugol and Vnesheconombank signed a credit facility agreement for a total amount of up to \$190.0 million to refinance our debt obligations of approximately \$183.1 million under the project financing for the development of the Elga coal deposit. Repayment under the credit facility has started in October 2017. The final maturity date is April 30, 2022.

Interest rate and interest period

Interest is payable quarterly at a fixed rate of 5.45% per year. The lender may increase the interest rate by 1% or 2.5-5% per year if the borrower fails to meet certain obligations, including payment obligations, under the credit facility.

Repayment and prepayments

Repayment is to be made in two tranches. The second tranche is repayable in 6 equal monthly installments starting from October 2017. The first tranche is repayable quarterly according to the following schedule: (i) in the amount of \$2.5 million plus additional payment which depends on financial results of Elgaugol from January 2018 to October 2019; and (ii) in the amount of \$10.0 million from January 2020 to April 2022. The remaining amount is to be paid in April 2022.

Security

The credit facility is secured by a pledge of 49% of registered capital of Elgaugol, 30% of shares of Korshunov Mining Plant, a pledge of Elgaugol proprietary land and land lease rights, a pledge of immovable property of Elgaugol including construction in progress and a pledge over all movable property of Elgaugol with a book value over one million rubles per unit.

Covenants and other matters

Under the credit facility, Debt Service Coverage Ratio shall not fall below 1.05. This financial covenant is tested annually.

The credit facility agreement contains certain customary representations and warranties, affirmative covenants, notice provisions and events of default.

The credit facility agreement is governed by Russian law.

Russian bonds

On July 30, 2009, we placed series 04 non-convertible interest-bearing bonds in an aggregate principal amount of 5.0 billion rubles. The bonds were registered with the FFMS and admitted to trading and listed on MICEX (currently Moscow Exchange). The bonds were secured by a guarantee from Yakutugol until July 2016. The proceeds were used to fund the construction of the Elga coal complex. The bonds were due on July 21, 2016. The bonds bear a coupon to be paid quarterly. The annual interest rate for the first 12 coupons was set at 19%, for the 13-16 coupons was set at 11.25%, for the 17-22 coupons was set at 13%, for the 23-24 coupons was set at 8% and for the 25-28 coupons was set at 2%. We partially redeemed the bonds ahead of maturity on July 29, 2013 in the amount of 1.349 billion rubles, on January 27, 2014 in the amount of 1.276 billion rubles, on July 28, 2014 in the amount of 858 million rubles, on January 26, 2015 in the amount of 325 million rubles and on July 27, 2015 in the amount of 372.43 million rubles. In July 2016, we restructured the series 04 bonds. On June 20, 2016, we published public irrevocable offers through which the bondholders were proposed to amend current schedules of redemption of the bonds and to waive the right to demand early redemption of the bonds. On July 7, 2016, the majority of the series 04 bondholders approved the new terms at the general meeting of bondholders. On July 28, 2016, the CBR registered amendments to the equity documents, including a schedule of partial redemption of the par value. The maturity of the bonds is extended until July 15, 2021. The annual interest rate is set as follows: for the 29 coupon at 13%, for the 30 coupon at 12.5%, for the 31 coupon at 12.75%, for the 32 coupon at 12.625%, for the 33 coupon at 11.75%, for the 34 coupon at 11.5%, for the 35 coupon at 11.125%, for the 36 coupon at 10.875%, for the 37 coupon at 10.375%, for the 38 coupon at 10.5%, for the 39 coupon at 10.625%, for the 40 coupon at $(11\% + (\text{the CBR key rate} + 2.5\%))/2$, for the 41-44 coupons at $(10\% + (\text{the CBR key rate} + 2.5\%))/2$ and for the 45-48 coupons at $(9\% + (\text{the CBR key rate} + 2.5\%))/2$. On each of August 11, 2016 and October 20, 2016, we partially redeemed 3.5% of the par value. On each of January 19, 2017 and April 20, 2017, we partially redeemed 4% of the par value. On each of July 20, 2017, October 19, 2017, January 18, 2018, April 19, 2018, July 19, 2018, October 18, 2018 and January 17, 2019, we partially redeemed 5% of the par value. We intend to gradually redeem 5% of the par value of the series 04 bonds on each of April 18, 2019, July 18, 2019, October 17, 2019, January 16, 2020, April 16, 2020, July 16, 2020, October 15, 2020, January 14, 2021, April 15, 2021 and July 15, 2021.

On September 7, 2010, we placed series 13 and series 14 non-convertible interest-bearing bonds in an aggregate principal amount of 10.0 billion rubles. The bonds were registered with the FFMS and admitted to trading and listed on MICEX (currently Moscow Exchange). The proceeds were used to fund the working capital of our group, refinance the existing loan agreements, as well as to finance the construction of the Elga coal complex and other investment projects of our group. The bonds bear a coupon to be paid on a semi-annual basis. The interest rate for the first 10 coupons was set at 10% per annum. In September 2015, we restructured the debt under series 13 and series 14 bonds. We were entitled to redeem the bonds on September 3, 2015, but failed to fulfill our obligations. On September 14, 2015, we published public irrevocable offers through which the bondholders were proposed to amend current schedules of redemption of the bonds and to waive the right to demand early redemption of the bonds. On September 17, 2015, the majority of the series 13 and 14 bondholders approved the new terms at the general meeting of bondholders. On October 21, 2015, the CBR registered amendments to the equity documents. The bonds are due on February 25, 2020. The annual interest rate is set as follows: for the 11-13 coupons at 15%, for the 14-15 coupons at 14%, for the 16-17 coupons at 12.25% and for the 18-19 coupons at 11.875%. In accordance with the new terms, we had to redeem the bonds amounting up to 500,000 bonds of each series on September 28, 2015 and amounting up to 250,000 bonds of each series on March 1, 2016 and August 30, 2016. On each of February 28, 2017, August 29, 2017 and February 27, 2018, we partially redeemed 10% of the par value. On each of August 28, 2018 and February 26, 2019, we partially redeemed 15% of the par value. We intend to gradually redeem 20% of the par value of both series of the bonds on each of August 27, 2019 and February 25, 2020. On September 28, 2015, we partially redeemed the bonds of both series in the total amount of 999.34 million rubles which equaled to 999,341 bonds. On March 1, 2016, we partially redeemed the bonds of both series in the total amount of 485.1 million rubles which equaled to 485,089 bonds. On August 30, 2016, we partially redeemed the bonds of both series in the total amount of 499.65 million rubles which equaled to 499,654 bonds.

On February 22, 2011, we placed series 15 and series 16 non-convertible interest-bearing bonds in an aggregate principal amount of 10.0 billion rubles. The bonds were registered with the FFMS and admitted to trading and listed on MICEX (currently Moscow Exchange). The proceeds were used to fund the working capital of our group, refinance the existing loan agreements, as well as to finance the construction of the Elga coal complex and other investment projects of our group. The bonds are due on February 9, 2021. The bonds bear a coupon to be paid on a semi-annual basis. The annual interest rate for the first 6 coupons was set at 8.25%, for the 7-8 coupons was set at 13%, for the 9-11 coupons was set at 8% and for the 12-20 coupons was set at 8%. We partially redeemed the series 15 and series 16 bonds ahead of maturity on February 20, 2014 in the amount of 8.149 billion rubles, on August 21, 2014 in the amount of 75 million rubles and on February 19, 2015 in the amount of 37.2 million rubles. On August 18, 2016, we partially redeemed the series 15 bonds in the amount of 6.16 million rubles. The option to demand early redemption of the series 16 bonds was replaced with the novation agreement approved at the general meeting of bondholders on August 4, 2016.

On June 9, 2011, we placed series 17 and series 18 non-convertible interest-bearing bonds in an aggregate principal amount of 10.0 billion rubles. The bonds were registered with the FFMS and admitted to trading and listed on MICEX (currently Moscow Exchange). The proceeds were used to refinance our short-term debt. The bonds are due on May 27, 2021. The bonds bear a coupon to be paid on a semi-annual basis. The interest rate for the first 10 coupons was set at 8.40% per annum. In June 2016, we restructured the debt under series 17 and series 18 bonds. On May 11, 2016, we published public irrevocable offers through which the bondholders were proposed to amend current schedules of redemption of the bonds and to waive the right to demand early redemption of the bonds. On May 25, 2016, the majority of the series 17 and 18 bondholders approved the new terms at the general meeting of bondholders. On June 28, 2016, the CBR registered amendments to the equity documents, including a schedule of partial redemption of the par value. The annual interest rate is set as follows: for the 11 coupon at 13.5%, for the 12 coupon at 13%, for the 13-14 coupons at 12.125%, for the 15-16 coupons at 10.625%, for the 17-18 coupons at $(10.5\% + (\text{the CBR key rate} + 2.5\%))/2$ and for the 19-20 coupons at $(9.5\% + (\text{the CBR key rate} + 2.5\%))/2$. We partially redeemed 3.5% of the par value on each of July 12, 2016 and September 1, 2016 and 4% of the par value on each of December 1, 2016 and March 2, 2017. On each of June 1, 2017, August 31, 2017, November 30, 2017, March 1, 2018, May 31, 2018, August 30, 2018, November 29,

2018 and February 28, 2019, we partially redeemed 5% of the par value. We intend to gradually redeem 5% of the par value of both series of the bonds on each of May 30, 2019, August 29, 2019, November 28, 2019, February 27, 2020, May 28, 2020, August 27, 2020, November 26, 2020, February 25, 2021 and May 27, 2021.

On June 14, 2011, we placed series 19 non-convertible interest-bearing bonds in an aggregate principal amount of 5.0 billion rubles. The bonds were registered with the FFMS and admitted to trading and listed on MICEX (currently Moscow Exchange). The proceeds were used to refinance our short-term debt. The bonds are due on June 1, 2021. The bonds bear a coupon to be paid on a semi-annual basis. The interest rate for the first 10 coupons was set at 8.40% per annum. In July 2016, we restructured the bonds series 19. On May 11, 2016, we published public irrevocable offers through which the bondholders were proposed to amend current schedules of redemption of the bonds and to waive the right to demand early redemption of the bonds. On May 25, 2016, the majority of the series 19 bondholders approved the new terms at the general meeting of bondholders. On July 21, 2016, the CBR registered amendments to the equity documents, including a schedule of partial redemption of the par value. The annual interest rate is set as follows: for the 11 coupon at 13.5%, for the 12 coupon at 13%, for the 13-14 coupons at 12.125%, for the 15-16 coupons at 10.625%, for the 17-18 coupons at $(10.5\% + (\text{the CBR key rate} + 2.5\%))/2$ and for the 19-20 coupons at $(9.5\% + (\text{the CBR key rate} + 2.5\%))/2$. We partially redeemed 3.5% of the par value on each of August 4, 2016 and September 6, 2016 and 4% of the par value on each of December 6, 2016 and March 7, 2017. On each of June 6, 2017, September 5, 2017, December 5, 2017, March 6, 2018, June 5, 2018, September 4, 2018, December 4, 2018 and March 5, 2019, we partially redeemed 5% of the par value. We intend to gradually redeem 5% of the par value of the series 19 bonds on each of June 4, 2019, September 3, 2019, December 3, 2019, March 3, 2020, June 2, 2020, September 1, 2020, December 1, 2020, March 2, 2021 and June 1, 2021.

In March 2017, Moscow Exchange registered our 30-year exchange-traded bonds program. During the term of this program, we are able to place exchange-traded bonds for a total amount of up to 100.0 billion rubles. However, our ability to implement the program in the future is limited by restrictions under the existing loan agreements and market conditions.

Contractual Obligations and Commercial Commitments

The following table sets forth the amount of our contractual obligations and commercial commitments as of December 31, 2018.

Contractual Obligations and Commercial Commitments	Total	Payments Due by Period			
		Less Than 1 Year	2-3 Years	4-5 Years	More Than 5 Years
		(In millions of Russian rubles)			
Short-Term Borrowings and Current Portion of Long-Term Debt	402,417	402,417	—	—	—
Long-Term Debt Obligations, Net of Current Portion . . .	6,538	—	6,402	104	32
Interest Payable ⁽¹⁾	7,749	7,749	—	—	—
Fines and Penalties on Credit Facilities ⁽²⁾	2,128	2,128	—	—	—
Contractual Commitments to Operating Lease ⁽³⁾	60,911	2,049	4,009	3,982	50,871
Purchase Obligations ⁽⁴⁾	3,054	2,600	454	—	—
Rehabilitation Provision ⁽⁵⁾	3,908	189	479	550	2,690
Pension Obligations ⁽⁶⁾	4,591	772	1,250	759	1,810
Short-Term Finance Lease Obligations	5,880	5,880	—	—	—
Long-Term Finance Lease Obligations	2,413	—	1,453	960	—
Fines and Penalties on Finance Lease Contracts ⁽⁷⁾	384	384	—	—	—
Contractual commitments to acquire plant, property and equipment ⁽⁸⁾	11,801	5,327	806	4,118	1,550
Contractual commitments to acquire intangible assets . . .	110	110	—	—	—
Contractual commitments to acquire raw materials and for delivery of goods and services	90,839	57,779	13,977	7,159	11,924
Estimated interest expense ⁽⁹⁾	173,635	32,007	70,944	70,684	—
Estimated average interest rate ⁽⁹⁾	7.9%	7.5%	8.3%	7.6%	—
Total Contractual Obligations and Commercial Commitments	776,358	519,391	99,774	88,316	68,877

- (1) Interest payable is included in the amount of RUB 7,749 million in the current period amount. In the year ended December 31, 2018, our loan interest expense was RUB 35,556 million and we paid out RUB 32,346 million of loan interest. As of December 31, 2018, interest payable in the amount of RUB 6,305 million was included in the loan principal amount with grace period until April 2020 and final maturity until April 2022 according to debt restructuring agreements.
- (2) In the year ended December 31, 2018, we recognized RUB 858 million penalties on credit facilities. During the period, the amount of RUB 280 million was paid in cash and the finance income in the amount of RUB 17,451 million was recognized due to the effect of restructuring and refinancing of loans.
- (3) The future minimum rentals payable includes our operating lease commitments related to non-cancellable land lease to explore or use of mineral deposits and other facilities of RUB 53,398 million.
- (4) Accounts payable for capital expenditures.
- (5) See note 23 to the consolidated financial statements.
- (6) Includes RUB 3,819 million pension obligations due in more than one year.
- (7) In the year ended December 31, 2018, we recognized RUB 10 million penalties on finance lease contracts. During the period, the amount of RUB 11 million was paid in cash and the amount of RUB 52 million was waived.
- (8) Obligation to be paid within one year in accordance with the contractual terms. See note 16 to the consolidated financial statements.
- (9) Interest expense is estimated for a five-year period based on (1) estimated cash flows, (2) forecasted LIBOR, EURIBOR, the CBR key rate where applicable, (3) actual long-term contract interest rates and fixed rates in accordance with the contractual obligations, (4) potential revolving credit facilities.

As of December 31, 2018, we guaranteed the fulfillment of obligations to third parties for a total amount of RUB nil.

The total carrying and discounted amount of commitments under finance lease contracts as of December 31, 2018 is equal to RUB nil. See note 11.6 to the consolidated financial statements.

Inflation

Inflation in the Russian Federation was 4.3% in 2018, 2.5% in 2017 and 5.4% in 2016. Inflation has generally not had a material impact on our results of operations during the period under review in this section. However, there can be no assurance that inflation will not materially adversely impact our results of operations in the future in case inflation accelerates. See “Item 3. Key Information — Risk Factors — Risks Relating to Our Financial Condition and Financial Reporting — Inflation could increase our costs and decrease operating margins.”

Critical Accounting Policies and Estimates

Basis of preparation of the consolidated financial statements

See note 2 to our consolidated financial statements in “Item 18. Financial Statements.”

Summary of significant accounting policies and standards issued but not effective

See note 3 to our consolidated financial statements in “Item 18. Financial Statements.”

Trend Information

Demand

Mining. The demand for coking coal is dependent on the steel industry, which is directly tied to global economic cycles. In 2016, growth of metallurgical coal imports in China was partially offset by lower imports in Europe and South America, in total global metallurgical coal imports increased by 0.9% compared to the previous year, according to CRU. In 2017, total global metallurgical coal imports increased by 3.6% compared to 2016, which was driven by China and India, according to CRU. In 2018, despite lower metallurgical coal imports in China and Europe, increased demand for seaborne metallurgical coal in India led to higher global metallurgical coal imports by 0.8% compared to 2017, according to CRU.

The steam coal market is driven by non-steel related factors, such as growth in electricity consumption, balance between supply and demand and seasonality. In 2016, total global seaborne steam coal imports changed insignificantly and increased by 0.8%, according to CRU. In 2017, total global seaborne steam coal imports rose by 3.6% due to increased imports in China, South Korea and India, according to CRU. In 2018, total global seaborne steam coal imports increased by 2.9% compared to 2017 due to consumption-driven growth in China and India, according to CRU estimates.

In 2016, global iron ore trade increased by 6.0% due to strong Chinese demand for imported iron ore which hit an all-time high in 2016, according to the Department of Industry, Innovation and Science of Australian Government and CRU. In 2017, global iron ore trade increased by 1.2% due to higher imports of iron ore in China in 2017, which was supported by robust steel production, according to the Department of Industry, Innovation and Science of Australian Government. In 2018, global iron ore trade is estimated to have increased by 2.3% due to higher imports from ex-China countries, according to the Department of Industry, Innovation and Science of Australian Government.

Steel. Russia is our largest market for steel products. In 2016, Russian rolled steel consumption amounted to 40.8 million tonnes, according to Metal Expert. In 2017, it increased by 6.9% and amounted to 43.6 million tonnes, according to Metal Expert. In 2018, rolled steel consumption in Russia increased by 0.9% and amounted to 44.0 million tonnes, according to Metal Expert.

In 2016, exports of steel products increased by 4.0% and amounted to 28.5 million tonnes, according to Metal Expert. The increase was due to the growth in manufacturing of steel products and decrease in domestic supplies. In 2017, exports of steel products decreased by 2.3% and amounted to 27.8 million tonnes as a result of a decline in manufacturing of steel products, according to Metal Expert. In 2018, the volume of steel products exports from Russia grew by 2.4% and amounted to 28.5 million tonnes, according to Metal Expert. The increase related primarily to semi-finished products and was due to favorable conditions on the international market in the first half of the year.

In 2016, imports of steel declined by 6.3% and amounted to 3.8 million tonnes, according to Metal Expert. In 2017, imports of steel increased significantly by 49.6% and amounted to 5.6 million tonnes mostly as a result of the growth in supplies of flat products from Kazakhstan, according to Metal Expert. In 2018, imports of steel slightly increased by 0.5% and amounted to 5.6 million tonnes, according to Metal Expert.

Power. In 2018, the electricity output of our generating facilities decreased by 5% as compared to 2017. Heat energy generated for sale increased by 3%. Power demand in Russia depends on its consumption by the industrial sector. In Russia, the steel and mining industries are major consumers of power and the level of production of steel and mining companies impact demand for power.

Sales

Mining. In 2019, we expect sales volumes of our mining segment to increase as compared to 2018 due to the increase of production volumes at all our coal assets, and the main increase is expected in the production volumes of Southern Kuzbass Coal Company and Yakutugol. We believe that our policy of concluding long-term contracts for coal sales will strengthen our relationships with our customers and will give us long-term presence in both the domestic and export markets.

Steel. Our steel segment sales volumes are expected to increase in 2019 due to the increase in both steel production and the utilization rate of rolling mills, including the universal rolling mill at our subsidiary Chelyabinsk Metallurgical Plant, resulting in the growth of long products, flat products, structural shapes, rebar and rails sales. In addition, we believe that our strategy aimed at increasing the efficiency of the existing distribution network in conjunction with direct sales from our plants to the largest customers will allow us to strengthen our leading position in the market, to provide us with greater stability in steel sales and to improve our cash flow in the current economic slowdown.

Power. In 2019, we expect sales volumes of our power segment to increase as compared to 2018. We do not expect that consumption by small and mid-sized businesses and households, which are also customers of power and heat-supply companies, will change significantly. We plan to expand our sales channels to build a new customer base among small and mid-sized businesses, as well as public utilities. We also plan to optimize our production capacity through further integration of our intra-group assets. We hope that further integration of our power assets, as well as diversification of our customer portfolio will allow us to avoid a fall in power segment sales caused by a decrease in demand from large industrial companies that are shifting their business from power supply companies.

Inventory

Overall, our inventory increased by RUB 5,433 million, or 14.3%, to RUB 43,423 million as of December 31, 2018 from RUB 37,990 million as of December 31, 2017, due to the increase in finished goods production costs, which was due to the increase in raw materials costs.

Costs

Mining. Within our mining segment, we expect our iron ore cash costs per tonne to increase in 2019 as a result of increasing prices of power, explosives, automotive tires and tubes for open pit equipment and land use

fees, while coal cash costs per tonne should remain relatively stable in 2019 as a result of increasing operational efficiency and decreasing semi-fixed costs.

Steel. Excluding the effects of imposition of international sanctions against Russia and exchange rate fluctuations, our steel cash costs per tonne should remain relatively stable in 2019 as a result of achieving cost savings, as well as efficiency and output gains arising as a result of our targeted capital investment program. Specifically, as we continue to introduce operational and technical changes at our plants allowing us to better integrate their products, we expect to be better able to control our costs.

Power. We expect that in 2019 the cost of the production of electricity and heat energy will increase due to an increase in the prices of key raw materials, particularly natural gas, as well as some ancillary materials. We intend to maintain strict control over costs, which should enable us to cut expenditures by reducing fixed production costs, optimizing administrative expenses and increasing productivity to satisfy increased market demand in some regions.

Seasonality

Seasonal effects have a relatively limited impact on our results. Nevertheless, a slowing of demand and, thus, a reduction in sales volumes (and a related increase in inventories) is typically evident in the first and fourth quarters of the financial year as a result of the general reduction in economic activity associated with the New Year holiday period in Russia and elsewhere. We are dependent on the Russian construction market, which also experiences slowdowns in the winter months. By contrast, our power segment sales volumes are generally higher in the first and the fourth quarters of the year, due to increased electricity and steam consumption in the winter period.

Consumption of combustive, lubricative and energy supplies during the winter months is generally higher than during the rest of the year. In addition, railroad carriers demand that iron ore concentrate be fully dried and coal concentrate be partially dried for transportation during the winter months, resulting in higher costs during that time.

Item 6. Directors, Senior Management and Employees

Directors and Executive Officers

Board of Directors

All of our current directors were elected on June 29, 2018, and their terms expire on the date of our next annual general shareholders' meeting, which will take place not later than June 30, 2019. The business and mailing address for all our directors and executive officers is Krasnoarmeyskaya Street 1, Moscow 125167, Russian Federation.

Name	Year of Birth	Position
Igor V. Zyuzin	1960	Chairman
Alexander N. Shokhin ⁽¹⁾	1951	Deputy Chairman
Oleg V. Korzhov ⁽⁴⁾	1970	Director, Chief Executive Officer, Chairman of Management Board
Victor A. Trigubko	1956	Director, Senior Vice President — Government Relations, Member of Management Board
Tigran G. Khachaturov ⁽⁴⁾	1979	Director
Alexander N. Kotsky ⁽¹⁾⁽²⁾⁽⁴⁾	1957	Director
Alexander D. Orishchin ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾	1932	Director
Yuriy N. Malyshev ⁽¹⁾⁽³⁾⁽⁴⁾	1939	Director
Georgy G. Petrov ⁽¹⁾⁽²⁾⁽³⁾	1948	Director

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- (1) Independent Director under the applicable NYSE regulations and Russian regulations.
 - (2) Member of the Audit Committee of the Board of Directors.
 - (3) Member of the Committee on Appointments and Remuneration.
 - (4) Member of the Committee on Investments and Strategic Planning.

Igor V. Zyuzin has been Chairman of our Board of Directors since July 2010. He was our Chief Executive Officer from December 2006 to June 2010 and Chairman of our Management Board from September 2007 to June 2010. He served as Chairman of our Board of Directors from March 2003, when Mechel was founded, to December 2006 and has been a member of our Board of Directors since that time. Mr. Zyuzin has been a member of the Board of Directors of Mechel Mining since April 2008 and Chairman of the Board of Directors of Mechel Mining since July 2018. He held the position of Chief Executive Officer of Mechel Mining from July 2011 to July 2018. Mr. Zyuzin served as Chairman of the Board of Directors of Southern Kuzbass Coal Company from May 1999 to June 2017 and Chairman of the Board of Directors of Yakutugol from June 2013 to June 2017. He was a member of the Board of Directors of Chelyabinsk Metallurgical Plant from June 2001 to April 2017 and a member of the Board of Directors of Yakutugol from October 2007 to June 2017. From July 2011 to April 2014, he was Chairman of the Management Board of Mechel Mining. From April 2008 to June 2011, Mr. Zyuzin served as Chairman of the Board of Directors of Mechel Mining. Mr. Zyuzin has over 30 years of experience in the coal mining industry. Mr. Zyuzin has a degree in technology and complex mechanization of underground mining from the Tula Polytechnic Institute. Mr. Zyuzin also has a degree in mining engineering economics and a Ph.D. in technical sciences in the coal mining field. Mr. Zyuzin may be deemed to be the beneficial owner of approximately 26.67% of our common shares. See “Item 7. Major Shareholders and Related Party Transactions.”

Alexander N. Shokhin has been Deputy Chairman of our Board of Directors since June 2016. He has been President of the Russian Union of Industrialists and Entrepreneurs since 2005. From 2005 to 2009, he was a member of the Public Chamber of the Russian Federation. From 2002 to 2005, he served as Chairman of the Supervisory Board of Renaissance Capital Investment Group. Since 1995, he has been President of the National Research University — Higher School of Economics (HSE), Head of the Department of the Theory and Practice of Business — Government Interaction. Mr. Shokhin has been a member of the Council of the Chamber of Commerce and Industry of the Russian Federation since 2016, a member of Supervisory Board of Agency for Strategic Initiatives since 2011 and a member of Supervisory Board of Agency of Technological Development since 2016. He has been a member of the Board of Directors of Eurasia Drilling Company Limited since 2007, a member of the Board of Directors of TMK PAO since 2008 and a member of the Board of Directors of RSMB Corporation JSC since 2015. From 1994 to 2002, he was a Deputy of the State Duma, as well as he held the posts of First Deputy Chairman of the State Duma, leader of the Duma faction “Our Home is Russia” and chairman of the State Duma’s Credit Institutions and Financial Markets Committee. In 1991-1994 and in 1998, he was Deputy Chairman of the Government of the Russian Federation. In 1991-1994, he also held the positions of Minister of Labor, Minister of Economics, Chairman of the Russian Agency for International Cooperation and Development. Mr. Shokhin graduated from the Lomonosov Moscow State University. He is a D.Sc. in economics, professor.

Oleg V. Korzhov has been a member of our Board of Directors since June 2014. Mr. Korzhov has been our Chief Executive Officer and Chairman of our Management Board since January 2014. He was our Senior Vice President for Economics and Management from February 2012 to December 2013. He has been a member of our Management Board since March 2009. Mr. Korzhov was our Senior Vice President for Business Planning and Analysis from November 2011 to February 2012, and our Vice President for Business Planning and Analysis from April 2009 to October 2011. Mr. Korzhov has been a member of the Board of Directors of Mechel Mining since June 2011. He served as Chairman of the Board of Directors of Mechel Mining from June 2014 to July 2018. He was a member of the Board of Directors of Port Posiet from May 2008 to June 2014, Beloretsk Metallurgical Plant and Mecheltrans from 2010 to 2014, Southern Kuzbass Power Plant from 2009 to 2014, Kuzbass Power Sales Company from 2010 to 2014, Chelyabinsk Metallurgical Plant from 2009 to 2011 and from

June 2014 to June 2015, as well as Vyartsilya Metal Products Plant from 2008 to 2010. From July 2008 to April 2009, he was Deputy Chief Executive Officer for Economics and Finance of Mechel-Steel Management. From September 2005 to January 2006, he served as Economic Planning Director of Mechel and from February 2006 to July 2008 he held the same position at Mechel-Steel Management. From 2003 to 2005, Mr. Korzhov was Director for Finance and Economics of EvrazHolding OOO. From 1998 to 2003, he was Deputy Director for Economic Analysis and Pricing and then Director for Economics of Nizhniy Tagil Iron and Steel Works OAO. Mr. Korzhov has a degree in economics and management in metallurgy from the Urals Polytechnic Institute and a degree in general management from the Academy of National Economy under the Government of the Russian Federation. Mr. Korzhov also has a Ph.D. in economics.

Victor A. Trigubko has been a member of our Board of Directors since June 2016. He has been our Senior Vice President — Government Relations since August 2006 and a member of our Management Board since February 2016. He was a member of our Board of Directors from June 2012 to March 2016. He served as our Vice President — Government Relations from 2005 to August 2006. From 2003 to 2005, he was our Vice President for Representation in Central and Eastern Europe, Chairman of the Board of Directors of Mechel Campia Turzii S.A. and a member of the Board of Directors of Mechel Targoviste S.A. From 2002 to 2003, Mr. Trigubko held the position of Director of Mechel International Holdings AG's representative office in Romania. From 1997 to 2002, he was Head of Izhstal's representative office in Moscow. From 1992 to 1997, he held various executive positions in the metallurgical company Unibros Steel Co. LTD, including Deputy General Director. Mr. Trigubko also worked in the Foreign Relations Department of the USSR State Committee for Labor and Social Issues and in the USSR Trade Representation Office in Romania. Mr. Trigubko has a degree in economics from the Kalinin State University.

Tigran G. Khachaturov has been a member of our Board of Directors since March 2016. Since September 2017, he has been a member of the Management Board of Gazprombank JSC. Since September 2016, he has served as Head for restructured assets management at Gazprombank JSC. From February 2015 to October 2016, he was an Adviser to our Chief Executive Officer for Finance. From July to December 2014, he was an Adviser to Director of Atomenergoprom JSC. From June 2013 to July 2014, he served as First Executive Vice President, as well as Head of Moscow representative office of Uranium One Holding N.V. From August 2007 to May 2013, Mr. Khachaturov was First Deputy General Director and Acting General Director at Atomredmetzoloto OAO. From April 2002 to August 2007, he held various positions at Techsnabexport OJSC, including First Deputy General Director since July 2004. Mr. Khachaturov has a degree in finance and credit from the Plekhanov Russian Academy of Economics.

Alexander N. Kotsky has been a member of our Board of Directors since March 2016. From June 2015 to June 2016, he was a member of the Board of Directors of Port Vanino. From 2008 to 2015, he was a member of the Board of Directors of Southern Kuzbass Coal Company. Mr. Kotsky has a degree in railway engineering from the Novosibirsk Institute of Railway Engineers.

Alexander D. Orishchin has been a member of our Board of Directors since March 2016. He was a member of the Board of Directors of Mechel Mining from June 2010 to June 2014. Mr. Orishchin has a degree in mining from the Tomsk Polytechnic Institute. He also holds a Ph.D. in technical sciences from the Moscow Mining Institute.

Yuriy N. Malyshev has been a member of our Board of Directors since June 2013. Mr. Malyshev is currently President of the State Geological Museum of V.I. Vernadsky. He has been President of the Academy of Mining Sciences of Russia since 1993. He has been a member of the Board of Directors of Acron PJSC since May 2015 and a member of the Board of Directors of Rosgeologia JSC since June 2017. From 2010 to 2016, he served as Chairman of the Board of Directors of OShK Soyuzspetsstroy ZAO. From 1999 to 2013, he was President of the Nonprofit Partnership Russian Mining Operators, and now he is a member of the Supreme Mining Council. Mr. Malyshev has over 50 years of experience in various executive positions in the coal mining industry. He is a member of the Russian Academy of Sciences and has a D.Sc. in technical sciences. He has the honorary title of

Honored Worker of Science and Technology of the Russian Federation. He is the recipient of several prizes and awards, including the order “For Merit to the Motherland” of the third grade, the Order of Honour and all three grades of the “Miner’s Glory” order. Mr. Malyshev has a degree in mining from the Kemerovo Mining Institute.

Georgy G. Petrov has been a member of our Board of Directors since June 2017. Since May 2016, he has served as an Adviser on international issues to the President of the Chamber of Commerce and Industry of the Russian Federation. From April 2002 to May 2016, he was Vice President of the Chamber of Commerce and Industry of the Russian Federation. From 1998 to 2002, Mr. Petrov served as Director of the Department of Economic Cooperation in the Ministry of Foreign Affairs of the Russian Federation, Ambassador-at-large. From 1971 to 1998, he held various positions in the Ministry of Foreign Trade of the USSR and Ministry of Foreign Economic Relations and Trade of the Russian Federation. Mr. Petrov has a degree in international currency and credit relations from the Moscow State Institute of International Relations.

Executive Officers

<u>Name</u>	<u>Year of Birth</u>	<u>Position</u>
Oleg V. Korzhov	1970	Chief Executive Officer, Director, Chairman of Management Board
Victor A. Trigubko	1956	Senior Vice President — Government Relations, Director, Member of Management Board
Valery A. Sheverdin	1963	Vice President for Corporate Security, Member of Management Board
Nelli R. Galeeva	1973	Chief Financial Officer, Member of Management Board
Minas A. Darbinyan	1983	Deputy Chief Executive Officer for Financial Control, Member of Management Board
Irina N. Ipeevea	1963	Director of Legal Department, Member of Management Board
Natalya O. Trubkina	1964	Human Resources Director, Member of Management Board
Pavel V. Shtark	1969	Chief Executive Officer of Mechel Mining Management
Andrey A. Ponomarev	1977	Chief Executive Officer of Mechel-Steel Management
Petr A. Pashnin	1977	Chief Executive Officer of Mechel Energo
Alexey V. Lebedev	1974	Chief Executive Officer of Mecheltrans Management

For brief biographies of Messrs. Korzhov and Trigubko, see “— Board of Directors.”

Valery A. Sheverdin has been our Vice President for Corporate Security since March 2014 and a member of our Management Board since August 2014. From June 2009 to March 2014, Mr. Sheverdin held the positions of our Director of the Department of Safety of Property Complex and Director of the Corporate Security Department. From April 2011 to March 2014, he was Chief Executive Officer of Mechel Garant OOO. From July 2007 to April 2011, he worked in PSC Mechel-Centre OOO, including as General Director from December 2007. From April 2003 to June 2007, Mr. Sheverdin held various positions in Lukom-A Agency ZAO. From February 2001 to March 2003, he was Chairman of the Belgorod regional office of the Russian Fund of Social Progress. From September 1995 to February 2001, he held various executive positions in security agencies. From November 1981 to August 1995, he served in the Armed Forces of the Russian Federation. Mr. Sheverdin graduated from the Moscow Border Institute of the Federal Security Service of the Russian Federation with a degree in law and the Kolomna Higher Artillery Command College of the October Revolution.

Nelli R. Galeeva has been our Chief Financial Officer since January 2018 and a member of our Management Board since July 2016. She has been a member of the Board of Directors of Mechel Mining since March 2018.

From March 2014 to January 2018, she was Director of our Accounting and Tax Department. She served as Chief Accountant of Mechel Mining Management from April 2009 to March 2014 and Chief Accountant of Mechel Mining from May 2008 to April 2009. From August 2005 to May 2008, she was Chief Accountant of Southern Kuzbass Coal Company. From March 2000 to August 2005, Mrs. Galeeva worked at Southern Kuzbass Coal Company, first as chief of consolidated and international reporting department and then as deputy chief accountant, chief of consolidated reporting department. From June 1995 to February 2000, she was an accountant of finance department and then a deputy chief production accountant at Krasnogorsky Open Pit OAO. Mrs. Galeeva has a degree in accounting and audit from the Kuzbass State Technical University and a degree in finance and credit from the Kemerovo State University.

Minas A. Darbinyan has been our Deputy Chief Executive Officer for Financial Control since June 2015 and a member of our Management Board since July 2015. Since May 2017, he serves as an adviser to General Director of GPB Asset Development OOO. He has been a member of the Board of Directors of Chelyabinsk Metallurgical Plant since April 2017 and a member of the Board of Directors of Port Vanino since June 2018. He was a member of the Board of Directors of Port Posiet from March 2016 to June 2017. From November 2013 to January 2015, he served as Director for Strategic Planning at Uranium One Holding N.V., part of state-owned corporation Rosatom. From April to November 2013, he headed Investment Planning and Development Department at Atomredmetzoloto OAO, also part of Rosatom. From May 2011 to April 2013, Mr. Darbinyan was senior consultant at KPMG ZAO. From 2008 to 2011, he held various positions at MIEL-DPM OOO, including Chief Financial Officer since 2010. From 2006 to 2008, he was an assistant to the Vice President-head of Moscow regional office in Moscow Industrial bank. Mr. Darbinyan has a degree in management from the Academy of National Economy under the Government of the Russian Federation and a degree in economics from the State Academic University for Humanities.

Irina N. Ipeeva has been Director of our Legal Department since April 2009 and a member of our Management Board since September 2007. She has been a member of the Board of Directors of Mechel Mining since June 2014 and a member of the Board of Directors of Elgaugol since February 2018. She was a member of the Board of Directors of Southern Kuzbass Coal Company from May 2005 to June 2017. From September 2007 to April 2009, she was our General Counsel, Deputy Director of the Legal Department — Director of the Department of Corporate Governance and Property. From 2003 to 2007, Mrs. Ipeeva held the position of General Counsel and Director of the Department of Corporate Governance and Property. From February to July 2006, she was Director of the Department of Corporate Governance and Property of Mechel-Steel Management. From March to June 2003, Mrs. Ipeeva held the position of Deputy General Director for Property Matters of Ugletmet-Trading OOO. From December 2001 to March 2003, she was Head of the Department for Regulation of Corporate Relations and Property of Southern Kuzbass Coal Company and, from January to November 2001, she was Head of the Share Capital Department. From August 1988 to January 2001, Mrs. Ipeeva worked at the Kuzbassuglebogashcheniye Industrial Amalgamation and the Tomusinskaya Washing Plant, where she held positions ranging from a legal adviser to head of the legal department. Mrs. Ipeeva has a degree in law from the Kuibyshev State University.

Natalya O. Trubkina has been our Human Resources Director since September 2015 and a member of our Management Board since February 2016. From August 2009 to August 2015, she held the position of Human Resources Director of Mechel-Steel Management. She was a member of the Board of Directors of Chelyabinsk Metallurgical Plant from June 2015 to April 2017 and a member of the Board of Directors of Urals Stampings Plant from June 2014 to June 2015. In 2009, she served as Human Resources Director in Souzmetallresource Management Company ZAO. From 2004 to 2009, Mrs. Trubkina worked in United Company RUSAL, including as Head of the Human Resources Department of secondary alloys business since 2006. From 2003 to 2004, she was HR manager in Texas Nafta Industries Inc. From 1994 to 2002, she was HR manager in Belpromstroybank OAO. Mrs. Trubkina has a degree in heat and gas supply and ventilation from the Novopolotsk Polytechnic Institute, as well as a diploma of further education in personnel management psychology from the Lomonosov Moscow State University.

Pavel V. Shtark has been Chief Executive Officer of Mechel Mining Management since July 2013. He was a member of our Management Board from August 2014 to May 2017. He has been a member of the Board of Directors of Moscow Coke and Gas Plant since June 2013, a member of the Board of Directors of Elgaugol since August 2013, a member of the Board of Directors of Mechel Mining, Korshunov Mining Plant and Yakutugol since June 2014 and a member of the Board of Directors of Southern Kuzbass Coal Company since June 2017. He was a member of the Board of Directors of Southern Kuzbass Coal Company from June 2014 to March 2016. He was a member of the Management Board of Mechel Mining from July 2013 to April 2014. From October 2012 to July 2013, he held the position of Deputy General Director for Coke and Chemical Products Production — Managing Director of Moscow Coke and Gas Plant. From April 2008 to October 2012, Mr. Shtark served as Deputy Director, Director and Managing Director of Mechel Coke. From October 1996 to March 2008, he was Head of the Workshop, Chief Engineer of Coke and Chemical Products Production at Nizhniy Tagil Iron and Steel Works OAO. Mr. Shtark has a degree in equipment and technology of welding production from the Urals State Technical University and a degree in chemical technology of natural energy carriers and carbon materials from the same university.

Andrey A. Ponomarev has been Chief Executive Officer of Mechel-Steel Management since December 2015. He was a member of our Management Board from February 2016 to May 2017. From August 2012 to November 2015, he served as First Deputy Chief Executive Officer of Mechel-Steel Management. He has been a member of the Board of Directors of Chelyabinsk Metallurgical Plant since 2013. He was a member of the Board of Directors of Vyatsilya Metal Products Plant and Beloretsk Metallurgical Plant from 2013 to 2014, Urals Stampings Plant from 2013 to 2015 and Izhtal from 2014 to 2015. From August 2009 to May 2013, he headed Mechel Service Global. From May 2005 to August 2009, Mr. Ponomarev was Managing Director of Mechel Service. From 2002 to 2005, he held various positions at Uglemet Trading OOO and Mechel Trading House OOO, including Head of Regional Sales Department. From 2000 to 2002, he served as chief of the analysis bureau in Chelyabinsk Metallurgical Plant's marketing and sales service. From 1999 to 2000, he was an engineer in the special steels sales department of Chelyabinsk Metallurgical Plant's marketing and sales service. Mr. Ponomarev has a degree in pressure metal treatment and a degree in finance from the Southern Urals State University.

Petr A. Pashnin has been Chief Executive Officer of Mechel Energo since November 2013. He has been a member of the Board of Directors of Southern Kuzbass Power Plant since June 2014. He was a member of the Board of Directors of Tomusinsk Energo Management from June 2014 to June 2015 and a member of the Board of Directors of Kuzbass Power Sales Company from June 2014 to June 2017. From July to November 2013, he held the position of Technical Director of Mechel Energo. From March 2012 to June 2013, he was Chief Operating Officer of Toplofikatsia Rousse. From September 2011 to May 2012, he served as Head of Energy Efficiency and Energy Audit Department of Mechel Energo. From February 2008 to September 2011, he held various positions at the Chelyabinsk branch of Mechel Energo. From July 1999 to January 2008, he worked at Chelyabinsk Metallurgical Plant, where he held positions ranging from steam turbine operator to heat and power station chief engineer. Mr. Pashnin has a degree in industrial heat power engineering from the Southern Urals State University.

Alexey V. Lebedev has been Chief Executive Officer of Mecheltrans Management since December 2013. He was a member of our Management Board from August 2014 to May 2017. He has been a member of the Board of Directors of Port Kambarka and Port Vanino since June 2014. He was a member of the Board of Directors of Port Posiet from June 2014 to March 2016 and a member of the Board of Directors of Mecheltrans from April 2014 to August 2016. He served as Chief Executive Officer of Mecheltrans Auto from December 2010 to December 2013 and Director of Motor Transportation Department of Mecheltrans from June 2010 to January 2011. From 2005 to 2010, Mr. Lebedev was Director of Uraltechstroy NN OOO. From 2004 to 2005, he held the position of Deputy General Director of Region Express TK OOO. From 1998 to 2003, he held various positions at UralPromSnab OOO. From 1993 to 1998, he was Head of Railway Transportation Department of Transfero EAFK OOO. Mr. Lebedev has a degree in industrial management from the Izhevsk State Technical University.

Compensation

Our directors and executive officers were paid an aggregate of approximately RUB 560.6 million for services in all capacities provided to us during 2018. Our directors and executive officers are also provided with voluntary medical insurance and the use of wireless services. See note 9 to the consolidated financial statements.

Board of Directors

Members of our Board of Directors are elected by a majority of the voting stock present at our annual general shareholders' meeting using a cumulative voting system. Directors are elected to serve until the next annual general shareholders' meeting and may be re-elected an unlimited number of times. Our Board of Directors currently consists of nine members, five of whom are independent pursuant to the director independence criteria set forth both in the applicable Russian regulations and NYSE regulations, as well as in the Charter and the Bylaw on the Board of Directors of Mechel PAO. The Board of Directors is responsible for our overall management, except matters reserved for our shareholders. See "Item 10. Additional Information — General Meetings of Shareholders" for more information regarding the competence of our general shareholders' meetings. Members of the Board of Directors do not have service contracts with us or with any of our subsidiaries that provide them benefits upon termination of their service.

Committees of the Board of Directors

Audit Committee

The Audit Committee consists of Georgy Petrov, Alexander Orishchin and Alexander Kotsky, each of whom is an Independent Director. Our Audit Committee operates pursuant to a bylaw, which is available at www.mechel.com. The purpose of this Committee is to assist the Board of Directors with its oversight responsibilities regarding:

- the quality and integrity of our financial statements;
- our compliance with legal and regulatory requirements;
- the independent auditor's qualifications and independence; and
- the performance of our internal audit function and independent auditor.

Committee on Investments and Strategic Planning

The members of the Committee on Investments and Strategic Planning are Yuriy Malyshev, Alexander Orishchin, Alexander Kotsky, Tigran Khachaturov and Oleg Korzhov. The Committee on Investments and Strategic Planning defines our strategic goals and defines our priorities. The Committee makes recommendations to the Board of Directors on our dividend policy and on the adjustments to our strategy as required in order to enhance our efficiency. Our Committee on Investments and Strategic Planning operates pursuant to a bylaw, which is available at www.mechel.com.

The following sub-committees function under the Committee on Investments and Strategic Planning:

- Sub-committee on metallurgical production strategy, with members Alexander Orishchin and Oleg Korzhov; and
- Sub-committee on mining production strategy, with members Yuriy Malyshev and Alexander Kotsky.

Committee on Appointments and Remuneration

The members of the Committee on Appointments and Remuneration are Alexander Orishchin, Georgy Petrov and Yuriy Malyshev, each of whom is an Independent Director. The Committee on Appointments and

Remuneration has been established to maintain continuity and high professional standards, as well as to work out a competitive remuneration system, within our group. The Committee prepares recommendations to the Board of Directors on candidates for appointment to the Management Board or as our Chief Executive Officer or other executive officers or senior officers of our subsidiaries. It also prepares appraisals of their performance and makes recommendations regarding their remuneration. The Committee also defines the requirements applicable to nominees to the Board of Directors and informs the shareholders of such nominees. The Committee operates pursuant to a bylaw, which is available at www.mechel.com.

Management Board

In September 2007, we created a Management Board to provide for greater oversight of our operations. For more information, see “Item 10. Additional Information — Management Board.” Currently, our Management Board consists of seven members. The members of the Management Board are set out above under “— Directors and Executive Officers.”

Management Companies

We have four management companies within our group which provide management services to the companies within the mining, steel and power segments and to our companies within our transport division.

Mechel Mining Management

Mechel Mining Management was established in July 2008 as a wholly-owned subsidiary of Mechel Mining with the purpose to provide management services to the production subsidiaries within our mining segment. Mechel Mining Management presently performs the functions of the sole executive body of the following companies: Southern Kuzbass Coal Company, Korshunov Mining Plant, Yakutugol, Moscow Coke and Gas Plant, Mechel Coke, Mechel Engineering, Elgaugol, Elga-road and Vzryvprom.

Mechel-Steel Management

Mechel-Steel Management was established in October 2005 as a wholly-owned subsidiary of Mechel with the initial purpose to provide management services to our subsidiaries by performing the functions of their respective management bodies. The company’s former name was Mechel Management OOO which was changed in September 2009 in line with the reorganization of our group’s management structure. Mechel-Steel Management presently provides management services to our subsidiaries within the steel segment by performing the functions of the sole executive body of Chelyabinsk Metallurgical Plant, Urals Stampings Plant, Izhstal and Bratsk Ferroalloy Plant.

Mechel Energo

Mechel Energo was established in May 2001 under the name of Regional Energy Company ENERGOSBYT OOO. In February 2004, we acquired the company with a view to make the strategic and operational management of our power assets more efficient. The name of the company was changed to its current name in April 2004. Mechel Energo performs the functions of the sole executive body of Southern Kuzbass Power Plant in our power segment.

Mecheltrans Management

Mecheltrans Management was established in March 2010 as a wholly-owned subsidiary of Mechel. Mecheltrans Management presently provides management services to the companies within our transport division by performing the functions of the sole executive body of Mecheltrans, MecheltransVostok, Port Posiet, Port Kambarka and Port Temryuk.

Internal Audit Department

The Internal Audit Department's main function is to systematically, consistently and independently from our management assess and improve the efficiency of our group's risk management, internal control, corporate governance and information systems. The activities of the Internal Audit Department are governed by the Bylaw on the Internal Audit Department. Natalya S. Zykova serves as the Director of the Internal Audit Department. The Department is functionally subordinated to the Board of Directors, and administrated by our Chief Executive Officer.

Corporate Governance Principles

Our corporate governance principles are based on the Russian Corporate Governance Code recommended by the CBR and supplemented by the obligations of the Board of Directors prescribed by Russian law, our charter and internal rules of procedure. The principles are intended to ensure that we are managed and monitored in a responsible and value-driven manner. They include the protection of shareholders' rights, comprehensive disclosure and transparency requirements and rules governing conflicts of interest. We are committed to continuing to adapt our corporate governance principles to developments in best-practices. Our corporate governance principles are reflected in our corporate documents, such as:

- the Charter;
- the Bylaw on the Board of Directors;
- the Bylaw on the General Meeting of Shareholders;
- the Bylaw on the General Director;
- the Bylaw on the Collegial Executive Body (Management Board);
- the Bylaw on the Internal Audit Department;
- the Code of Business Conduct and Ethics;
- the Bylaw on the Prohibition and Prevention of Insider Trading;
- the Bylaw on the Disclosure of Information that may Significantly Impact the Market Value of our Shares;
- the Bylaw on Information Policy;
- the Bylaw on Appointments and Remuneration Committee of the Board of Directors;
- the Bylaw on Investments and Strategic Planning Committee of the Board of Directors;
- the Bylaw on the Audit Committee of the Board of Directors;
- the Code of Corporate Governance; and
- the Bylaw on Dividend Policy.

These documents or summary thereof are available at www.mechel.com and www.mechel.ru.

We also comply with the corporate governance requirements applicable to Russian public companies listed on Russian stock exchanges. Such requirements include: (1) the obligation to have at least three independent directors, who shall represent at least one-fifth of the members of the board of directors; (2) the establishment of an audit committee chaired by an independent director and a committee on appointments and remuneration consisting of independent directors, or, if not practicable, of independent directors and members of the board of directors who are not a sole executive body and/or members of the collegial executive body; (3) the establishment of a corporate body responsible for the internal audit (control) and adoption of an internal audit (control) policy; (4) the existence of the corporate secretary or special structural unit(s) performing the functions of the corporate secretary; and (5) the adoption of a dividend policy.

We are also required to comply with applicable corporate governance requirements of the NYSE. The NYSE permits listed companies that are foreign private issuers, such as Mechel, to follow their home jurisdiction governance practice where it differs from the NYSE requirements in certain circumstances. In addition, we have voluntarily complied with certain other requirements applicable to U.S. companies under the NYSE Listing Standard 303A. For a summary description of the NYSE Listing Standard 303A showing our compliance therewith and/or the alternative corporate governance practices followed by us see “Item 16G. Corporate Governance.”

Employees

As of December 31, 2018, 2017 and 2016, we employed 59,382, 59,971 and 61,455 people as follows:

Segment	Primary Location	2018		2017		2016	
		Total Employees	% Unionized	Total Employees	% Unionized	Total Employees	% Unionized
Mining	Russia, Switzerland, Singapore	21,175	65%	21,930	65%	22,472	65%
Steel	Russia, Europe, CIS	33,167	53%	32,974	55%	33,985	58%
Power	Russia	4,096	35%	4,203	36%	4,288	38%
Other	Various	944	6%	864	7%	710	7%
Total		<u>59,382</u>	<u>55%</u>	<u>59,971</u>	<u>57%</u>	<u>61,455</u>	<u>59%</u>

Set out below is information about membership of our employees in trade unions:

- Employees of Chelyabinsk Metallurgical Plant, Beloretsk Metallurgical Plant, Southern Urals Nickel Plant, Korshunov Mining Plant, Moscow Coke and Gas Plant, Mechel Coke, Izhtal, Bratsk Ferroalloy Plant, Mechel Materials and Pugachevsky Open Pit are members of the Ore Mining and Smelting Trade Union of Russia.
- Employees of Urals Stampings Plant are members of the Trade Union of Machinists of the Russian Federation, employees of Chelyabinsk branch of Urals Stampings Plant are members of the Ore Mining and Smelting Trade Union of Russia.
- Employees of Southern Kuzbass Coal Company and its subsidiaries Tomusinsky Open Pit and Vzryvprom are members of the Russian Independent Trade Union of Coal Industry Workers and of the Independent Trade Union of Miners of Russia.
- Employees of Yakutugol, Neryungry Car Fleet and Mechel-Remservice are members of the Russian Independent Trade Union of Coal Industry Workers.
- Employees of Mechel Energo are members of the Ore Mining and Smelting Trade Union of Russia.
- Employees of Port Posiet are members of the Russian Stevedores' Trade Union.
- Employees of Mecheltrans' separate business unit in the city of Myski are members of the Russian Independent Trade Union of Coal Industry Workers.
- Employees of Southern Kuzbass Power Plant are members of the All-Russian Power Industry Trade Union and of the Russian Independent Trade Union of Coal Industry Workers.
- Employees of Kuzbass Power Sales Company are members of the All-Russian Power Industry Trade Union.
- Employees of Mechel Nemunas are members of the Trade Union Nemunas.

We consider our relationships with our employees to be good.

Item 7. Major Shareholders and Related Party Transactions

The following table sets forth information regarding our major shareholders, which means shareholders that are the beneficial owners of 5% or more of our common shares, as of March 21, 2019, based on the information available to us:

<u>Name of Beneficial Owner</u>	<u>Number of Common Shares</u>	<u>% of Common Shares</u>
Igor V. Zyuzin ⁽¹⁾	111,030,756	26.67%
Irina V. Zyuzina ⁽²⁾	77,826,997	18.70%
Ksenia I. Zyuzina ⁽²⁾	99,356,991	23.87%
Kirill I. Zyuzin ⁽²⁾	77,826,997	18.70%
Other ⁽³⁾⁽⁴⁾	205,882,998	49.46%

- (1) Mr. Zyuzin is the Chairman of our Board of Directors. See “Item 6. Directors, Senior Management and Employees — Directors and Executive Officers.” Mr. Zyuzin may be deemed to be the beneficial owner of approximately 26.67% of our common shares through (i) his record ownership of 26.47% of our common shares; and (ii) his ownership of 93.56% of the outstanding equity interests in JSC IC BASK (“**BASK**”). BASK is the record owner of 0.20% of our common shares. Further information regarding the shareholdings of Mr. Zyuzin is available in the Schedule 13D and amendments thereto filed by him with the SEC.
- (2) In the course of 2016, MetHol OOO (“**MetHol**”), which is owned by Mrs. Irina V. Zyuzina, Ms. Ksenia I. Zyuzina and Mr. Kirill I. Zyuzin (the “**Zyuzin Family Members**”), acquired 77,826,997 of our common shares from Calridge. As a result, MetHol is now the owner of 18.70% of our common shares. As a result, each of Mrs. Irina V. Zyuzina and Mr. Kirill I. Zyuzin may be deemed to share beneficial ownership of the 18.70% shareholding held of record by MetHol. In the course of 2017, Bonoro Limited (“**Bonoro**”), which is owned by Ms. Ksenia I. Zyuzina, acquired 4.93% of our common shares from Calridge. In addition, Ms. Ksenia I. Zyuzina owns 100% of equity interests in Swan Agency Limited (“**Swan**”), which is the record owner of 0.24% of our common shares that it acquired in the course of 2018 and at the beginning of 2019. Thus, Ms. Ksenia I. Zyuzina may be deemed to share beneficial ownership of the 23.87% shareholding held of record by MetHol, Bonoro and Swan. Further information regarding the shareholdings of the Zyuzin Family Members is available in the Schedule 13D that each Zyuzin Family Member has filed with the SEC.
- (3) According to Deutsche Bank Trust Company Americas, as of December 31, 2018, 33,420,085 common ADSs and 26,750,001 GDSs were outstanding, representing 28.91% of our total issued common shares.
- (4) We believe our directors and executive officers as a group, other than Mr. Zyuzin and Zyuzin Family Members, beneficially own less than 1% of our shares.

None of our common shareholders have voting rights which differ from any other holders of our common shares. Based on our share register, we believe we are not directly or indirectly owned or controlled by another corporation or government, and that there are no arrangements the operation of which may result in a change of control.

Related Party Transactions

See note 9 to our consolidated financial statements in “Item 18. Financial Statements.”

Item 8. Financial Information

See “Item 18. Financial Statements.”

Litigation

Other than the legal proceedings described below, we are not involved in any legal proceedings that we believe to be material.

Tax

On January 16, 2012, Mechel Trading House received an assessment from the tax authorities for income tax, interest and incurred penalties in a total amount of 5.9 billion rubles for the 2008-2009 period. We contested this assessment through the administrative procedure with the higher-level tax authorities which reduced the assessment to 5.5 billion rubles. On June 5, 2012, Mechel Trading House filed a claim with the Moscow Arbitrazh Court to contest the amount of 5.5 billion rubles. On January 9, 2014, the Moscow Arbitrazh Court sustained the Mechel Trading House claims in part of 1.6 billion rubles, including penalties and fines, and the remaining claims were denied. Mechel Trading House did not appeal the decision. On June 19, 2014, the Moscow Arbitrazh Court sustained the application of Mechel Trading House, requesting leave to repay the remaining 3.9 billion ruble assessment on an installment basis by May 2016. On March 15, 2016, Mechel Trading House reapplied with the court for installment payment. On March 31, 2016, the Moscow Arbitrazh Court extended the installment payment until May 2017. On December 14, 2016, Mechel Trading House and the tax authority entered into a settlement agreement under which the payment of the debt is extended until April 25, 2018. Mechel Trading House repaid the debt in full.

We believe that we have paid or accrued all taxes that are applicable. Where uncertainty exists, we have accrued tax liabilities based on management's best estimate of the probable outflow of resources embodying economic benefits, which will be required to settle these liabilities. We accrued RUB 583 million, RUB 578 million and RUB 760 million of tax claims other than income tax that management believes are probable as of December 31, 2018, 2017 and 2016, respectively. In addition, income tax claims that management believes are probable were accrued. See note 20 to the consolidated financial statements.

Antimonopoly

In May 2017, the Office of the FAS for Primorsky Krai found Port Posiet to have violated the Competition Law by preventing access to ships' agency service market in the port and issued a directive to remedy violation of antimonopoly legislation. The courts, including the appeal and cassation instances, confirmed the legality of a decision and the directive issued by the Office of the FAS for Primorsky Krai. In May 2018, Port Posiet was fined by the Office of the FAS for Primorsky Krai in the amount of 54 million rubles. Currently, we are challenging the decision to impose a fine.

Environmental and safety

Pursuant to a claim of the Novokuznetsk Environmental Prosecutor's Office against Southern Kuzbass Power Plant concerning the emission of pollutants into the atmosphere above the maximum allowable level, the court ruled in September 2008 that we must limit the emission of pollutants into the atmosphere to comply with the maximum allowable level. We have complied with the ruling effective as of November 2009. The court also mandated us to reconstruct the de-dusting system. Since then, we have applied several times for stay of execution, the last time being in April 2017, and the court allowed us to stay execution of this mandate until June 1, 2019. We are continuing with the reconstruction and replacement of the dust and gas scrubber equipment. During 2013-2018, we completed the reconstruction of six of the boilers and have commenced the reconstruction of another boiler.

On June 11, 2013, the Department of Rosprirodnadzor for the Republic of Bashkortostan filed a lawsuit against Beloretsk Metallurgical Plant with the Arbitrazh Court of the Republic of Bashkortostan seeking the recovery of damages caused to water resources as a result of non-compliance with water legislation in the amount of 408.2 million rubles. During the court hearings claims under the lawsuit were reduced to 398.6 million rubles. On October 3, 2013, the Arbitrazh Court of the Republic of Bashkortostan rendered a decision to collect from Beloretsk Metallurgical Plant the amount of damages in the amount of 398.6 million rubles. We contested this decision with the Eighteenth Arbitrazh Court of Appeal. On January 28, 2014, the court upheld the decision of the lower court. On February 7, 2014, Beloretsk Metallurgical Plant filed a cassation appeal with the Federal

Arbitrazh Court of Urals District. At the court hearing held on April 14, 2014 Beloretsk Metallurgical Plant withdrew its cassation appeal. On May 27, 2014, the Arbitrazh Court of the Republic of Bashkortostan approved a settlement agreement between Rosprirodnadzor for the Republic of Bashkortostan and Beloretsk Metallurgical Plant. In accordance with the settlement agreement, Beloretsk Metallurgical Plant was obliged to develop project documentation for the technical upgrading and/or reconstruction (construction) of waste treatment facilities system in order to bring the quality of discharged waste water into compliance with applicable regulatory requirements. The reconstruction of waste treatment facilities system was to be completed by December 31, 2016. In November 2016, Beloretsk Metallurgical Plant applied for a stay of execution and the court ruled to complete the reconstruction by December 31, 2023.

In October 2018, the Bratsk Environmental Prosecutor filed a lawsuit against Bratsk Ferroalloy Plant with the Bratsk City Court of Irkutsk region seeking to declare the reclamation of the sludge reservoir illegal and ban it. On February 27, 2019, the Bratsk City Court of Irkutsk region ordered Bratsk Ferroalloy Plant to raise the hazard class of the sludge reservoir by December 1, 2019 in accordance with the specified claims of the Bratsk Environmental Prosecutor.

Commercial litigation

In November 2014, Minmetals initiated proceedings at the Arbitration Institute of the Stockholm Chamber of Commerce against Chelyabinsk Metallurgical Plant to recover alleged amounts due under the construction contract, whereas Chelyabinsk Metallurgical Plant filed its own counter-claims, which include a penalty for delay and recovery of damages for failing to perform works and rectifying works of poor quality. In 2015-2017, both parties submitted a number of procedural statements to the arbitral tribunal and presented arguments during arbitral hearing for the adjustment of claims, so that the final claims of Minmetals amounted to approximately \$143.0 million (plus applicable interest) and those by Chelyabinsk Metallurgical Plant to approximately \$57.5 million and €4.1 million (plus applicable interest). During the arbitral proceedings, three arbitrators resigned from their duty and in November 2016 new arbitral tribunal was formed. The final arbitral award was issued on November 9, 2017, awarding Minmetals (in accordance with a set off against the satisfied claims of Chelyabinsk Metallurgical Plant) approximately \$16.7 million (plus applicable interest). Chelyabinsk Metallurgical Plant did not agree with the award and filed a petition with the Svea Court of Appeal (state court in Sweden) asking to set aside this award in full. In February 2018, the Svea Court of Appeal accepted the petition for consideration. The court hearing has not yet been scheduled. In August 2018, Minmetals applied with the Arbitrazh Court of Chelyabinsk region for recognition and enforcement on the territory of the Russian Federation of the award of the Arbitration Institute of the Stockholm Chamber of Commerce. The Arbitrazh Court of Chelyabinsk region suspended the consideration of the Minmetals petition until the termination of the proceedings in the Svea Court of Appeal.

In December 2015, ERG SALES AG filed a claim against Chelyabinsk Metallurgical Plant with the LCIA seeking recovery of debt under iron ore feed supply contract in the amount of \$10.7 million and penalty for delay in payment in the amount of \$513.4 thousand. In June 2016, the LCIA approved a settlement agreement according to which Chelyabinsk Metallurgical Plant was obliged to repay \$12.3 million in monthly installments until June 25, 2017. As of December 31, 2017, Chelyabinsk Metallurgical Plant repaid \$11.9 million. On March 22, 2018, ERG SALES AG filed a claim with the Arbitrazh Court of Chelyabinsk region seeking to oblige Chelyabinsk Metallurgical Plant to repay the amount of approximately \$941.9 thousand. In June 2018, the Arbitrazh Court of Chelyabinsk region sustained the claims of ERG SALES AG. In August 2018, the debt was repaid in full.

From September 2017 to February 2019, IDGC of Urals JSC filed 14 claims against Mechel Energo with the Arbitrazh Court of Chelyabinsk region seeking recovery of debt for electricity transmission services for the period from July 2017 to November 2018 in an aggregate amount of approximately 919.8 million rubles and penalty for delay in payment totaling approximately 58.7 million rubles. Currently, the proceedings under 12 cases are suspended until the first case is considered by the court. The court hearing of the first case is scheduled for March 26, 2019, and the court hearing for the remaining case is scheduled for April 4, 2019.

On January 14, 2019, Mechel Trading received a notice dated January 8, 2019 from cantonal court of Zug about an acceptance of court recovery claim of Moorgate Industries UK Limited dated January 3, 2019 regarding the debt of \$77.0 million.

Debt litigation

Banks

On March 16, 2015, we received notice from the LCIA that VTB Bank and VTB Capital Plc had filed 14 requests for arbitration against our group companies. The 14 requests claim amounts allegedly due plus costs and such other, unspecified, relief that the arbitral tribunal may deem appropriate, pursuant to two syndicated credit agreements (one involving Yakutugol and the other involving Southern Kuzbass Coal Company) and 12 deeds of guarantee with respect to those syndicated credit agreements. Under these deeds of guarantee, the guarantors (Mechel, Mechel Mining, Mechel Carbon, Mechel Carbon Singapore, Korshunov Mining Plant, Yakutugol and Southern Kuzbass Coal Company) each guaranteed the obligations of the borrowers (Yakutugol and Southern Kuzbass Coal Company) under each of the syndicated credit agreements. As of the date of the filing of the requests for arbitration, the claim against Yakutugol as the borrower and the claims against each of the Yakutugol guarantors amount to \$16.2 million, and the claim against Southern Kuzbass Coal Company as the borrower and the claims against each of the Southern Kuzbass Coal Company guarantors amount to \$16.3 million. On March 17-18, 2015, we received notice from the LCIA concerning the initiation of the 14 arbitration cases described above. On April 13, 2015, the relevant Mechel group companies filed preliminary response letters in respect of the 14 arbitration cases described above. On April 24, 2015, in support of the 14 aforementioned LCIA arbitration proceedings, VTB Bank and VTB Capital Plc filed an arbitration claim with the High Court of Justice Queen's Bench Division Commercial Court in England seeking injunctive relief to secure their arbitration claims. The first hearing regarding injunctions took place on April 29, 2015. Following the hearing and considering the parties' positions, the court postponed the hearing until May 18, 2015, however, later due to the restructuring negotiations the parties agreed a moratorium for injunction hearing until July 1, 2015, afterwards the moratorium for hearing and arbitration proceedings has been extended until the execution in September 2018 of a settlement agreement with VTB Bank and VTB Capital Plc according to which the claims were discontinued.

In February 2017, a number of lenders filed 14 requests for arbitration with the LCIA. The 14 requests claim amounts allegedly due plus costs and such other, unspecified, relief that the arbitral tribunal may deem appropriate, pursuant to two syndicated credit agreements (one involving Yakutugol and the other involving Southern Kuzbass Coal Company) and 12 deeds of guarantee with respect to those syndicated credit agreements. Under these deeds of guarantee, the guarantors (Mechel, Mechel Mining, Mechel Carbon, Mechel Carbon Singapore, Korshunov Mining Plant, Yakutugol and Southern Kuzbass Coal Company) each guaranteed the obligations of the borrowers (Yakutugol and Southern Kuzbass Coal Company) under each of the syndicated credit agreements. As of the date of the filing of the requests for arbitration, the claim against Yakutugol as the borrower and the claims against each of the Yakutugol guarantors was claimed to amount to \$230.1 million plus costs, and the claim against Southern Kuzbass Coal Company as the borrower and the claims against each of the Southern Kuzbass Coal Company guarantors was claimed to amount to \$231.0 million plus costs. In September 2017, the amounts were updated to \$241.1 million plus costs under the Yakutugol syndicated credit agreement and \$241.5 million plus costs under the Southern Kuzbass Coal Company syndicated credit agreement. In late 2017 and early 2018, several lenders left the arbitration. Yakutugol and Southern Kuzbass Coal Company contested the jurisdiction of the tribunal but the tribunal dismissed the contest. Yakutugol and Southern Kuzbass Coal Company appealed this decision. They also submitted counterclaims. From July to October 2018, we executed a number of settlement agreements with the lenders, whereby the claimants and the respondents had agreed to discontinue their claims and counterclaims.

Leasing

From June to September 2015 and in March 2016, Caterpillar Financial OOO filed eight lawsuits with the Moscow Arbitrazh Court against Yakutugol, Mechel Engineering, Korshunov Mining Plant, Mechel Materials, Metallurgshakhtspetsstroy, Tomusinsky Open Pit and Southern Kuzbass Coal Company, as well as Mechel (as the guarantor under four lease agreements) seeking termination of lease agreements, withdrawal of leasing assets and recovery of debt in an aggregate amount of approximately \$5.0 million and €313.9 thousand. During the period from October 2015 to July 2016, the Moscow Arbitrazh Court sustained the claims regarding the recovery of debt in the amount of approximately \$4.5 million and €380.2 thousand and dismissed the claims regarding the withdrawal of leasing assets under six cases; sustained the claims regarding the withdrawal of leasing assets and dismissed the rest of claims under one case; sustained in full the plaintiff's claims under one case. During the period from October 2015 to November 2016, we appealed all these cases with the higher courts. The higher courts upheld the decisions of the Moscow Arbitrazh Court under seven cases and recovered penalty in the amount of approximately \$88.6 thousand under one case. In addition, in July 2016, Caterpillar Financial OOO filed a lawsuit with the Moscow Arbitrazh Court against Southern Kuzbass Coal Company seeking withdrawal of a leasing asset under one lease agreement and recovery of debt in an aggregate amount of approximately \$235.8 thousand under two other lease agreements. During the court hearings, the court divided the lawsuit into three cases. In January 2017, the Moscow Arbitrazh Court sustained the plaintiff's claims regarding the withdrawal of the leasing asset and recovery of debt in the amount of approximately \$56.6 thousand. In April-December 2017, the Ninth Arbitrazh Court of Appeal approved settlement agreements with new payment schedules under five cases. In 2016-2018, we repaid the debt in full under four cases. At present, we have signed settlement agreements under two cases and expect to sign settlement agreements under three cases, all to be further approved by the court.

Other

On January 9, 2017, Atrix B.V. filed a lawsuit with the Arbitrazh Court of Rostov region against Mechel, Mechel Mining Management, Mechel-Steel Management, NK INVEST OOO and former general director of Rostov Electrometallurgical Plant OOO seeking jointly and severally recovery of damages related to the management of Rostov Electrometallurgical Plant OOO in the amount of approximately 10.1 billion rubles. In February 2017, the amount of claims under the lawsuit was increased to 10.9 billion rubles. In April 2017, the proceedings have been suspended due to judicial expertise. In July 2017, the Arbitrazh Court of Rostov region sustained the claims for recovery of damages in the total amount of approximately 12.7 billion rubles. We appealed this decision with the higher court. The higher court upheld the decision of the Arbitrazh Court of Rostov region. In October 2017, we filed a cassation appeal with the Arbitrazh Court of North Caucasus District. In November 2017, the Arbitrazh Court of North Caucasus District reversed the lower courts decisions and remanded the case for a new proceeding with the court of first instance. On March 13, 2018, the Arbitrazh Court of Rostov region dismissed the claim of Atrix B.V. The courts of higher instances upheld the decision of the Arbitrazh Court of Rostov region. Atrix B.V. filed a cassation appeal with the Supreme Court of the Russian Federation, which denied in consideration.

Rostov Electrometallurgical Plant OOO and Lomprom Rostov OOO within the bankruptcy cases of Zlatoust Metallurgical Plant OAO and Guryevsk Metallurgical Plant OAO (hereinafter referred to as the “**debtors**”) reviewed in the Arbitrazh Court of Chelyabinsk region and the Arbitrazh Court of Kemerovo region, respectively, requested to hold Mechel secondarily liable for obligations of the debtors. The claimants state that Mechel was the controlling entity in relation to the debtors and pursuant to the Bankruptcy Law should be liable in the amount equal to the aggregate amount of creditor claims that remained unsettled due to insufficiency of the debtors' property. The amount of claims is not currently defined. On August 31, 2018, the Arbitrazh Court of Kemerovo region dismissed claims to impose secondary liability on Mechel under the first case; this decision is being appealed now. The proceedings under the second case are suspended.

On December 1, 2017, the Arbitrazh Court of Irkutsk region held proceedings in connection with a claim filed by Paslencia Investments Ltd. (“**Paslencia**”) against Mechel and Mechel Mining in favor of Korshunov

Mining Plant, where Paslencia is a minority shareholder. Paslencia seeks to challenge loans provided by Korshunov Mining Plant in the total amount of 4.2 billion rubles. The Arbitrazh Court of Irkutsk region and a higher court dismissed the claim in full.

In May 2017, Paslencia filed two claims with the Arbitrazh Court of Irkutsk region seeking invalidation of suretyship agreements entered into between Korshunov Mining Plant and each of Gazprombank and VTB Bank. Under the suretyship agreements with Gazprombank, the Arbitrazh Court of Irkutsk region and a higher court dismissed the claim in full. Under the suretyship agreements with VTB Bank, the court hearing is scheduled for May 21, 2019.

On October 26, 2017, Omia Holdings Limited (“**Omia**”), a minority shareholder of Guryevsk Metallurgical Plant OAO, filed a claim with the Arbitrazh Court of Kemerovo region seeking invalidation of a facility agreement and a loan agreement entered into by Guryevsk Metallurgical Plant OAO, recognition of Mechel as the borrower under the facility agreement and imposition of an obligation to repay the facility on Mechel. The Arbitrazh Court of Kemerovo region dismissed the claim. The higher courts upheld the decision of the Arbitrazh Court of Kemerovo region. In January 2019, Omia filed for review on the basis of newly discovered facts. On February 15, 2019, the Arbitrazh Court of Kemerovo region rejected the review.

On March 2, 2018, Boreas Asset Management and Arsagera Asset Management, minority shareholders of Urals Stampings Plant, filed a claim with the Arbitrazh Court of Chelyabinsk region seeking invalidation of loan agreements entered into between Urals Stampings Plant and Mechel. The Arbitrazh Court of Chelyabinsk region and a higher court dismissed the claim in full.

Securities litigation

In April 2015, Vadim Varshavsky filed a lawsuit with the Moscow Arbitrazh Court seeking to oblige Mechel and Mechel Steel OOO to perform share purchase agreements by transferring 2,000 shares of our Cypriot company Daveze Limited and to recognize the plaintiff’s title to these shares. In August 2015, the Moscow Arbitrazh Court ruled to terminate the proceedings. Vadim Varshavsky appealed to the higher courts. In December 2015, the Arbitrazh Court of Moscow District reversed the lower courts decisions and remanded the case for a new proceeding. In June 2016, the Moscow Arbitrazh Court dismissed the claim. During the period from October 2016 to August 2017, the higher courts upheld the decision of the Moscow Arbitrazh Court. In November 2017, Vadim Varshavsky filed for review on the basis of newly discovered facts. On March 21, 2018, the Moscow Arbitrazh Court rejected the review. In September 2018, a higher court upheld the decision of the Moscow Arbitrazh Court.

Dividend Distribution Policy

We determine the amount of dividends payable on our common shares based on cash needs of our business, which will be influenced by the market situation, results of our operations, the level and availability of debt and debt servicing requirements and the requirements of our capital investment program.

We determine the amount of dividends payable on our preferred shares based on the provisions of our charter. See “Item 10. Additional Information — Description of Capital Stock — Dividends.”

In addition, some of our credit facility agreements impose certain restrictions on the payment of dividends on our shares. Mechel may not pay dividends on its common shares without the prior written consent of the lenders. The amount of permitted dividends paid on our preferred shares is limited to 7.5 million rubles or another minimum amount required by our charter.

The decision to pay dividends and the amount thereof must be recommended by our Board of Directors taking into account the charter’s provisions and approved by our shareholders. The amount of dividends, if any,

approved by the shareholders may not be higher than the amount proposed by the Board of Directors. In particular, dividends may be declared and paid only out of net profits calculated under the Russian accounting standards and as long as the following conditions have been met:

- our charter capital has been paid in full;
- the value of our net assets, calculated under the Russian accounting standards, is not less (and would not become less as a result of the proposed dividend payment) than the sum of our charter capital, our reserve fund and the difference between the liquidation value and the par value of our issued and outstanding preferred shares;
- we have repurchased all shares from shareholders having the right to demand repurchase; and
- we are not, and would not become, insolvent as the result of the proposed dividend payment.

For a further description, please refer to “Item 10. Additional Information — Description of Capital Stock — Dividends.” See also “Item 3. Key Information — Risk Factors — Risks Relating to Our Shares and ADSs and the Trading Market — Our ability to pay dividends depends primarily upon receipt of sufficient funds from our subsidiaries.”

On June 29, 2018, our general shareholders’ meeting decided not to pay dividends for 2017 on common shares and declared a dividend of 2,311.7 million rubles on preferred shares (of which 809.1 million rubles was paid to Skyblock Limited), which was paid in August 2018. On June 30, 2017, our general shareholders’ meeting decided not to pay dividends for 2016 on common shares and declared a dividend of 1,426.4 million rubles on preferred shares (of which 570.6 million rubles was paid to Skyblock Limited), which was paid in July and August 2017. On June 30, 2016, our general shareholders’ meeting decided not to pay dividends for 2015 on common shares and declared a dividend of 6.9 million rubles on preferred shares (of which 2.8 million rubles was paid to Skyblock Limited), which was paid in July and August 2016. In each case we could not pay insignificant amounts of dividends to those shareholders who did not provide us with their bank account details and/or due to the restriction of shareholders’ rights to receive dividends in certain cases provided for by Russian law.

We anticipate that any dividends we may pay in the future on shares represented by ADSs will be declared and paid to the depositary in rubles (subject to Russian withholding tax) and will be converted into U.S. dollars by the depositary and distributed to holders of ADSs, net of the depositary’s fees and expenses. Accordingly, the value of dividends received by holders of ADSs will be less than the amounts declared and subject to fluctuations in the exchange rate between the ruble and the U.S. dollar. For information on risks associated with Russian withholding tax on dividends to holders of ADSs, see “Item 10. Additional Information — Taxation — Russian Income and Withholding Tax Considerations.”

Significant Changes

Other than as described in this document, no significant change in our business has occurred since December 31, 2018.

Item 9. The Offer and Listing

Our common ADSs have been listed on the NYSE under the symbol “MTL” since October 2004. In June 2004, our common shares were listed on Open Joint Stock Company “Russian Trading System” Stock Exchange (“RTS”). In October 2008, our common shares were listed on Closed Joint Stock Company Moscow Interbank Currency Exchange (“MICEX”). RTS and MICEX ceased to exist as a result of their reorganization through accession to Public Joint-Stock Company “Moscow Exchange MICEX-RTS” (“**Moscow Exchange**”). Our common shares have been traded on the Moscow Exchange Level 1 quotation list under the symbol “MTLR.”

Our preferred ADSs have been listed on the NYSE under the symbol “MTL PR” since May 2010. In April 2011, our preferred shares were admitted to trading without listing on RTS and MICEX. In July 2011, our preferred shares were listed on MICEX. RTS and MICEX ceased to exist as a result of their accession to Moscow Exchange. Our preferred shares have been traded on the Moscow Exchange Level 1 quotation list under the symbol “MTLRP.”

Item 10. Additional Information

Charter and Certain Requirements of Russian Legislation

We describe below our registered common and preferred shares, the material provisions of our charter in effect on the date of this document and certain requirements of Russian legislation. In addition to this description, we urge you to review our charter, which is included as an exhibit to this document, to review its complete terms. The description of our charter is qualified in its entirety by reference to the charter.

Our Purpose

Article 4.1 of our charter provides that our primary purpose is to earn profit, as well as to provide the highest-quality products and services for our customers.

Description of Capital Stock

General

Pursuant to our charter, we have the right to issue registered common shares, preferred shares and other securities provided for by the legislation of the Russian Federation with respect to securities. Our capital stock currently consists of 555,027,660 shares, including 416,270,745 common shares, each with a nominal value of 10 rubles, and 138,756,915 preferred shares, each with a nominal value of 10 rubles, all of which are fully paid, issued and outstanding under Russian law. Under Russian legislation, charter capital refers to the aggregate nominal value of the issued and outstanding shares. We are authorized to issue an additional 81,698,341 common shares with a nominal value of 10 rubles each. None of our capital stock is under option or agreed conditionally or unconditionally to be put under option. Any of our shares that are owned by our subsidiaries are not considered treasury shares under Russian law (i.e., they are considered outstanding shares), and we are able to vote such shares and dispose of such shares without any further corporate actions by our shareholders or Board of Directors, provided that such disposals are not major or interested party transactions. Currently, our wholly-owned subsidiary Skyblock Limited holds 55,502,766 preferred shares. The shares are considered issued and outstanding shares under Russian law and have all the rights attaching to other preferred shares. The preferred shares owned by Skyblock Limited are not considered outstanding for purposes of our IFRS financial statements.

Currently, we have more than 10,000 holders of voting shares, which determines the applicability of certain provisions of the Joint-Stock Companies Law, as described below.

A resolution of our Board of Directors dated May 14, 2008 approved an increase in our charter capital through the issuance of 55,000,000 preferred shares with a nominal value of 10 rubles. On September 19, 2008, our Board of Directors amended its resolution to increase the number of preferred shares being issued to 138,756,915 preferred shares which is the maximum number of preferred shares authorized by our charter. The decision to issue 138,756,915 preferred shares was registered with the FFMS on October 23, 2008. On April 2, 2009, we placed all 138,756,915 of the preferred shares authorized for issuance at the placement price of 10 rubles per share. All the preferred shares were taken up by our wholly-owned subsidiary Skyblock Limited, which was the sole offeree. A report on the placement of the preferred shares was registered with the FFMS on April 14, 2009. We transferred 83,254,149 preferred shares to the sellers of 100% of the shares and interest of Bluestone Industries, Inc., Dynamic Energy, Inc. and JCJ Coal Group, LLC and certain other companies as part of the consideration in our acquisition of the Bluestone. Our preferred shares are not convertible into common shares, bonds or other securities of Mechel.

Rights attaching to common shares

Holders of our common shares have the right to vote at general shareholders' meetings. As required by the Joint-Stock Companies Law and our charter, all of our common shares have the same nominal value and grant to their holders identical rights. Each fully paid common share, except for treasury shares, gives its holder the right to:

- freely transfer the shares without the consent of other shareholders or the company;
- receive dividends in accordance with our charter and current legislation;
- participate in general shareholders' meetings and vote on all matters of shareholders' competence;
- transfer voting rights to its representative on the basis of a power of attorney;
- elect and be elected to the governing and controlling bodies of the company;
- if holding, alone or with other holders, 2% or more of the voting stock, within 45 days after the end of our fiscal year, make proposals to the agenda of the annual general shareholders' meeting and nominate candidates to the board of directors and counting commission;
- if holding, alone or with other holders, 10% or more of the voting stock, demand that the board of directors call an extraordinary general shareholders' meeting;
- demand, under the following circumstances, the repurchase by us of all or some of the shares owned by it, as long as such holder voted against or did not participate in the voting on the decision approving the following:
 - our reorganization;
 - conclusion of a major transaction (in the form of consent or subsequent approval), which involves property in excess of 50% of the balance sheet value of the company's assets determined according to its accounting statements on the last reporting date (including those which are simultaneously interested party transactions);
 - amendment of our charter or approval of a new version of our charter that restricts the holder's rights; and
 - amendment of the company's charter which eliminates indication that the company is public, simultaneously with the decision on applying to the CBR on release from obligation to disclose information under the laws of the Russian Federation on securities and the decision on applying for delisting of shares and securities convertible into shares;
- upon liquidation, receive a proportionate amount of our property after our obligations to our creditors are fulfilled;
- in cases and in the procedure provided by Russian law and our charter, receive information on the company's activities, including access to accounting and other documentation, receive copies thereof for a fee not exceeding the cost of making such copies, and, if holding alone or with other holders, 25% or more of the voting stock, have free access to accounting documents and minutes of meetings of the collegial executive body (Management Board);
- if holding, alone or with other shareholders at least 1% of the voting shares, demand consent for the interested party transaction; and
- exercise other rights of a shareholder provided by our charter, Russian legislation and decisions of general shareholders' meetings approved in accordance with its competence.

Rights attaching to preferred shares

Pursuant to our charter, all of our preferred shares have the same nominal value and grant to their holders identical rights. Each fully paid preferred share gives its holder the right to:

- freely transfer preferred shares without the consent of other shareholders;
- receive dividends in accordance with our charter and current legislation;
- upon liquidation, receive a portion of our liquidation value, which is equal to a portion of our property calculated pro rata to the portion represented by one preferred share in our charter capital;
- in cases and in the procedure provided by Russian law and our charter, receive information on the company's activities, including access to accounting and other documentation, and receive copies thereof for a fee not exceeding the cost of making such copies;
- transfer all or part of the rights attached to the preferred shares to its representative on the basis of a power of attorney; and
- participate in shareholders' meetings and vote on the following matters:
 - our reorganization, liquidation and in case of amendment of the company's charter which eliminates indication that the company is public, simultaneously with the decision on applying to the CBR on release from obligation to disclose information under the laws of the Russian Federation on securities and the decision on applying for delisting of shares and securities convertible into shares;
 - any amendment of our charter or approval of a new version of our charter that restricts the preferred shareholders' rights, including determination or increase or decrease of a dividend amount and/or determination or increase or decrease of the liquidation value paid on preferred shares of previous priority, as well as provision to shareholders of another type of preferred shares of advantages in the priority of payment of dividends and/or the liquidation value of shares;
 - participate in shareholders' meetings and vote on all matters on which common shareholders are entitled to vote if for any reason the annual shareholders' meeting did not adopt a resolution to pay the full amount of dividends to which preferred shareholders are entitled under our charter. The holders of preferred shares enjoy this right effective from the first shareholders' meeting to be held after the relevant annual shareholders' meeting and until the date when dividends on preferred shares are paid in full;
 - filing of an application with a stock exchange for listing or delisting of our preferred shares; and
 - in other cases provided for in the applicable laws of the Russian Federation.

Pre-emptive rights

The Joint-Stock Companies Law and our charter provide existing shareholders with a pre-emptive right to purchase additional shares or securities convertible into shares issued by way of open subscription in an amount proportionate to their existing holding of shares of the same category (type) as the newly issued shares. In addition, the Joint-Stock Companies Law and our charter provide shareholders with a pre-emptive right to purchase shares or securities convertible into shares during a closed subscription if the shareholders voted against or did not participate in the voting on the decision approving such subscription. The pre-emptive right does not apply to placement of shares or other securities convertible into shares through a closed subscription among existing shareholders only, provided that such shareholders may each acquire a whole number of shares or other securities convertible into shares being placed in an amount proportionate to their existing holding of shares of the corresponding category (type). We must notify shareholders of the opportunity to exercise their pre-emptive rights and the period thereof in accordance with the procedure and time limits provided by Russian law.

Dividends

The Joint-Stock Companies Law and our charter set forth the procedure for determining the dividends that we distribute to our shareholders. Shareholders may decide on whether or not to pay the dividends upon results of a reporting quarter, half a year, nine months and/or year. Dividends are recommended to a general shareholders' meeting by the board of directors, and approved by the general shareholders' meeting by a majority vote. A decision on quarterly dividends may be taken at a general shareholders' meeting within three months of the end of the respective quarter; a decision on annual dividends must be taken at the annual general shareholders' meeting. The company shall not be entitled to resolve (declare) on payment of dividends on common and preferred shares, the amount of dividends on which has not been determined, unless it is resolved to fully pay dividends on all types of preferred shares, the amount of dividends on which is determined by the company's charter. The company shall not be entitled to resolve (declare) on payment of dividends on common and preferred shares of any other type, unless it is resolved to fully pay dividends on preferred shares with an advantage in the order of receiving dividends. The company shall not be entitled to resolve (declare) on payment of dividends on common shares, unless it is resolved to pay the same amount of dividends on preferred shares, the amount of dividends on which is not determined by the company's charter. The dividend approved at the general shareholders' meeting may not be more than the amount recommended by the board of directors. The date on which in accordance with the decision on payment (declaration) of dividends are determined the persons entitled to receive them, cannot be earlier than 10 days from the date of the decision to pay (declare) dividends and later than 20 days from the date of such decision. Dividends are not paid on treasury shares. Dividend payment period to a nominee holder and a trustee who is a professional participant of the securities market, which are registered in the register of shareholders, shall not exceed 10 business days, and to other persons registered in the register of shareholders shall not exceed 25 business days from the date on which the persons entitled to receive dividends are defined. A shareholder who is entitled to the declared dividends but has not received them due to the fact that the company or the registrar has no exact and necessary address information or bank details, or in connection with the other creditor's delay, has a right to make a claim to the company for the unpaid dividends within three years from the date of the decision on their payment. Upon the expiration of this three year period, declared and unclaimed dividends are restored in retained earnings of the company and the obligation on their payment terminates.

Starting from January 1, 2014, a new "cascade" dividend payment mechanism is introduced with respect to shares recorded on custodians' account as opposite to the shareholders' register. The cascade payment mechanism provides that Russian issuers will pay dividends to the NSD for further transfer to nominee holders (custodians), who in turn will be obliged to further transfer dividends to their clients (shareholders, foreign nominee holders and depository banks for further transfer to depository receipt owners). Under the new regime no disclosure will be required by ultimate beneficial owners in order to receive dividends. See also "Item 3. Key Information — Risk Factors — Risks Relating to Our Shares and ADSs and the Trading Market — Upon introduction of a system of recording the depository's rights to the shares underlying depository receipts, the depository is required to disclose information on ADS and GDS owners in order to exercise voting rights and receive dividends with respect to the shares underlying ADSs and GDSs."

The Joint-Stock Companies Law allows dividends to be declared only out of net profits calculated under the Russian accounting standards and as long as the following conditions have been met:

- the charter capital of the company has been paid in full;
- the value of the company's net assets on the date of adoption of the decision to pay dividends is not less (and would not become less as a result of the proposed dividend payment) than the sum of the company's charter capital, the company's reserve fund and the difference between the liquidation value and the par value of the issued and outstanding preferred shares of the company;
- the company has repurchased all shares from shareholders who demanded repurchase; and
- the company is not, and would not become, insolvent as the result of the proposed dividend payment.

Pursuant to our charter, we may calculate the dividends for preferred shares on the basis of our consolidated financial statements prepared under accepted international accounting standards which we apply for the relevant accounting period, including IFRS and U.S. GAAP. The annual fixed dividend for one preferred share amounts to 20% of our net profit under our annual consolidated financial statements prepared in accordance with the applicable international accounting standards and audited by an independent auditor, divided by 138,756,915, and is declared and paid subject to sufficiency of the company's net profit for those purposes.

If the dividend to be paid for one common share exceeds the dividend to be paid for one preferred share for the same year, we must increase the dividend to be paid for one preferred share up to the amount of dividend to be paid for one common share. For this purpose, if the nominal value of our common shares has changed (e.g., through a share split), the dividend to be paid for one common share is calculated as if its nominal value has not changed. If dividends for common shares are to be paid in kind, the monetary valuation of the property directed for dividend payment must be determined by the Board of Directors involving an independent appraiser.

Distributions to shareholders on liquidation

Under Russian legislation, liquidation of a company results in its termination without the transfer of rights and obligations to other persons as legal successors. The Joint-Stock Companies Law and our charter allow us to be liquidated:

- voluntarily, by a three-quarters majority of the voting stock present at a general shareholders' meeting; or
- involuntarily, by a court order.

Following a decision to liquidate the company, the right to manage our affairs would pass to a liquidation commission which, in the case of voluntary liquidation, is appointed by a general shareholders' meeting and, in an involuntary liquidation, is appointed by the court. Creditors may file claims within a period to be determined by the liquidation commission, but which may not be less than two months from the date of publication of notice of liquidation by the liquidation commission.

The Civil Code gives creditors the following order of priority during liquidation:

- individuals owed compensation for injuries or deaths;
- payments related to disbursement of accrued vacation pay and wages of persons currently or formerly employed under an employment agreement and remuneration to owners of intellectual property rights;
- federal and local governmental entities claiming taxes and similar payments to the budgets and non-budgetary funds; and
- other creditors in accordance with Russian legislation.

Claims of creditors in connection with obligations secured by a pledge of the company's property ("**secured claims**") are satisfied out of the proceeds of the sale of the pledged property prior to claims of any other creditors except for the creditors of the first and second priorities described above, provided that claims of such creditors arose before the pledge agreements in respect of the company's property were made. To the extent that the proceeds of sale of the pledged property are not sufficient to satisfy secured claims, the latter are satisfied simultaneously with claims of the fourth priority creditors as described above.

The Joint-Stock Companies Law and our charter provide for the following order of priority for distribution of remaining assets after settlement with creditors:

- payments to repurchase shares from shareholders having the right to demand repurchase;

- payments of accrued but unpaid dividends on preferred shares and the liquidation value of the preferred shares determined by the company's charter; and
- payments to holders of common and preferred shares.

Liability of shareholders

The Civil Code and the Joint-Stock Companies Law generally provide that shareholders in a Russian joint-stock company are not liable for the obligations of a joint-stock company and bear the risk of losses within the value of their shares. This may not be the case, however, when one entity is capable of determining decisions made by another entity. The entity capable of determining such decisions is called an "effective parent." The entity whose decisions are capable of being so determined is called an "effective subsidiary." The effective parent bears joint and several responsibility for transactions concluded by the effective subsidiary in course of carrying out these decisions if:

- this decision-making capability is provided for in the charter of the effective subsidiary or in a contract between such entities; and
- the effective parent gives binding instructions or consent for a transaction to the effective subsidiary based on the above-mentioned decision-making capability.

Thus, a shareholder of an effective parent is not itself liable for the debts of the effective parent's effective subsidiary, unless that shareholder is itself an effective parent of the effective subsidiary. Accordingly, a shareholder will not be personally liable for our debts or those of our effective subsidiaries unless such shareholder controls our business and the conditions set forth above are met. See "Risk Factors — Legal risks and uncertainties — Shareholder liability under Russian legislation could cause us to become liable for the obligations of our subsidiaries."

In addition, an effective parent is secondarily liable for an effective subsidiary's debts if an effective subsidiary becomes insolvent or bankrupt resulting from the fault of an effective parent only when the effective parent has used the right to give binding instructions, knowing that the consequence of carrying out this action would be insolvency or bankruptcy of this effective subsidiary. This is the case regardless of how the effective parent's capability to determine decisions of the effective subsidiary arises, for example, whether through ownership of voting securities or by contract. If the effective subsidiary is a joint-stock company, the effective parent has secondary liability only if the effective parent has caused the effective subsidiary to take any action or fail to take any action, knowing that such action or failure to take action would result in insolvency or bankruptcy of the effective subsidiary. If the effective subsidiary is a limited liability company, the effective parent may be held secondarily liable if the effective subsidiary's insolvency is caused by the willful misconduct or negligence of such effective parent and if the effective subsidiary's assets are insufficient to cover its obligations. To be relieved from the liability, the effective parent would need to prove before the court that it acted in good faith and in the interests of the effective subsidiary.

Shareholders of an effective subsidiary that is a joint-stock company may also claim compensation for the effective subsidiary's losses from the effective parent if: (1) the effective parent caused the effective subsidiary to take any action or fail to take any action that resulted in a loss and (2) the effective parent knew that such action or failure to take such action would result in an effective subsidiary's loss. Members of an effective subsidiary that is a limited liability company may claim compensation for the effective subsidiary's losses from the effective parent if the effective parent through its willful misconduct or negligence caused the effective subsidiary to take any action that resulted in a loss.

Russian law also provides for other cases in which shareholders may be held liable to us.

Charter capital increase

We may increase our charter capital by:

- issuing additional shares, or
- increasing the nominal value of already issued shares.

A decision on any issuance of shares or securities convertible into shares by closed subscription, or an issuance by open subscription of common shares or securities convertible into common shares constituting more than 25% of the number of issued common shares, requires a three-quarters majority of the voting stock present at a general shareholders' meeting. A decision to increase the charter capital by increasing the nominal value of issued shares requires a majority of the voting stock present at a general shareholders' meeting. In addition, the issuance of shares above the number of authorized and non-issued shares provided in our charter necessitates a charter amendment, which requires a three-quarters majority of the voting stock present at a general shareholders' meeting.

The Joint-Stock Companies Law requires that the value of newly issued shares be determined by the board of directors based on their market value but not less than their nominal value, except in limited circumstances where: (1) existing shareholders exercise a pre-emptive right to purchase shares at the price which is not more than 10% lower than the price paid by third parties, or (2) fees of up to 10% are paid to intermediaries. The price may not be set at less than the nominal value of the shares. The board of directors shall value any in-kind contributions for new shares, based on the appraisal report of an independent appraiser.

Russian securities regulations set out detailed procedures for the issuance and registration of shares of a joint-stock company. These procedures require:

- taking a decision on share placement;
- approval of a resolution on share issuance;
- registration of a share issuance with the CBR;
- placement of the shares;
- registration and filing with the CBR of a report or a notice (as applicable) on results of share issuance; and
- public disclosure of information relating to the share issuance.

Charter capital decrease

The Joint-Stock Companies Law does not allow a company to reduce its charter capital below the minimum charter capital required by law, which is 100,000 rubles for a public joint-stock company. The Joint-Stock Companies Law and our charter require that any decision to reduce our charter capital, whether through a repurchase and cancellation of shares or a reduction in the nominal value of the shares, be made at a general shareholders' meeting.

The Joint-Stock Companies Law allows a company to reduce its share capital only if, at the time of such reduction:

- its share capital is paid up in full;
- the company is not, and would not become, as a result of the payment to, or the modification of the securities of, the shareholders, as described above, insolvent;
- the value of its net assets is not less (and would not become less, as a result of the payment or the modification of the securities to the shareholders) than the sum of its share capital, the reserve fund and the difference between the liquidation value and the par value of its issued and outstanding preferred shares;

- the company has repurchased all shares from shareholders that have the right to demand repurchase of their shares under legislation protecting the rights of minority shareholders, as described below;
- the company has fully paid all declared dividends; and
- the company complies with other requirements of Russian legislation.

In addition, within three business days after taking the decision to reduce our charter capital, we must notify this decision to the authority which carries out state registration of legal entities and publish this decision twice with a monthly interval. Within 30 days of the latest of such publications, our creditors, whose claim rights arose prior to the publication, have the right to demand early performance of the relevant obligation by our company, and if early performance is not possible to terminate the obligation and reimburse related losses.

Share buy-back

Under the Joint-Stock Companies Law and our charter, our general meeting of shareholders and our board of directors are entitled to decide on the acquisition of our shares representing up to 10% of our charter capital. The repurchased shares must be resold at a value not less than a market value within one year of their repurchase or, failing that, the shareholders must decide to cancel such shares and decrease the charter capital. Repurchased shares do not bear voting rights.

The Joint-Stock Companies Law allows us to repurchase our shares only if:

- our charter capital is paid in full;
- we are not and would not become, insolvent as a result of the repurchase;
- the value of our net assets is not less (and would not become less, as a result of the repurchase) than the sum of our charter capital, the reserve fund and the difference between the liquidation value and par value of our issued and outstanding preferred shares; and
- we have repurchased all shares from shareholders having the right to demand repurchase of their shares in accordance with Russian law, as described immediately below.

The Joint-Stock Companies Law and our charter provide that our shareholders may demand repurchase of all or some of their shares if the shareholder demanding repurchase voted against or did not participate in the voting on the decision approving any of the following actions:

- reorganization;
- consent or subsequent approval of a major transaction, which involves property in excess of 50% of the balance sheet value of the company's assets determined according to its accounting statements on the last reporting date (including those which are simultaneously interested party transactions);
- amendment of our charter or approval of a new version of our charter in a manner which restricts shareholders' rights; or
- amendment of the public company's charter which eliminates indication that the company is public, simultaneously with the decision on applying to the CBR on release from obligation to disclose information under the laws of the Russian Federation on securities and the decision on applying for delisting of shares and securities convertible into shares.

A shareholder demanding repurchase must send to us a written request within 45 days following the date when the relevant decision of the general shareholders' meeting is taken. We must purchase the shares of the demanding shareholder within 30 days following the expiration of the above 45-day period or within five business days notify the registrar that the repurchase of the shares is not carried out due to the fact that decisions made by the general shareholders' meeting on the above issues have not entered into force. We may spend up to

10% of our net assets calculated under the Russian accounting standards on the date of the adoption of the decision which gives rise for a share redemption demanded by the shareholders. If the value of shares in respect of which shareholders have exercised their right to demand repurchase exceeds 10% of our net assets, we will repurchase shares from each such shareholder on a pro-rata basis.

A shareholders' decision on filing of an application for delisting of our shares enters into effect if the consideration to be paid for the repurchase of shares does not exceed 10% of our net assets.

Registration and transfer of shares

Russian legislation requires that a joint-stock company maintain a register of its shareholders which, for a public joint-stock company, shall be maintained by a registrar. Since July 2014, our shareholder register has been maintained by Computershare Registrar JSC which was renamed to Independent Registrar Company JSC in October 2015. Ownership of our shares is evidenced by entries made in the shareholders' register or on the books of a Russian licensed depository.

The Federal Law No. 414-FZ "On the Central Depository" dated December 7, 2011 (the "**Central Depository Law**"), which came into force on January 1, 2012, set out a legal framework for establishment and operation of the central depository. On November 6, 2012, the FFMS granted the NSD the status of central depository which opened its nominee holder accounts in, among others, all securities registers of the issuers which are obliged to disclose information in accordance with Russian securities law. As we are required to make public disclosures, the above requirement is applicable to us, which means that the central depository became the only person having a nominee holder account in our share register. Also, the Central Depository Law prohibits persons maintaining securities registers from opening and depositing securities (save for limited exceptions) to other nominee holder accounts from the date of the opening of a nominee holder account with the central depository.

Any of our shareholders may obtain an extract from the register of our shareholders maintained by the registrar or from their respective depository, as the case may be, certifying the number of shares that such shareholder holds. We are entitled to obtain an extract from our shareholders' register which sets out all of our shareholders registered directly therein in cases provided under Russian law. In addition, we are entitled to request through the registrar a list of clients of nominee holders which are entitled to participate in the general shareholders' meeting. However, we are unable to monitor transfers of our shares that are held on the books of depositories registered with the central depository because underlying shareholders have no obligation to reveal and such depositories have no obligation to notify us about such transfers. As a result, we can currently only identify our actual shareholders in a limited number of cases provided for by Russian law, including when requesting our registrar to compile a list of shareholders of record for the general shareholders' meeting and when shareholders and ADSs or GDSs holders provide voting instructions together with disclosure of information, including ownership information, in accordance with Russian securities regulations.

The purchase, sale or other transfer of shares is accomplished through the registration of such transfer in the shareholder register, or the registration of such transfer with a depository if shares are held and recorded by a depository. The registrar or depository may not require any documents in addition to those required by Russian legislation in order to transfer shares in the register or with a depository. Refusal to register the shares in the name of the transferee or, upon request of the beneficial holder, in the name of a nominee holder, is not allowed except in certain instances provided for by Russian legislation, and may be challenged in court.

Reserve fund

Russian legislation requires that each joint-stock company establish a reserve fund to be used only to cover the company's losses, redeem the company's bonds and repurchase the company's shares in cases when other funds are not available. Our charter provides for a reserve fund of 5% of our charter capital, funded through

mandatory annual transfers of at least 5% of our statutory net profits until the reserve fund has reached the 5% requirement.

Disclosure of Information

Under Russian legislation, disclosure of information on the securities market means making it available to all interested parties, regardless of the purpose of obtaining this information. We are required to make the following periodic public disclosures and filings in the newswire of authorized information agency Interfax (www.e-disclosure.ru), on our websites at www.mechel.ru and www.mechel.com, as well as on the webpage provided by authorized information agency Interfax (www.e-disclosure.ru/portal/company.aspx?id=1942):

- disclosure of quarterly reports containing information about us, our shareholders, registrar and depositary, the structure of our management bodies, the members of the board of directors and management board, our branches and representative offices, our subsidiaries and affiliates, our shares, bank accounts and auditors, important developments during the reporting quarter, quarterly accounting statements prepared in accordance with the Russian accounting standards, and other information about our financial and business activity;
- disclosure of any information concerning material facts and other official disclosures, including, among other things, our reorganization; certain changes in the amount of our assets; decisions on share issuances; certain changes in ownership and shareholding; information about controlled organizations which are material to us or organizations controlling us, reorganization, liquidation or bankruptcy of such organizations; conclusion of agreement with our controlled or controlling organization, where we are required to buy securities issued by such controlled or controlling organization; as well as shareholder and management bodies resolutions;
- notifying Moscow Exchange about the disclosure of aforementioned information;
- disclosure of the documents that we have received in connection with any of the following:
 - a voluntary offer (including any competing offer) to acquire us;
 - a mandatory offer (including any competing offer) to acquire us;
 - a notice of the right of shareholders to sell their shares to the person that has acquired more than 95% of our common shares; and
 - a request that minority shareholders sell their shares to the person that has acquired more than 95% of our common shares;
- disclosure of information on various stages of securities placement, issuance and registration through publication of certain data as required by the securities legislation;
- disclosure of our charter and internal corporate governance documents;
- disclosure of our annual report and annual financial statements prepared in accordance with the Russian accounting standards and our annual and interim IFRS financial statements;
- disclosure on a quarterly basis of a list of our affiliated companies and individuals;
- disclosure of a list of information which is considered an insider information and approved by the company (“**insider information**”);
- disclosure of insider information; and
- disclosure of other information as required by applicable Russian securities legislation.

Starting from January 1, 2020, new disclosure rules (which were enacted by the Federal Law No. 514-FZ “On amendments to the Federal Law “On Securities Market” and other legislative acts” on December 27, 2018) will enter into force. Pursuant to these new rules, among other things, issuers will be obligated to determine

independently which information is material and must be disclosed. At that, the CBR may adopt additional regulations related to disclosure of information based on a company's field of business and size as well as on the category (type) of securities issued and type of listing of such securities.

In addition, new rules on inside information will enter into force, starting from January 1, 2020. Issuers will be obligated to maintain their own lists of inside information (compared to the current regulation where the CBR establishes an exhaustive list of what constitutes inside information which issuers must rely on).

General Meetings of Shareholders

Procedure

A general shareholders' meeting may exercise only the powers that are set forth in the Joint-Stock Companies Law and in our charter. Among the issues which our shareholders have the exclusive power to decide are:

- approval of charter amendments or of a new version of the charter;
- reorganizations or liquidations;
- election and early removal of the members of the board of directors;
- determination of the number, nominal value and type of authorized shares and rights granted by such shares;
- changes in the company's charter capital;
- appointment and early removal of the members of the counting commission;
- approval of our independent auditor;
- consent or subsequent approval of certain interested party transactions and major transactions;
- distribution of profits and losses, including approval of dividends payment;
- decisions on our participation in commercial or industrial groups or other associations of commercial entities;
- redemption by the company of issued shares in cases provided for by the Joint-Stock Companies Law;
- approval of certain internal documents regulating the activity of our governing bodies;
- decision on filing of an application for delisting of our shares or securities convertible into shares; and
- other issues, as provided by the Joint-Stock Companies Law and our charter.

Voting at a general shareholders' meeting is generally carried out on the principle of one vote per voting share, with the exception of the election of the board of directors, which is done through cumulative voting. Decisions are generally passed by a majority of the voting stock present at a general shareholders' meeting. However, Russian law requires a three-quarters majority of the voting stock present at a general shareholders' meeting to approve the following:

- approval of charter amendments or of a new version of the charter;
- reorganizations or liquidations;
- determination of the number, nominal value and category (type) of authorized shares and the rights granted by such shares;
- repurchase by the company of its issued shares;
- any issuance of shares or securities convertible into common shares by closed subscription;

- issuance by open subscription of common shares or securities convertible into common shares, in each case, constituting 25% or more of the number of issued and outstanding common shares;
- consent or subsequent approval of a major transaction the subject matter of which is property with the value exceeding 50% of the balance sheet value of the company's assets; and
- decision on filing of an application for delisting of our shares or securities convertible into shares.

A resolution of the shareholders' meeting to apply for delisting of our preferred shares requires a three-quarters majority vote of the voting common stock present at the meeting and a three-quarters majority vote of the total preferred stock. The Joint-Stock Companies Law provides that a charter may require a larger number of the votes for passing such resolution.

The quorum requirement for our general shareholders' meeting is met if shareholders (or their representatives) accounting for more than 50% of the issued voting shares are present. If the quorum requirement is not met, another general shareholders' meeting with the same agenda may (and, in the case of an annual meeting, must) be scheduled and the quorum requirement is satisfied if shareholders (or their representatives) accounting for at least 30% of the issued voting shares are present at that meeting.

The annual general shareholders' meeting must be convened by the board of directors and be held between March 1 and June 30 of each year, and the agenda must include the following items:

- election of the members of the board of directors;
- approval of distribution of profits, including approval of annual dividends and losses, if any; and
- appointment of an independent auditor.

A shareholder or group of shareholders owning in the aggregate at least 2% of the outstanding voting shares may introduce proposals for the agenda of the annual general shareholders' meeting and may nominate candidates to the board of directors and the general director. Any agenda proposals or nominations must be provided to the company not later than 45 days after the preceding calendar year ends.

Extraordinary general shareholders' meetings may be called either by the board of directors on its own initiative, or at the request of the independent auditor of the statutory accounts or a shareholder or group of shareholders owning in the aggregate at least 10% of the issued voting shares as of the date of the request.

A general shareholders' meeting may be held in a form of a meeting or by an absentee ballot. The form of a meeting contemplates the adoption of resolutions by the general shareholders' meeting through the attendance of the shareholders or their authorized representatives for the purpose of discussing and voting on issues of the agenda, provided that if a ballot is mailed to shareholders for participation at a meeting convened in such form, the shareholders may complete and mail the ballot back to the company without personally attending the meeting. A general shareholders' meeting by absentee ballot contemplates the determination of shareholders' opinions on issues on the agenda by means of a written poll.

The following issues cannot be decided by a general shareholders' meeting by absentee ballot:

- election of the members of the board of directors; and
- approval of a company's independent auditor for statutory accounts.

The voting ballots, which must be used when conducting a general shareholders' meeting in form of a meeting in a joint-stock company, must be sent to persons registered in the register of shareholders and entitled to participate in the general shareholders' meeting at least 20 days in advance of the general shareholders' meeting.

Notice and participation

Persons registered in the register of shareholders and entitled to participate in a general shareholders' meeting must be notified of the meeting, whether the meeting is to be held in direct form or by absentee ballot, not less than 30 days prior to the date of the meeting, and such notification shall specify the agenda for the meeting. However, if it is an extraordinary general shareholders' meeting to elect the board of directors or it is a general shareholders' meeting to elect the board of directors of a reorganized company, persons registered in the register of shareholders and entitled to participate in the general shareholders' meeting must be notified at least 50 days prior to the date of the meeting. Under our charter, a notice of the general shareholders' meeting shall be published on our website *www.mechel.ru*. It also may be sent by post or delivered against signature, as well as published in the Russian official newspaper *Rossiyskaya Gazeta*. Moreover, other means of mass media (television, radio) can be used. Only those items that were set out in the agenda may be voted upon at a general shareholders' meeting. In addition, nominee holders included in the shareholder register will be notified of the shareholders' meeting by way of an electronic communication and will be required to convey such information to the depositors within a prescribed period.

In accordance with Russian law and our charter, we may notify persons registered in the register of shareholders and entitled to participate in the general shareholders' meeting of a meeting by sending an electronic message to the email address of a shareholder, as well as by sending the text message containing the procedure for reviewing the notice of the general meeting of shareholders at the contact phone number or email address of a shareholder.

In accordance with Russian law and our charter, a list of persons entitled to participate in the general shareholders' meeting is compiled by the registrar of the company pursuant to the regulations of Russian securities law. It is compiled on the basis of the data from the register, as well as taking into account information provided to the registrar by the nominee holder to whom the relevant client account was opened in the register. The owners of the company's shares are not included in the list if the nominee holder has not submitted to the registrar information about them. The list of persons entitled to participate in the general shareholders' meeting is compiled on the date established by the board of directors, which date may neither be earlier than 10 days from the date of adoption of the resolution to hold a general shareholders' meeting nor more than 25 days before the date of the meeting (or, in the case of an extraordinary general shareholders' meeting to elect the board of directors, not more than 55 days before the date of the meeting).

The right to participate in a general shareholders' meeting may be exercised by shareholders as follows:

- by personally participating in the discussion of agenda items and voting thereon;
- by sending an authorized representative to participate in the discussion of agenda items and to vote thereon;
- by absentee ballot;
- by delegating the right to fill out the absentee ballot to an authorized representative; or
- by sending information about their willingness to the nominee holder for further transfer to the registrar in accordance with the requirements of Russian securities law.

The Federal Law No. 415-FZ also sets forth obligations for a depositary to disclose information on depositary receipt owners in order to exercise voting rights with respect to the shares represented by depositary receipts. The requirements for the provision of information are regulated by the Directive of the CBR dated June 15, 2015. Information about the depositary receipt owners is provided to the issuer in the form of a list of persons who exercise the rights under the depositary receipts. The list is provided to the issuer by the foreign depositary which opens the depo account of depositary programs. The list is provided for the preparation and holding of a shareholders' meeting. See also "Item 3. Key Information — Risk Factors — Risks Relating to Our Shares and ADSs and the Trading Market — Upon introduction of a system of recording the depositary's rights

to the shares underlying depositary receipts, the depositary is required to disclose information on ADS and GDS owners in order to exercise voting rights and receive dividends with respect to the shares underlying ADSs and GDSs.”

Furthermore, on July 1, 2016, provisions of the Federal Law No. 210 stipulating the new procedure for corporate actions became effective which, *inter alia*, provides for a possibility of participation at general meetings of security holders by means of electronic voting for those shareholders who hold their shares either directly on a share register or through a depositary. This new procedure may lead to delays in voting process and inconsistencies and may entail additional risks due to its novelty to the Russian market.

Board of Directors

The Joint-Stock Companies Law and our charter provide that our entire board of directors is up for election at each annual general shareholders’ meeting and that our board of directors is elected through cumulative voting. Under cumulative voting, each shareholder has a number of votes equal to the number of voting shares held by such shareholder multiplied by the number of persons to be elected to our board of directors, and the shareholder may give all such votes to one candidate or spread them between two or more candidates. Before the expiration of their term, the members of the board of directors may be removed as a group at any time without cause by a majority of the voting stock present at a general shareholders’ meeting.

The Joint-Stock Companies Law requires at least a nine-member board of directors for a joint-stock company with more than 10,000 holders of voting shares. Only natural persons (as opposed to legal entities) are entitled to sit on the board. Members of the board of directors are not required to be shareholders of the company. Members of the management board are not permitted to constitute more than 25% of the members of the board of directors. The actual number of directors is determined by the company’s charter or decision of the general shareholders’ meeting. Our charter provides that our board of directors shall consist of nine members, and the majority of our directors shall be independent.

The Joint-Stock Companies Law prohibits the board of directors from acting on issues that fall within the exclusive competence of the general shareholders’ meeting. Our board of directors has the power to direct the general management of the company, and to decide the following issues:

- determination of our business priorities and their significant change, including approval of our annual and quarterly budgets;
- convening of annual and extraordinary general shareholders’ meetings, except in certain circumstances specified in the Joint-Stock Companies Law;
- approval of the agenda of the general shareholders’ meeting and determination of the record date for shareholders entitled to participate in a general shareholders’ meeting;
- placement of our bonds and other securities;
- determination of the price of our property and of our securities to be placed or repurchased, as provided for by the Joint-Stock Companies Law;
- repurchase of our shares, bonds and other securities in certain cases provided for by the Joint-Stock Companies Law;
- appointment of the general director and members of the management board, and early termination of their powers and the establishment of their compensation;
- recommendation to the general shareholders’ meeting on the amount of a dividend and the payment procedure thereof;
- recommendation on the fees payable for the services of an independent auditor;

- the use of our reserve fund and other funds;
- the creation and liquidation of branches and representative offices;
- approval of internal documents, except for those documents whose approval falls within the competence of the company's shareholders or general director or the management board;
- consent or subsequent approval of major and interested party transactions in the cases provided for by the Joint-Stock Companies Law;
- approval of the procedures of internal control over financial and business operations of the company;
- control over establishment of the risk management system;
- increasing our charter capital by issuing additional shares within the limits of the authorized charter capital, except in certain circumstance specified in our charter;
- approval of decisions on securities issuances and of the prospectus relating to such securities issuances, as well as of reports on the results of such securities issuances;
- approval of our share registrar;
- decision on filing of an application for listing of our shares or securities convertible into shares;
- decision on alienation by the company of treasury and quasi-treasury shares, as well as determination of the procedure for alienation of such shares;
- approval of financing transactions, as defined in our charter;
- conclusion of transactions exceeding 5% of the balance sheet value of the company's assets according to accounting statements on the last reporting date;
- approval of our annual report and annual financial statements; and
- other issues, as provided for by the Joint-Stock Companies Law and our charter.

Our charter requires a unanimous vote of the directors present for an action to pass, with the exception of actions for which our charter requires a majority vote of the directors or a majority vote of the disinterested and independent directors, as described herein. A board meeting is considered duly assembled and legally competent to act when the elected directors are present in a number necessary for the adoption of resolutions on items of the agenda in accordance with the charter. Quorum for a board meeting shall be at least half of the elected members of the board and certain issues require presence all of the elected members of the board, unless otherwise provided by the law or the company's charter.

Management Board

In June 2011, an annual general shareholders' meeting approved a new version of the "Bylaw on the Collegial Executive Body (Management Board)." Pursuant to the Bylaw, the management board engages in discussions regarding important corporate issues within its powers and makes recommendations to our board of directors. The management board operates on the basis of our charter and applicable internal regulations. The management board's size is defined by the board of directors, and it may comprise of senior management of Mechel and our subsidiaries, with each member of the management board elected by the board of directors for an indefinite period. A meeting of the management board is quorate if at least half of its members participate in the meeting.

The management board decides on the following issues, among others:

- developing and submitting to the board of directors long-term plans for the implementation of the company's priorities and proposals regarding its development strategy;

- reporting to the board of directors on the realization of investment projects in the amount of more than \$30 million;
- developing and submitting to the board of directors investment projects in the amount of more than \$50 million;
- submitting to the board of directors proposals on bonds placement and acquisitions;
- submitting to the board of directors proposals on participation (obtaining or increasing participation) or giving up (reducing) our participation in other entities;
- approving annual and long-term investment programs;
- approving transactions related to alienation by the company of non-current assets with a value of between 10% to 25% of the balance sheet value of the company's assets, except for transactions provided by our charter and interested party transactions;
- making certain decisions regarding the exercise of our rights as a shareholder or a participant of other entities;
- making recommendations on certain matters relating to the management of our affiliates included in the list approved by our management board;
- developing and establishing methods of compensation and monetary motivation for our employees; and
- other issues related to our day-to-day business referred to the management board by its chairman, the board of directors or by a shareholder holding not less than 20% of our voting shares.

Together with the general director, the management board is responsible for our day-to-day management and administration. The management board's activities are coordinated by the general director (chairman of the management board) and are regulated by applicable Russian law and our charter.

General Director

The general director (also referred to in this document as chief executive officer) is our sole executive body and manages our current operations within its powers and organizes the implementation of resolutions of our general shareholders' meeting and the board of directors. The general director acts on our behalf without a power of attorney and has the following rights and responsibilities:

- performing the routine management of our operations;
- exercising the right of first signature on financial documents;
- managing our property to provide for our current operations within the limits established by our charter and prevailing Russian legislation within its powers;
- representing our interests both in Russia and abroad;
- approving staff, executing labor contracts with our employees and rewarding and disciplining employees;
- entering into transactions on our behalf within its powers;
- issuing powers of attorney on our behalf;
- opening and closing our bank accounts;
- organizing our accounting and reporting process;
- issuing orders and instructions binding on all our employees;
- organizing the implementation of resolutions of our general shareholders' meeting and our board of directors; and

- performing other functions necessary to achieve our aims and to provide for our normal operations, in compliance with prevailing legislation and our charter, except for the functions laid upon our other management bodies by the Joint-Stock Companies Law and our charter.

The general director is appointed by the board of directors for a period of one year. The term of office runs from the time of his appointment until such time as a general director is appointed by the board of directors one year later. The general director may be re-appointed an unlimited number of times.

The general director may on his own initiative renounce his powers at any time by written notice to the board of directors. The authority of the general director may be terminated before the expiration of his term of office by a resolution of the board of directors on the following grounds:

- failure to comply with the requirements of our charter, resolutions of the general shareholders' meeting or the board of directors or our internal documents;
- in the cases stipulated by the employment agreement with the general director; and
- in other events provided by current legislation.

Upon resolution of the general shareholders' meeting, the authority of the sole executive body may be vested in a commercial organization (a **"managing organization"**) or an individual entrepreneur (a **"manager"**) on a contractual basis. Under the Civil Code, if the authority of a company's sole executive body has been vested in a managing organization or a manager, the company exercises its legal rights and assumes its legal obligations through such managing organization or manager. A resolution to transfer the authority of a company's sole executive body to a managing organization or a manager shall be passed by the general meeting of shareholders only upon recommendation of the board of directors of the company.

Our general director is required under Russian law to disclose information on his holdings of our securities and on sales and/or purchases of our securities, as well as if he is a member of the Board of Directors to inform of the circumstances by virtue of which he can be recognized interested in transactions.

Interested Party Transactions

In accordance with amendments to the Joint-Stock Companies Law, which entered into force on January 1, 2017, transactions defined as "interested party transactions" do not require a mandatory prior consent of disinterested directors or shareholders of a company. However, the Joint-Stock Companies Law introduces an obligation of the company to notify members of the board of directors, members of the collegial executive body and in case all members of the board of directors are interested (or in case such notification is prescribed by the charter) all shareholders about such transactions prior to their accomplishment. After receiving such a notice, the above-mentioned persons may demand convocation of a meeting of the board of directors or a general shareholders' meeting to obtain relevant consent.

The following persons may be deemed interested parties: a member of the board of directors; the sole executive body; a member of a collegial executive body; a person directly or indirectly controlling over 50% of the voting shares in another legal entity (on the basis of an instruction, a shareholders' agreement or other agreements); a person having the right to appoint the sole executive body or more than half of the management board members; and a person having the right to give binding instructions on the company.

A person directly or indirectly holding over 50% of the voting shares in another legal entity shall be deemed controlling. A person in which such holding is exercised shall be deemed controlled.

A transaction shall be deemed an interested party transaction if the persons referred to above and/or their spouses, parents, children, adoptive parents and adopted children, full and half brothers and sisters and/or controlled entities:

- act as parties to, beneficiaries in, representatives or agents in the transaction;

- control another legal entity that is a party, beneficiary, representative or agent in the transaction; or
- act as members of any management body of the company which is a party, beneficiary, representative or agent in the transaction, or members of any governing body of the managing organization of such company.

In public joint-stock companies approval for the transaction shall be granted by a majority vote of disinterested directors of the company who within one year prior to the decision: (1) have not acted as general directors (or persons performing functions of the sole executive body), members of any executive body of the company or its management company or managers; (2) did not have spouses, parents, children, adoptive parents and adopted children, full and half brothers and sisters acting as members of any executive body of the company or its management company or managers; and (3) did not control the company or its management and were not entitled to give instructions binding on the company.

If the value of a transaction or a number of related transactions is 10% or more of the balance sheet value of the company's assets calculated in accordance with the Russian accounting standards, as well as in other cases provided by the Joint-Stock Companies Law, the approval for such transaction shall be granted by a majority vote of disinterested shareholders participating in the meeting.

At the same time, the Joint-Stock Companies Law provides cases in which the relevant requirements do not apply. These include transactions entered into within the ordinary course of business (even if the company did not enter into similar transactions before), transactions in respect of property with the value not exceeding 0.1% of the balance sheet value of the company's assets calculated in accordance with the Russian accounting standards as of the last reporting date, or transactions on the acquisition or redemption by the company of its issued shares, as well as in other cases provided by the Joint-Stock Companies Law.

For information on certain risks relating to interested party transactions see "Item 3. Key Information — Risk Factors — Risks Relating to Our Business and Industry — In the event that the minority shareholders of our subsidiaries were to successfully challenge past interested party transactions or do not approve interested party transactions in the future, we could be limited in our operational flexibility."

Major Transactions

The Joint-Stock Companies Law defines a "major transaction" as a transaction or a number of related transactions entered into beyond the ordinary course of business and, at the same time, associated with the direct or indirect acquisition, disposal or possibility of disposal of property with a value of 25% or more of the balance sheet value of the company's assets determined in accordance with the Russian accounting standards as of the last reporting date preceding the transaction, as well as in other cases provided by the Joint-Stock Companies Law.

Under the Joint-Stock Companies Law a decision to issue consent to, or to grant a subsequent approval of, major transactions shall be adopted in accordance with the following procedure:

- major transactions involving property ranging from 25% to 50% of the balance sheet value of the company's assets require unanimous approval by all members of the board of directors or, if unanimity is not reached, a majority of the voting stock held by shareholders participating in the meeting; and
- major transactions involving property in excess of 50% of the balance sheet value of the company's assets require a three-quarters majority of the voting stock held by shareholders participating in the meeting.

At the same time, the Joint-Stock Companies Law sets out the cases to which requirements to the procedure of executing of major transactions do not apply:

- transactions related to the placement of shares or other securities convertible into shares;

- transactions entered into in the course of property rights transfer in a reorganization;
- transactions mandatory for companies pursuant to the federal laws (settlements under such transactions are effected at fixed prices and tariffs set by the relevant governmental authorities); and
- other cases provided by the Joint-Stock Companies Law.

For information on our largest shareholders' potential ability to approve major transactions see "Item 3. Key Information — Risk Factors — Risks Relating to Our Business and Industry — The concentration of our shares with our largest shareholders will limit your ability to influence corporate matters and transactions with largest shareholders may present conflicts of interest, potentially resulting in the conclusion of transactions on less favorable terms than could be obtained in arm's length transactions."

Change in Control

Anti-takeover protection

Russian legislation requires the following:

- A person intending to acquire more than 30% of the total number of a public company's common shares and voting preferred shares (including, for such purposes, shares already owned by such person and its affiliates), will be entitled to make a public offer to other holders of the corresponding categories (types) of shares of the public company (the "**voluntary offer**"). The voluntary offer may also contain an offer to purchase securities convertible into such shares from other holders of such securities convertible into such shares of the public company.
- A person that has acquired more than 30% of the total number of a public company's common shares and voting preferred shares (including, for such purposes, shares already owned by such person and its affiliates) will be required to make, within 35 days of such shares being recorded in the name of such person or the moment when the person learnt, or should have learnt that it individually or together with its affiliates owned the relevant number of the shares, a public offer for other shares of the same class and for securities convertible into such shares (the "**mandatory offer**"), at a price which is not less than (i) the price determined based on a weighted average market price of the shares and securities convertible into such shares during trading sessions on a stock exchange for the six months preceding the date when a mandatory offer was sent to the CBR; or (ii) the market price, which must be determined by an appraiser if the shares and securities convertible into such shares are not traded on a stock exchange or their trading history is less than six month. The public offer price may not be less than the highest price at which the offeror or its affiliates purchased or undertook to purchase the relevant shares or securities over the six-month period before the offer was sent to the public company. From the moment of acquisition of more than 30% of the total number of the shares until the moment of sending of an offer to the public company, the person making the offer and its affiliates will be able to vote only 30% of the common shares and voting preferred shares of the public company (regardless of the size of their actual holdings). These rules are also applied (or reapplied) to acquisitions resulting in a person and its affiliates owning more than 50% and 75% of a public company's outstanding common shares and voting preferred shares.
- A person that, as a result of such a voluntary or mandatory offer, becomes (individually or together with its affiliates) the owner of more than 95% of the total number of the public company's common shares and voting preferred shares, must buy out the remaining shares of the public company as well as other securities convertible into such shares upon request of the holders of such shares or other securities, and may require such holders to sell such shares and other securities convertible into such shares. The price for the shares and other securities convertible into such shares should be determined in the manner described above for a mandatory offer, but it may not be less than (i) the price of the preceding acquisition of the public company's shares or other securities convertible into such shares under the voluntary or mandatory offer as a result of which the offeror and its affiliates acquired over

95% of the total number of the public company's common shares and voting preferred shares; or (ii) the highest price at which after the expiration date of the voluntary or mandatory offer the offeror or its affiliates acquired or undertook to acquire such shares or other securities convertible into such shares of the public company. The offeror is entitled to require the holders of the remaining shares of the public company, as well as other securities convertible into such shares, to sell such shares and other securities, provided that the offeror acquired not less than 10% of the total number of shares or other securities of the public company as a result of acceptance by other shareholders of the voluntary or mandatory offer as described above.

- An offer of the kind described in the preceding three paragraphs must be accompanied by a bank guarantee of payment. Prior notice of the offer must be filed with the CBR which may order amendments to the terms of the offer (including price) in order to bring them into compliance with the requirements of the current legislation.
- Once a voluntary or mandatory offer has been made, competing offers for the same securities can be made by third parties and, in certain circumstances, acceptance of the initial offer may be withdrawn by the security holders who choose to accept such competing offer. From the date of receipt of a voluntary or mandatory offer by the public company until 20 days after its expiration the public company's general shareholders' meeting will have the sole power to make decisions on charter capital increase by way of issuance of additional shares within the number and category (type) of authorized shares, issuance of securities convertible into shares, including options of a public company, consent or subsequent approval of certain transactions or a number of related transactions, involving the acquisition or disposal, or a possibility of disposal (whether directly or indirectly), of property having a value of 10% or more of the balance sheet value of the assets of a public company as determined under the Russian accounting standards as of the last reporting date preceding the transaction, with the exception of, *inter alia*, transactions completed in the ordinary course of business, and on certain other significant matters.

The above rules may be supplemented through rulemaking by the CBR, which may result in a broader, narrower or more specific interpretation of these rules by the governmental and judicial authorities, as well as by market participants.

Approval of the Russian Federal Antimonopoly Service

Pursuant to the Competition Law, acquisitions of voting shares of a joint-stock company, involving companies with a combined value of assets or annual revenues, exceeding a certain threshold under the Russian accounting standards, which would result in a shareholder (or a group of shareholders defined under Russian law) holding more than 25%, 50% or 75% of the voting capital stock of such company, or in a transfer between such companies of assets or rights to assets, the value of which exceeds a certain amount, or obtaining rights to determine the conditions of business activity of an entity or to exercise the authorities of its executive body must be approved in advance by the FAS. Such transactions executed between members of a group of companies may require only a subsequent notification to the FAS if prior notification about the members of the group of companies has been filed with the FAS and the information contained in this notification is still accurate as of the date of the relevant transaction and had not been changed within 30 days from the date of group's disclosure and prior to the date of the transaction's settlement. See "Item 4. Information on the Company — Regulatory Matters — Russian Antimonopoly Regulation."

Foreign ownership

Under the Strategic Industries Law any acquisition, whether direct or indirect, by a foreign investor or its group of entities (except for the acquisition by a foreign investor controlled by the Russian Federation, the constituent entity of the Russian Federation and/or Russian nationals provided such Russian nationals are Russian tax residents and do not have other nationality) of a certain stake, or certain rights, in a Strategic

Company or a Subsoil Strategic Company, as well as acquisition, ownership or use by them of property of such companies which relates to core production facilities and the cost of which is 25% or more of the balance sheet value, must be previously approved by the Governmental Commission. Under the Strategic Industries Law, acquisition of 5% or more of the charter capital of a Strategic Company and implementation of pre-agreed transactions and other actions by a foreign investor or its group of entities require notification of the Russian authorities. The FAS is the federal executive authority for execution of control over making foreign investments in the Russian Federation. See “Item 3. Key Information — Risk Factors — Legal risks and uncertainties — Expansion of limitations on foreign investment in strategic sectors could affect our ability to attract and/or retain foreign investments” and “Item 4. Information on the Company — Regulatory Matters — The Strategic Industries Law.”

The Federal Law No. 160-FZ “On Foreign Investments in the Russian Federation,” dated July 9, 1999, as amended (“**Foreign Investments Law**”), provides that any acquisition (whether direct or indirect) by a foreign state or international organization or entities controlled by them of more than 25% of voting shares in a Russian company or any other powers to block decisions of the management bodies in a Russian company, requires a prior approval of the Governmental Commission in accordance with the procedures set forth in the Strategic Industries Law.

In July 2017, the Foreign Investments Law and the Strategic Industries Law were amended to restrict foreign investments. After July 18, 2017, any transaction involving acquisition of rights by a foreign investor in respect of any Russian enterprise may become subject to approval by the Commission on Control of Foreign Investments in Russia at the decision of the Russian Prime Minister. Furthermore, the notion of a foreign investor also includes Russian citizens possessing foreign nationality and legal entities which, though incorporated in Russia, are controlled by foreign investors. The amendments to the Strategic Industries Law which entered into force on June 12, 2018, prohibit obtaining control over a Strategic Company or acquiring fixed assets of a Strategic Company representing 25% or more of its balance sheet value to foreign investors which do not submit to the FAS information on their beneficiaries, beneficial owners and controlling parties, or organizations controlled by them.

Disclosure of Ownership

Under Russian law, a holder of common shares of a joint-stock company, which has a CBR registered prospectus, must notify the company and the CBR of an acquisition of 5% or more of the company’s common shares or of an acquisition of the right to cast votes attached to 5% or more of the common shares by virtue of an agreement or otherwise, and of any subsequent change in the number of the common shares above or below a 5%, 10%, 15%, 20%, 25%, 30%, 50%, 75% or 95% threshold. Such notifications must be given not later than 10 days after the common shares have been transferred to such shareholder’s securities account or after the acquisition of the right to cast votes attached to such common shares, whether by virtue of an agreement or otherwise.

Russian taxpayers (organizations and individual entrepreneurs), as well as foreign persons, registered as individual entrepreneurs in Russia, who acquire more than 10% of shares in a Russian joint-stock company, need to notify the Russian tax authorities within one month following such acquisition.

Negative Net Assets

If the net assets of a Russian joint-stock company calculated on the basis of the Russian accounting standards as of the end of its second or any subsequent reporting year are lower than its share capital, the joint-stock company’s board of directors must disclose it in the annual report. Furthermore, if the net assets of a Russian joint-stock company calculated on the basis of the Russian accounting standards as of the end of the reporting year that follows its second or any subsequent reporting year, at the end of which the net assets of such company were lower than its share capital, remain lower than its share capital, the company must decrease its

share capital to the amount of its net assets or liquidate. In addition, if a Russian joint-stock company's net assets calculated on the basis of the Russian accounting standards as of the end of its second or any subsequent reporting year are lower than the minimum amount of the share capital required by law, the company must liquidate.

Moreover, if a Russian joint-stock company fails to comply with any of the requirements stated above within six months from the end of the relevant reporting year, governmental or local authorities will be able to seek involuntary liquidation of such company in court. In addition, if a Russian joint-stock company fails to comply with any of the requirements stated above within six months from the end of the relevant reporting year or decreases its share capital, the company's creditors will have the right to accelerate their claims or demand early performance of the company's obligations owed to them and demand compensation of damages.

In addition, if a Russian joint-stock company's net assets calculated on the basis of the Russian accounting standards are lower than its share capital by more than 25% as of the end of three, six, nine or twelve months of the reporting year that follows its second or any subsequent reporting year, at the end of which the net assets of such company were lower than its share capital, a joint-stock company is obliged to make a public disclosure of this fact. In this case, the company's creditors whose claims arose before the publication will have the right to accelerate their claims or demand early performance of the company's obligations owed to them and demand compensation of damages.

However, if a Russian joint-stock company is able to demonstrate that the creditors' rights were not violated as a result of a decrease of its share capital or a decrease of the amount of its net assets, as the case may be, and that the security provided for due performance of the company's obligations is sufficient, a court may dismiss the creditors' claims that are brought in the following cases: (1) in the event of a decrease of the share capital of the company, including when the share capital of the company must be decreased to the amount of its net assets in compliance with the requirements of Russian law; and (2) in the event the company's net assets calculated on the basis of the Russian accounting standards are lower than its share capital by more than 25% at the end of three, six, nine or twelve months of the reporting year that followed its second or any subsequent reporting year, at the end of which the net assets of such company became lower than its share capital. Moreover, the existence of negative assets, generally, may not accurately reflect the actual ability to pay debts as they come due. Some Russian courts, in deciding whether or not to order the liquidation of a company for having negative net assets, have looked beyond the fact that the company failed to comply fully with all applicable legal requirements and have taken into account other factors, such as the financial standing of the company and its ability to meet its tax obligations, as well as the economic and social consequences of its liquidation. Nonetheless, creditors have the right to accelerate claims, including damages claims, and governmental or local authorities may seek the liquidation of a company with negative net assets. Courts have, on rare occasions, ordered the involuntary liquidation of a company for having net assets less than the minimum share capital required by law, even if the company had continued to fulfill its obligations and had net assets in excess of the minimum share capital required by law at the time of liquidation. See "Item 3. Key information — Risk Factors — Legal risks and uncertainties — One or more of our subsidiaries could be forced into liquidation on the basis of formal non-compliance with certain requirements of Russian law, which could materially adversely affect our business, financial condition, results of operations and prospects."

Material Contracts

The following is a description of contracts that we and/or our subsidiaries are a party to and that are or may be material to our business. The descriptions of the contracts are qualified in their entirety by reference to the relevant contracts. For more information, see "Item 5. Operating and Financial Review and Prospects — Liquidity and Capital Resources — Restrictive Covenants" and "Item 13. Defaults, Dividend Arrearages and Delinquencies."

Credit Facility for Mechel from VTB Bank

General

On December 27, 2010, Mechel obtained a credit line for the total amount of 10.0 billion rubles from VTB Bank to finance our general activity. In November 2011, the amount of the credit line was increased up to 13.0 billion rubles.

On April 10, 2013, Mechel executed an amendment increasing the amount of the facility to 40.0 billion rubles (approximately \$1.3 billion as of that date). The term of the facility was extended to five years and the covenants were amended. The proceeds were used to refinance existing indebtedness with VTB Bank as well as to refinance other obligations of the companies within our group (including redemption of ruble bonds).

In May 2014, Mechel entered into an amendment to the credit facility agreement to refinance debt in the amount of 40.0 billion rubles (approximately \$711.0 million as of December 31, 2014), providing for an extension of the repayment grace period until April 2015 and the final maturity until April 2018. VTB Bank also provided an additional loan for redemption of ruble bonds in the amount of up to 3.8 billion rubles (approximately \$67.3 million as of December 31, 2014). As of December 31, 2014, the facility was fully drawn.

In September 2015, Mechel signed restructuring with VTB Bank for the amount of principal and accrued compounded interest totaling 44.8 billion rubles (approximately \$614.3 million as of December 31, 2015), providing for an extension of the repayment grace period until April 2017 and the final maturity until April 2020. The restructuring came into effect on October 13, 2015.

In December 2016, Mechel signed an amendment to its credit facility agreement with VTB Bank which provides for an extension of the repayment grace period until April 2020 and the final maturity until April 2022.

In December 2016, Chelyabinsk Metallurgical Plant entered into a credit facility agreement with VTB Bank with a credit limit of 30.0 billion rubles (approximately \$494.6 million as of December 31, 2016) to refinance Mechel's debt under the credit facility with VTB Bank. The loans are provided to the borrower until February 28, 2020 in the amount of 5.0 billion rubles twice a year in 2017 and 2018 and once a year in 2019 and 2020. The borrower's obligations are guaranteed by Mechel and the same guarantors as under the Mechel's credit facility, except for Bratsk Ferroalloy Plant, Mecheltrans and Mechel Service. The credit facility is secured by the same pledges as the Mechel's credit facility, except for 37.5%+1 share of Mechel Mining. In all other material aspects the terms of the credit facility are identical to the Mechel's credit facility. As of December 31, 2018, we had drawn 10.0 billion rubles under this credit facility.

Interest rate and interest period

Interest under the credit facility is payable monthly at the CBR key rate plus 1.5% per year. The lender may increase the interest rate by 1% per year if the borrower fails to meet certain obligations under the credit facility.

During the grace period, we apply payable interest rate for interest repayment. The remaining unpaid interest is being capitalized and paid on the final maturity date. Payable interest rate: 8.75% if our Net Borrowings/EBITDA ratio is equal to 6.01 or above; 9.50% if our Net Borrowings/EBITDA ratio is equal to or above 5.01 and less than 6.00; and 10.50% if our Net Borrowings/EBITDA ratio is equal to or above 4.01 and less than 5.00. If our Net Borrowings/EBITDA ratio is 4.00 or less, the accrued interest shall be paid in full.

Repayment and prepayments

The facility has a grace period until April 6, 2020 and is to be repaid in equal monthly installments. The final maturity date is April 6, 2022. Mechel may prepay the loan in full or in part subject to simultaneous compliance with certain requirements.

Guarantee

The borrower's obligations under the credit facility are guaranteed by Mechel Mining, Mechel Carbon, Mechel Carbon Singapore, Mechel Trading, Yakutugol, Southern Kuzbass Coal Company, Korshunov Mining Plant, Urals Stampings Plant, Chelyabinsk Metallurgical Plant, Bratsk Ferroalloy Plant, Mecheltrans and Mechel Service.

Security

The credit facility is secured by a pledge of 37.5%+1 share of Mechel Mining, 46.66%-1 share of Chelyabinsk Metallurgical Plant, 25%+1 share of Southern Kuzbass Coal Company, 25%-3 shares of Yakutugol, 25%+1 share of Korshunov Mining Plant and 25%+1 share of Urals Stampings Plant.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain non-financial covenants.

Under the credit facility agreement, Mechel group's ratio of Net Borrowings to EBITDA shall not exceed 7.00:1 until December 31, 2018, 6.00:1 until December 31, 2019, 5.00:1 until December 31, 2020 and thereafter. Mechel group's ratio of EBITDA to Net Interest Expense shall not be less than 1.75:1 until December 31, 2018, 2.00:1 until December 31, 2019, 2.25:1 until December 31, 2020 and thereafter. Financial covenants are tested semi-annually.

The credit facility agreement contains certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control and cross-defaults relating to other debt, as well as limitations on payment of dividends, acquisitions and disposals and non-core transactions.

The credit facility agreement is governed by Russian law.

Credit Facilities for Southern Kuzbass Coal Company from Sberbank

General

On October 9, 2012, Sberbank opened four credit lines to our subsidiary Southern Kuzbass Coal Company in the total amount of 24.0 billion rubles for the purpose of working capital financing. As of December 31, 2013, the facilities were fully drawn. In December 2014, due to substantial depreciation of the ruble, the exchange rate threshold of 50.00 rubles per one U.S. dollar (as stipulated in the agreements) was exceeded and Sberbank converted the 20.9 billion rubles loans into U.S. dollars. As of December 31, 2015, the outstanding balance was \$678.0 million for the U.S. dollar-denominated part of the credit lines and 3.1 billion rubles for the ruble-denominated part of the credit lines.

In December 2015, Southern Kuzbass Coal Company signed settlement agreements with Sberbank making all the debt due and payable to be further assigned to Gazprombank in the amount of 31.5 billion rubles. In April 2016, Southern Kuzbass Coal Company signed new settlement agreements with Sberbank which assigned part of the principal amount to Gazprombank. The principal in the total amount of \$423.1 million (28.4 billion rubles as of April 12, 2016) and 3.1 billion rubles was assigned with \$254.9 million remaining with Southern Kuzbass Coal Company. The overdue interest on ruble-denominated and U.S. dollar-denominated debt was added to the principal outstanding in the amount of 189.4 million rubles and \$40.2 million, respectively. Part of the overdue interest and penalties remained with Southern Kuzbass Coal Company was capitalized with extended maturity similar to the principal outstanding. The rest of the overdue interest and penalties were paid in June 2016.

Interest rate and interest period

Under the U.S. dollar-denominated part of the credit lines, the interest is payable monthly at 3M LIBOR plus a margin of 7% per year. During the grace period, we apply payable interest rate for interest repayment. The remaining unpaid interest is being capitalized and paid on the final maturity date. Payable interest rate: 3M LIBOR+5% if our Total Borrowings/EBITDA ratio is above 6.01; 3M LIBOR+5.5% if our Total Borrowings/EBITDA ratio is above 5.01 and equal to or less than 6.01; and 3M LIBOR+6% if our Total Borrowings/EBITDA ratio is above 4.01 and equal to or less than 5.01. If our Total Borrowings/EBITDA ratio is 4.01 or less, the accrued interest shall be paid in full.

Under the ruble-denominated part of the credit lines, the interest is payable monthly at the CBR key rate plus 1.5% per year. The lender may change the interest rate to the CBR key rate plus 3.5% per year if our Total Borrowings/EBITDA ratio is 4.00 or less. During the grace period, we apply payable interest rate for interest repayment. The remaining unpaid interest is being capitalized and paid on the final maturity date. Payable interest rate: (key rate +1.5%)×0.6 if our Total Borrowings/EBITDA ratio is above 6.01; (key rate +1.5%)×0.7 if our Total Borrowings/EBITDA ratio is above 5.01 and equal to or less than 6.01; and (key rate +1.5%)×0.8 if our Total Borrowings/EBITDA ratio is above 4.01 and equal to or less than 5.01. If our Total Borrowings/EBITDA ratio is 4.01 or less, the accrued interest shall be paid in full. In all of the above cases, payable interest rate shall not be less than 8.75% per year.

Repayment and prepayments

The final maturity date is April 10, 2022. The debt is payable in equal monthly installments starting from January 10, 2020. The borrower may prepay the loans in full or in part with prior notice to the lender.

Guarantee

The borrower's obligations under the credit facility agreements are guaranteed by Mechel, Mecheltrans, Mechel Service, Bratsk Ferroalloy Plant, Izhstal, Yakutugol, Korshunov Mining Plant, Chelyabinsk Metallurgical Plant and Mechel Mining.

Security

Starting from March 2016, the credit facilities share one security package with other Sberbank credit facilities: a pledge of 25%+1 share of Mechel Mining, a pledge of 25%+1 share of Beloretsk Metallurgical Plant, pledges of movable assets and mortgage over immovable assets of other Sberbank borrowers within Mechel group.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain financial and non-financial covenants.

Under the credit facility agreements, Mechel group's ratio of Total Borrowings to EBITDA shall not exceed 4.5:1 as of December 31, 2018, 3.5:1 as of June 30, 2019 and December 31, 2019, 3.0:1 as of June 30, 2020 and thereafter. Mechel group's ratio of EBITDA to Consolidated Financial Expense shall not fall below 1.75:1 as of December 31, 2018, 2.0:1 as of June 30, 2019 and December 31, 2019, 2.5:1 as of June 30, 2020 and thereafter.

The credit facility agreements contain certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control and cross-defaults to other debt.

The credit facility agreements are governed by Russian law.

Facility Agreement for Chelyabinsk Metallurgical Plant from BNP Paribas, Gazprombank and UniCredit — Universal Rolling Mill Facility Agreement

General

On September 15, 2010, we signed a credit facility agreement to finance the universal rolling mill installation project at our subsidiary Chelyabinsk Metallurgical Plant. The credit facility consists of three tranches underwritten by BNP Paribas S.A., Gazprombank and UniCredit. Gazprombank's tranche is \$219.4 million, BNP Paribas's tranche is €102.8 million and UniCredit's tranche is €89.2 million. The credit facility benefits from insurance coverage of the Italian, German and Chinese export credit agencies: SACE, Euler Hermes and Sinasure, respectively.

The purpose of the facility is to finance payments under two contracts: the equipment and technology supply contract executed with Danieli and the general construction contract executed with Minmetals.

As of December 31, 2018, the principal amount outstanding under the facility was \$154.9 million and €154.7 million (in aggregate approximately 23.1 billion rubles), with overdue principal in the amount of \$126.7 million and €99.4 million (in aggregate approximately 16.7 billion rubles) and overdue interest in the amount of \$13.5 million and €3.1 million (in aggregate approximately 1.2 billion rubles). We hold negotiations with the lenders on the restructuring of the facility.

Interest rate and interest period

Interest on the facility tranche underwritten by Gazprombank (Facility A) is payable at 6M LIBOR plus a margin of 6.75% per year during the period until the construction completion date and at 6M LIBOR plus a margin of 6.25% per year after that date. Interest on the facility tranche underwritten by UniCredit (Facility B) is payable at 6M EURIBOR plus a margin of 1.50% per year. Interest on the facility tranche underwritten by BNP Paribas (Facility C) is payable at 6M EURIBOR plus a margin of 1.60% per year. The margin is increased by 2% per year if the payments are overdue.

Accrued interest is payable twice a year on payment dates January 21 and July 21.

Repayment and prepayments

The borrower must repay the tranches in 13 equal semi-annual installments in respect of Facility A; 16 equal semi-annual installments in respect of Facility B; and 16 equal semi-annual installments in respect of Facility C.

Repayment starts on the first repayment date, which means in respect of each of the tranches, the first payment date (January 21 or July 21) falling after the earlier of (a) the end of the availability period and (b) the construction completion date. The availability period under all three tranches is 30 months from the signing date. Facility A must be repaid in full after six years following the first repayment date, Facilities B and C must be repaid in full after seven and a half years following the first repayment date.

The borrower may make a pro rata prepayment of the loan with the prior written consent of the lenders. A prepayment of part of the loan must be of a minimum amount of \$10.0 million in respect of Facility A, and €10.0 million in respect of Facility B and Facility C.

Starting from July 2014, the borrower failed to pay the installments.

Guarantee

The borrower's obligations under the credit facility agreement are guaranteed by Mechel.

Security

The borrower's obligations under the credit facility agreement are secured by a pledge of 20% of shares of Chelyabinsk Metallurgical Plant. The borrower has also granted security over certain of its assets, including real estate and equipment to secure its obligations.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain financial and non-financial covenants.

Under the credit facility agreement, Mechel's ratio of Net Borrowings to EBITDA shall not exceed 5.8:1 as of December 31, 2018 and thereafter, provided that if during any period the ratio of Net Borrowings to EBITDA is 3.0:1 or less, then the ratio of 3.0:1 continues to apply thereafter. Mechel's ratio of EBITDA to Net Interest Expense shall not fall below 2.0:1 as of December 31, 2018 and thereafter. Mechel's shareholder equity shall be equal to or exceed \$3.0 billion.

Mechel may pay dividends: (i) on our common and preferred shares, provided that the ratio of Mechel's Net Borrowings to EBITDA does not exceed 3.0:1, and if such dividends are funded from available excess cash flow, provided that no default occurs or would occur as a result of that payment; and (ii) if dividends on our preferred shares do not exceed 20% of Mechel's net profit. If Mechel records a loss as shown in the financial statements, the amount of permitted dividends paid on our preferred shares shall be limited to 7.5 million rubles for any such financial year.

Acquisitions by members of our group are permitted if (1) such acquisitions in aggregate do not exceed (i) \$5.0 million when the ratio of our Net Borrowings to EBITDA exceeds 3.5:1, (ii) \$50.0 million when the ratio of our Net Borrowings to EBITDA is within the range of 3.0:1 – 3.5:1, (iii) \$250.0 million when the ratio of our Net Borrowings to EBITDA is within the range of 2.5:1 – 3.0:1, (iv) \$375.0 million when the ratio of our Net Borrowings to EBITDA is within the range of 2.0:1 – 2.5:1, or (v) \$500.0 million when the ratio of our Net Borrowings to EBITDA is 2.0:1 or less; or (2) the total amount of such acquisition is fully financed by available excess cash flow.

The borrower may not, without prior consent from the lenders, enter into any amalgamation, demerger, merger or reorganization except an intra-group reorganization on a solvent basis.

The credit facility agreement contains certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control and cross-defaults to other debt.

The credit facility agreement is governed by English law.

Credit Facility Agreements for Yakutugol and Southern Kuzbass Coal Company from Gazprombank

General

In April 2012, our subsidiaries Yakutugol and Southern Kuzbass Coal Company entered into two separate non-revolving credit facility agreements with Gazprombank for a total amount of \$500.0 million: \$300.0 million was made available to Yakutugol and \$200.0 million was made available to Southern Kuzbass Coal Company, both for a period of up to five years with a three-year grace period obtained for the purpose of funding operational activities and refinancing of short-term debt. As of December 31, 2014, the facilities were fully drawn.

In August and December 2015, Yakutugol and Southern Kuzbass Coal Company signed amendments to their credit facility agreements with Gazprombank to restructure debt in a total amount of \$500.0 million. In

January 2016, the restructuring of these credit facilities became effective. As a result of the conversion into rubles, the debt of Yakutugol amounted to approximately 22.8 billion rubles and of Southern Kuzbass Coal Company amounted to approximately 15.3 billion rubles.

In June 2016, we signed amendments to the credit facility agreements under which accrued and unpaid interests in the amount of 3.9 billion rubles were capitalized. We repaid this amount and interest accrued on it during the period from April 15, 2017 to March 30, 2018.

Interest rate and interest period

Starting from the effective date, the interest under the credit facilities is payable monthly at the CBR key rate plus 1.5% per year.

During the grace period, we apply payable interest rate for interest repayment. The remaining unpaid interests are being capitalized and paid in accordance with the principal repayment schedule. Payable interest rate: 8.75% if our Total Borrowings/EBITDA ratio is equal to 6.01 or above; 9.50% if our Total Borrowings/EBITDA ratio is equal to or above 5.01 and less than 6.00; and 10.50% if our Total Borrowings/EBITDA ratio is equal to or above 4.01 and less than 5.00. If our Total Borrowings/EBITDA ratio is 4.00 or less, the accrued interest shall be paid in full. In all of the above cases, payable interest rate shall not exceed the CBR key rate plus 1.5% per year.

Repayment and prepayments

The final maturity date is April 20, 2022. Repayment is to be made in equal monthly installments starting from February 17, 2020. The borrowers may prepay the loans in full or in part with a 30 day prior notice to the lender.

Guarantee

The borrowers' obligations are guaranteed by Mechel Mining, Mechel Carbon, Korshunov Mining Plant, Urals Stampings Plant, Chelyabinsk Metallurgical Plant, Mechel and cross guarantee between Southern Kuzbass Coal Company and Yakutugol.

Security

Yakutugol's obligations under the credit facility agreement are secured by a pledge of 25%+1 share in each of Korshunov Mining Plant, Port Posiet, Chelyabinsk Metallurgical Plant, Beloretsk Metallurgical Plant and Urals Stampings Plant, 45%+1 share of Southern Kuzbass Coal Company, 50%+1 share of Yakutugol, 25%+1 share of Mechel Mining and 25% of registered capital of Port Temryuk, as well as 33.3% of common shares of Izhtal.

Southern Kuzbass Coal Company's obligations under the credit facility agreement are secured by a pledge of 25%+1 share in each of Korshunov Mining Plant, Port Posiet and Beloretsk Metallurgical Plant, 45%+1 share of Southern Kuzbass Coal Company, 50%+1 share in each of Yakutugol and Urals Stampings Plant, 25%+1 share of Mechel Mining and 25% of registered capital in each of Port Temryuk and Bratsk Ferroalloy Plant, as well as 33.3% of common shares of Izhtal.

In March 2016, we mortgaged the Ulak-Elga rail line under the credit facility agreements.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain financial and non-financial covenants.

Under the credit facility agreements, Mechel group's ratio of Total Borrowings to EBITDA shall not exceed 4.5:1 in 2018, 3.5:1 in 2019 and 3.0:1 in 2020. Mechel group's ratio of EBITDA to Consolidated Financial Expense shall not be less than 1.75:1 in 2018, 2.0:1 in 2019 and 2.5:1 in 2020. During the period from 2017 to 2020, we also have to comply with the ratios of Cash flow from operating activities to EBITDA and EBITDA to Revenues at the levels of 80% and 20%, respectively.

The credit facility agreements contain certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control and cross-defaults to other debt.

The credit facility agreements are governed by Russian law.

Credit Facility Agreements for Yakutugol and Southern Kuzbass Coal Company from Gazprombank

General

In April 2013, our subsidiaries Yakutugol and Southern Kuzbass Coal Company entered into separate non-revolving credit facility agreements with Gazprombank for a total amount of \$889.0 million: \$400.0 million was made available to Southern Kuzbass Coal Company and \$489.0 million was made available to Yakutugol, both for a period of up to five years with a three-year grace period obtained for the purpose of funding operational activities and refinancing of short-term debt provided by Gazprombank. As of December 31, 2014, the amount outstanding under the Southern Kuzbass Coal Company facility was \$400.0 million and the amount outstanding under the Yakutugol facility was \$385.8 million.

In August and December 2015, Yakutugol and Southern Kuzbass Coal Company signed amendments to their credit facility agreements with Gazprombank to restructure debt in a total amount of \$785.8 million. In January 2016, the restructuring of these credit facilities became effective. As a result of the conversion into rubles, the debt of Yakutugol amounted to approximately 30.5 billion rubles and of Southern Kuzbass Coal Company amounted to approximately 30.4 billion rubles.

In June 2016, we signed amendments to the credit facility agreements under which accrued and unpaid interests in the amount of 6.4 billion rubles were capitalized. We repaid this amount and interest accrued on it during the period from April 15, 2017 to March 30, 2018.

Interest rate and interest period

Starting from the effective date, the interest under the credit facilities is payable monthly at the CBR key rate plus 1.5% per year.

During the grace period, we apply payable interest rate for interest repayment. The remaining unpaid interests are being capitalized and paid in accordance with the principal repayment schedule. Payable interest rate: 8.75% if our Total Borrowings/EBITDA ratio is equal to 6.01 or above; 9.50% if our Total Borrowings/EBITDA ratio is equal to or above 5.01 and less than 6.00; and 10.50% if our Total Borrowings/EBITDA ratio is equal to or above 4.01 and less than 5.00. If our Total Borrowings/EBITDA ratio is 4.00 or less, the accrued interest shall be paid in full. In all of the above cases, payable interest rate shall not exceed the CBR key rate plus 1.5% per year.

Repayment and prepayments

The final maturity date is April 20, 2022. Repayment is to be made in equal monthly installments starting from February 17, 2020. The borrowers may prepay the loans in full or in part with a 10 day prior notice to the lender.

Guarantee

The borrowers' obligations are guaranteed by Mechel Mining, Mechel Carbon, Korshunov Mining Plant, Urals Stampings Plant, Chelyabinsk Metallurgical Plant, Mechel and cross guarantee between Southern Kuzbass Coal Company and Yakutugol.

Security

Yakutugol's obligations under the credit facility agreement are secured by a pledge of 25%+1 share in each of Korshunov Mining Plant, Port Posiet, Chelyabinsk Metallurgical Plant, Beloretsk Metallurgical Plant and Urals Stampings Plant, 45%+1 share of Southern Kuzbass Coal Company, 50%+1 share of Yakutugol, 25%+1 share of Mechel Mining and 25% of registered capital of Port Temryuk, as well as 33.3% of common shares of Izhtal.

Southern Kuzbass Coal Company's obligations under the credit facility agreement are secured by a pledge of 25%+1 share in each of Korshunov Mining Plant, Port Posiet and Beloretsk Metallurgical Plant, 45%+1 share of Southern Kuzbass Coal Company, 50%+1 share in each of Yakutugol and Urals Stampings Plant, 25%+1 share of Mechel Mining and 25% of registered capital in each of Port Temryuk and Bratsk Ferroalloy Plant, as well as 33.3% of common shares of Izhtal.

In March 2016, we mortgaged the Ulak-Elga rail line under the credit facility agreements.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain financial and non-financial covenants.

Under the credit facility agreements, Mechel group's ratio of Total Borrowings to EBITDA shall not exceed 4.5:1 in 2018, 3.5:1 in 2019 and 3.0:1 in 2020. Mechel group's ratio of EBITDA to Consolidated Financial Expense shall not be less than 1.75:1 in 2018, 2.0:1 in 2019 and 2.5:1 in 2020. During the period from 2017 to 2020, we also have to comply with the ratios of Cash flow from operating activities to EBITDA and EBITDA to Revenues at the levels of 80% and 20%, respectively.

The credit facility agreements contain certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control and cross-defaults to other debt.

The credit facility agreements are governed by Russian law.

Syndicated Loan for Chelyabinsk Metallurgical Plant from VTB Bank

General

On July 12, 2018, Chelyabinsk Metallurgical Plant entered into a syndicated credit facility agreement with VTB Bank and VTB Bank (Europe) SE for a total amount of up to €950.0 million (two tranches of \$1,004 million and \$38 million in euro equivalent) to refinance the existing pre-export credit facilities of Yakutugol and Southern Kuzbass Coal Company and for the purposes of funding operating activities. We drew down a total of €896.7 million under this credit facility.

Interest rate and interest period

Interest under the credit facility is payable monthly at 1M EURIBOR plus a margin of 5.5% per year. The lender may increase the interest rate by 1% per year if the borrower fails to meet certain obligations under the credit facility.

Repayment and prepayments

The credit facility is repayable in equal monthly installments starting on April 6, 2020. The final maturity date is April 6, 2022. The borrower may prepay the loan in full or in part subject to simultaneous compliance with certain requirements.

Guarantee

The borrower's obligations are guaranteed by Mechel, Mechel Mining, Mechel Carbon, Yakutugol, Southern Kuzbass Coal Company, Korshunov Mining Plant, Urals Stampings Plant, Bratsk Ferroalloy Plant, Mecheltrans, Mechel-BusinessService and Mechel Service.

Security

The borrower's obligations are secured by a pledge of 25%-3 shares of Yakutugol, 25%+1 share of Southern Kuzbass Coal Company and 25%+1 share of Korshunov Mining Plant. We are obliged to provide additional security to VTB Bank.

Covenants and other matters

For the relevant period ending on December 31, 2018, we were not in compliance with certain financial and non-financial covenants.

Under the credit facility agreement, Mechel group's ratio of Net Borrowings to EBITDA shall not exceed 6.00:1 until December 31, 2019, 5.00:1 until December 31, 2020 and thereafter. Mechel group's ratio of EBITDA to Net Interest Expense shall not be less than 1.75:1 until December 31, 2018, 2.00:1 until December 31, 2019, 2.25:1 until December 31, 2020 and thereafter. Financial covenants are tested on a quarterly basis.

The credit facility contains certain customary representations and warranties, affirmative covenants, notice provisions and events of default, including change of control and cross-defaults relating to other debt, as well as limitations on payment of dividends, acquisitions and disposals and non-core transactions.

The credit facility agreement is governed by Russian law.

Exchange Controls

The Federal Law "On Currency Regulation and Currency Control," effective from June 18, 2004, as amended, sets forth certain restrictions on settlements between residents of Russia with respect to transactions involving foreign securities (including ADSs), including requirements for settlement in Russian rubles.

Repatriation of Export Proceeds

Russian companies must repatriate 100% of their receivables from the export of goods and services and/or the provision of loans (with a limited number of exceptions concerning, in particular, certain types of secured financing) within the time frame provided under the respective agreement.

Restrictions on Remittance to Non-residents

The Foreign Investments Law guarantees foreign investors the right to repatriate their earnings from Russian investments. However, the evolving Russian exchange control regime may affect investors' ability to do so in the future. Currently, ruble dividends on shares may be paid to the depositary or its nominee and converted

into U.S. dollars by the depositary for distribution to owners of ADSs without restriction. In addition, ADSs may be sold by non-residents of Russia for U.S. dollars outside Russia without regard to Russian currency control laws so long as the buyer is not a Russian resident for currency control purposes.

Taxation

The following discussion is not intended as tax advice to any particular investor. No opinion of counsel will be issued with respect to the following discussion and, therefore, such discussion is not based on an opinion of counsel. It is also not a complete analysis or listing of all potential U.S. federal or Russian income and withholding tax consequences of ownership of shares or ADSs. We urge such holders to consult their tax advisers regarding the specific U.S. federal, state and local and Russian tax consequences of the ownership and disposition of the shares or ADSs, including their eligibility for the benefits of a double tax treaty between the Russian Federation and their country of residence, in light of their particular facts and circumstances, as well as the applicability and effect of state, regional and local tax laws and foreign tax law.

Russian Income and Withholding Tax Considerations

The following is a summary of certain Russian tax considerations relevant to payments to Russian resident and non-resident holders of the shares and ADSs and to the purchase, ownership and disposition of the shares and ADSs by Russian resident and non-resident holders. This summary is based on the laws of Russia in effect as of the date of this document. The discussion with respect to Russian legislation is based on our understanding of current Russian law and tax rules, which are subject to frequent change and varying interpretations.

This summary does not seek to address the applicability of, and procedures in relation to, taxes levied by the regions, municipalities or other non-federal level authorities of the Russian Federation. Nor does the summary seek to address the availability of double tax treaty relief, and it should be noted that there might be practical difficulties involved in claiming relief under an applicable double tax treaty. You should consult your own professional advisors regarding the tax consequences of investing in the shares and ADSs. No representations with respect to the Russian tax consequences to any particular holder are made hereby.

The Russian tax rules applicable to ADSs are characterized by uncertainties and by an absence of special provisions with respect to transactions involving ADSs. Both the substantive provisions of Russian tax law and the interpretation and application of those provisions by the Russian authorities may be subject to more rapid and unpredictable change than in a jurisdiction with more developed capital markets and a more developed taxation system. In particular, the interpretation and application of such provisions will in practice rest substantially with local tax inspectors.

For the purposes of this summary, a “Russian resident holder” means: (1) an individual holder of the shares and ADSs, actually present in the Russian Federation for 183 days or more in 12 consecutive months; or (2) an organization recognized as a tax resident of the Russian Federation, namely (i) an organization or an individual entrepreneur, organized under Russian law, (ii) a foreign organization recognized as a tax resident of the Russian Federation in accordance with the international tax treaty of the Russian Federation, and (iii) a foreign organization which place of management is the Russian Federation, unless otherwise provided by the international tax treaty of the Russian Federation; or (3) an organization, organized under a foreign law, that holds and disposes of the shares and ADSs through its permanent establishment in Russia. Individual presence in Russia is not considered interrupted if an individual departs for short periods (less than six months) for the purpose of medical treatment or education, as well as for the performance of labor or other duties related to the execution of work or services at offshore raw hydrocarbon deposits.

For the purposes of this summary, a “non-resident holder” is a holder of the shares or ADSs which is not qualified to be a Russian resident holder as defined in the previous paragraph.

Taxation of acquisition of the shares and ADSs

No Russian tax implications should arise for holders of the shares and ADSs upon purchase of the shares and ADSs. However, starting from 2015, Russian resident holders are required to notify tax authorities about their participation in Russian organizations (in case of direct participation interests in excess of 10%) not later than one month from the date of commencement of such participation. In addition, under certain conditions a taxable material gain may arise for individuals if the shares and ADSs are purchased at a price below the deemed market value. Also, in certain circumstances, a Russian resident holder that is an organization acquiring the shares or ADSs is generally obliged to act as a tax agent to withhold income tax on proceeds from the sale of the shares or ADSs to be transferred to a non-resident holder disposing such shares or ADSs. We urge such holders to consult their tax advisers regarding specific tax consequences of acquisition of the shares or ADSs.

Taxation of dividends

A Russian company that pays dividends is generally obliged to act as a tax agent to withhold tax on the dividends and remit the amount of tax due to the Russian Federation state budget. In some cases, tax agent's functions are performed by other legal entities. However, the applicable withholding tax rate will depend on the status of the dividend's recipient and on the availability with the Russian company paying dividends on the date of such payment of documents confirming the status of the tax resident of the respective state (country) in relation to the recipient of income.

Russian resident holders

Shares

Dividends paid to a Russian resident holder of the shares that is a Russian organization or an individual will be generally subject to Russian withholding tax at the rate of 13%. Dividends received by Russian organizations are subject to withholding tax at the rate of 0% provided that the recipient organization constantly owns for a period of 365 calendar days or more at least 50% of participation shares in the share capital of the paying organization or share depositary receipts qualifying for dividends equal to at least 50% of the total amount of dividends paid by the organization. However, it is difficult to predict how the Russian tax authorities may interpret the conditions listed above. Therefore, there can be no assurance that the 0% withholding tax rate will apply.

The effective rate of this tax may be lower than 13% (other than to non-resident companies and non-resident individuals) owing to the fact that generally this tax should be calculated by multiplying the basic tax rate (13%) by the difference between (i) the dividends to be distributed by us to our shareholders, and (ii) dividends collected by us in the current and preceding tax periods from other Russian persons (except for dividends which under the current Russian tax law are taxable at the rate of 0% and provided that the amount of dividends previously was not included when determining the tax base which is determined in respect of income received by a Russian organization in the form of dividends).

Since 2014, when paying dividends in respect of shares that are recorded on depo account of foreign nominee holder and depo account of foreign authorized holder, the tax should be calculated and withheld by the depositary (tax agent), which opened these accounts. Effective from January 1, 2014, the reduced tax rate of 0% does not apply on dividend payments for such shares. Under Russian law, the general rate of 13% is applied, subject to the submission of certain information to the tax agent. If such information has not been submitted to the tax agent in the prescribed manner and in a certain period of time, the tax rate of 15% is applied.

A holder that is a foreign organization holding shares through a permanent establishment in Russia is entitled to pay this tax to the Russian budget on its own behalf (i.e., without a Russian entity that distributes the dividends to such holder acting as a tax agent for withholding tax) if such holder provides the Russian entity that acts as the Russian tax agent with specific documentary evidence confirming dividend income is attributable to a

permanent establishment of the holder in Russia. Such evidence includes a notarized copy of the form confirming registration of the holder with the Russian tax authorities. A notification must also be issued by the local tax authorities at the holder's place of tax registration confirming dividend income is attributable to the permanent establishment of the holder in Russia.

Dividends paid to a Russian establishment of a foreign organization are taxable at a rate which is set based on non-discrimination provisions of a double tax treaty between Russia and the country of tax residence of the respective foreign organization. As the Russian Tax Code does not specifically provide for the application by the Russian establishment of a foreign organization of a rate of 0% in respect of received dividends, it is not possible to guarantee the application of this rate.

ADSs

There are uncertainties in relation to withholding tax on dividends payable to Russian resident holders of ADSs primarily because the taxation of dividends payable under ADSs is not specifically addressed under Russian tax law.

Effective from January 1, 2014, so as to apply the tax rate of 13% when paying dividends under ADSs to residents the tax agent must be submitted with certain information in the prescribed manner and in a certain period of time. If such information has not been submitted to the tax agent, the tax rate of 30% is applied. Thus, starting from 2014, the tax agent may be obliged to withhold tax at the rate of 30% (due to the absence of the required information) and Russian holders of ADSs may be unable to use the rate of 13% provided by Russian tax law for residents.

Upon receiving dividends, Russian holders which are organizations may be required to pay additional Russian income tax at the rate of 13% (the rate applied to dividends received from non-residents) or 20% (if the income received will not be recognized as dividends) while Russian holders who are individuals may be required to pay Russian personal income tax at the rate of 13%. There is also no established procedure providing for the refund of tax withheld from dividends payable through the depositary to Russian resident holders of ADSs. Accordingly, Russian residents are urged to consult their own tax advisors regarding the tax treatment of the purchase, ownership and disposition of the ADSs.

A holder of the ADSs that is a foreign organization conducting its business through a permanent establishment in Russia is entitled to pay this tax to the Russian budget on its own behalf (i.e., without a Russian entity that distributes the dividends to such holder acting as a tax agent for withholding tax) if such holder provides the Russian entity that acts as the Russian tax agent with specific documentary evidence confirming dividend income is attributable to a permanent establishment of the holder in Russia. Such evidence includes a notarized copy of the form confirming registration of the holder with the Russian tax authorities. A notification must also be issued by the local tax authorities at the holder's place of tax registration confirming dividend income is attributable to the permanent establishment of the holder in Russia.

Non-resident holders

As of September 2018, Russia participates in the international automatic exchange of financial information with the competent authorities of foreign states (territories). As part of this exchange, the organizations of the Russian financial market, including professional securities market participants engaged in brokerage and/or securities management and/or depositary activities, are obliged to send information about clients, their beneficiaries and controlling parties who are foreign tax residents to the Russian tax service. Special attention is given to individuals whose account balance exceeds \$1 million or the equivalent of such amount in another currency and legal entities with a capital over \$250 thousand or the equivalent of such amount in another currency.

Shares

Dividends paid to non-resident holders of shares will generally be subject to Russian withholding tax, which the tax agent will withhold. Under Russian law dividends paid to a non-resident holder which is an organization or individual will be subject to Russian withholding tax at rates of 15% or 30% in certain cases. Withholding tax on dividends may be generally reduced under the terms of a double tax treaty between the Russian Federation and the country of tax treaty residence of a non-resident holder of the shares.

Since 2014, when paying dividends in respect of shares issued by Russian organizations that are recorded on depo account of foreign nominee holder, depo account of foreign authorized holder and/or depo account of depository programs, the tax should be calculated and withheld by the depository (tax agent), which opened these accounts. Effective from January 1, 2014, the reduced tax rate established in accordance with certain provisions of the double tax treaty does not apply on dividend payments under such shares. The general rate established by such treaty and not accounting for benefits or the rate of 15% provided by Russian law are applied, subject to the submission of certain information to the tax agent. If such information has not been submitted to the tax agent in the prescribed manner and in a certain period of time, a tax rate of 30% is applied.

Thus, starting from 2014, the tax agent is obliged to withhold tax at the general rate established by the tax treaty or at the rate of 15% (in the absence of the tax treaty) or at the rate of 30% (in the absence of the required information) and non-resident holders of shares may be unable to benefit from the tax treaty. Although non-resident holders of shares may apply for a refund of a portion of the tax withheld under an applicable tax treaty, the procedure to do so may be time-consuming and no assurance can be given that the Russian tax authorities will grant a refund.

ADSs

Comments provided in the previous section (see “— Taxation of dividends — Non-resident holders — Shares”) are also applicable to ADSs. Effective from January 1, 2014, the reduced tax rate established in accordance with certain provisions of the double tax treaty does not apply on dividend payments under ADSs. The general rate established by such treaty and not accounting for benefits or the rate of 15% provided by Russian law are applied, subject to the submission of certain information to the tax agent. If such information has not been submitted to the tax agent in the prescribed manner and in a certain period of time, a tax rate of 30% is applied.

Thus, starting from 2014, the tax agent is obliged to withhold tax at the general rate established by the tax treaty or at the rate of 15% (in the absence of the tax treaty) or at the rate of 30% (in the absence of the required information) and non-resident holders of ADSs may be unable to benefit from the tax treaty. Although non-resident holders of ADSs may apply for a refund of a portion of the tax withheld under an applicable tax treaty, the procedure to do so may be time-consuming and no assurance can be given that the Russian tax authorities will grant a refund. See “— Tax treaty procedures” below.

The dividends taxation rate may be reduced to 10% under the United States-Russia income tax treaty for U.S. non-resident holders. Under current regulations, authorization from the Russian tax authorities is not required to allow the tax agent to withhold tax at a reduced rate under applicable double tax treaties provided that all other requirements are met. See “— Tax treaty procedures.”

If the tax agent is not submitted with the prescribed by the tax legislation information, it will be obliged to withhold tax at the rate of 30%. In this case, U.S. holders qualifying for a reduced rate under the United States-Russia income tax treaty may claim a refund from the Russian tax authorities/tax agents, depending on the status of a holder, within three years. There is significant uncertainty regarding the availability and timing of such refunds.

Taxation of capital gains

The following sections summarize the taxation of capital gains in respect of the disposition of the shares and ADSs.

Russian resident holders

As the Russian legislation related to taxation of capital gains derived by Russian resident holders (including organizations and individuals) in connection with ADSs is not entirely clear, we urge Russian residents to consult their own tax advisors regarding the tax treatment of the purchase, ownership and disposition of ADSs.

However, since 2015, Russian tax legislation does not recognize as a sale or other disposition of securities: (i) the cancellation of ADSs upon receipt of representing securities; (ii) the transfer of securities at placement of ADSs certifying the rights for represented securities.

Organizations

Capital gains arising from the sale of the shares and ADSs by a Russian resident holder that is an organization will be taxable at the regular Russian corporate income tax rate of 20%.

Since November 27, 2018, sale of the shares and ADSs is taxable at a rate of 0% provided that there is a documentary evidence that on the date of sale of such shares they were continuously owned by Russian resident holders on the basis of the right of ownership or other proprietary right for more than five years, and provided that such shares constitute the charter capital of Russian organizations in which no more than 50% of assets directly or indirectly consist of immovable property located in Russia. Until November 27, 2018, the above conditions applied only to the sale of the shares and ADSs which were acquired after January 1, 2011.

However, it should be noted that the determination of whether more than 50% of our assets consist of immovable property located in Russia is inherently factual and is made on an ongoing basis, and the relevant Russian legislation in this respect is not entirely clear. Hence, there can be no assurance that immovable property owned by us and located in Russia will not constitute more than 50% of the company's assets as at the date of the sale of shares and ADSs by residents.

Russian tax legislation contains a requirement that a profit arising from activities connected with securities quoted on a stock exchange must be calculated and accounted for separately from a profit from activities connected with securities that are not quoted on a stock exchange and from other profits. Since 2015, income (expenses) from operations with securities quoted on a stock exchange is recorded in the general tax base in accordance with generally established procedures. Therefore, Russian resident holders may be able to apply losses arising in respect of the listed shares and ADSs in the current base for income tax.

Individuals

Capital gains arising from the sale, exchange or other disposition of the shares and ADSs by individuals who are Russian resident holders must be declared on the holder's tax return and are subject to personal income tax at a rate of 13%.

Since November 27, 2018, sale of the shares and ADSs by Russian individuals resident holders is not subject to personal income tax provided that there is a documentary evidence that on the date of sale of such shares they were continuously owned by Russian resident holders on the basis of the right of ownership or other proprietary right for more than five years, and provided that such shares constitute the charter capital of Russian organizations in which no more than 50% of assets directly or indirectly consist of immovable property located in Russia. Until November 27, 2018, the above conditions applied only to the sale of the shares and ADSs which were acquired after January 1, 2011.

However, it should be noted that the determination of whether more than 50% of our assets consist of immovable property located in Russia is inherently factual and is made on an ongoing basis, and the relevant Russian legislation in this respect is not entirely clear. Hence, there can be no assurance that immovable property owned by us and located in Russia will not constitute more than 50% of the company's assets as at the date of the sale of shares and ADSs by residents.

The income in respect of sale of the shares or ADSs by an individual is calculated as sale proceeds less documented expenses related to the purchase of these securities (including cost of securities and expenses associated with purchase, safe-keeping and sale of these securities).

Under Russian law, the acquisition value can be deducted by the source of the payment, if the sale was made by a holder through a professional trustee, dealer or broker that is a Russian organization or a foreign company with a permanent establishment in Russia. This professional trustee, dealer or broker should also act as a tax agent and withhold the applicable tax. Such a tax agent will be required to report to the Russian tax authorities the amount of income realized by the individual and tax withheld upon the sale of the shares and ADSs not later than April 1 of the year following the reporting year.

Furthermore, according to certain conditions, individuals may have taxable material gain at the rate of 13% if the shares and ADSs are acquired at a price below conventional market value.

Non-resident holders

Since 2015, Russian tax legislation does not recognize as a sale or other disposition of securities: (i) the cancellation of ADSs upon receipt of representing securities; (ii) the transfer of securities at placement of ADSs certifying the rights for represented securities.

As of September 2018, Russia participates in the international automatic exchange of financial information with the competent authorities of foreign states (territories). As part of this exchange, the organizations of the Russian financial market, including professional securities market participants engaged in brokerage and/or securities management and/or depositary activities, are obliged to send information about clients, their beneficiaries and controlling parties who are foreign tax residents to the Russian tax service. Special attention is given to individuals whose account balance exceeds \$1 million or the equivalent of such amount in another currency and legal entities with a capital over \$250 thousand or the equivalent of such amount in another currency.

Organizations

Capital gains arising from the sale, exchange or other disposition of the shares and ADSs by organizations that are non-resident holders should not be subject to tax in Russia if more than 50% of our assets directly or indirectly consist of immovable property located in Russia. If more than 50% of our assets were to consist of immovable property located in Russia, organizations that are non-resident holders of the shares and ADSs should be subject (except as described below) to a 20% withholding tax on the gross proceeds from sale, exchange or other disposition of the shares and ADSs or 20% withholding tax on the difference between the sales, exchange or other disposition price and the acquisition costs of the shares and ADSs.

However, it should be noted that the determination of whether more than 50% of our assets consist of immovable property located in Russia is inherently factual and is made on an ongoing basis, and the relevant Russian legislation in this respect is not entirely clear. Hence, there can be no assurance that immovable property owned by us and located in Russia will not constitute more than 50% of the company's assets as at the date of the sale of shares and ADSs by non-residents. Certain international double tax treaties may provide for protection from the Russian taxation in such instances.

Where the shares and ADSs are sold by organizations being non-resident holders to persons being organizations recognized as tax residents of the Russian Federation, even if the resulting capital gain is considered taxable in Russia, there is currently no mechanism under which the purchaser will be able to withhold the tax and remit it to the Russian budget.

Individuals

The taxation of the income of non-resident individuals depends on whether the income is received from Russian or non-Russian sources. Russian tax law considers the place of sale as an indicator of source. Accordingly, the sale of the shares and ADSs outside of Russia by individuals who are non-resident holders should not be considered Russian source income and, therefore, should not be taxable in Russia. However the Russian tax law gives no clear indication as to how the place of sale of the shares and ADSs should be defined in this respect. Therefore, the Russian tax authorities may have a certain amount of flexibility in concluding whether a transaction is within Russia or outside of Russia.

The sale, exchange or other disposal of the shares and ADSs by non-resident holders in Russia will be considered Russian source income and will be subject to tax at the rate of 30% on the difference between the sales price and the acquisition value of such shares and ADSs as well as other documented expenses, such as depositary expenses and broker fees, among others. Under Russian law, the acquisition value can only be deducted by the source of the payment, if the sale was made by a non-resident holder through a professional trust manager, dealer or broker that is a Russian organization or a foreign company with a permanent establishment in Russia. Such professional trust manager, dealer or broker should also act as a tax agent and withhold the applicable tax. Such a tax agent will be required to report to the Russian tax authorities the amount of income realized by the non-resident individual and tax withheld upon the sale of the shares and ADSs not later than on April 1 of the year following the reporting year.

Otherwise, if the sale is made to other organizations and individuals, generally no withholding needs to be made and the non-resident holder will have an obligation to file a tax return, report his realized profit and apply for a deduction of acquisition expenses (which includes filing of support documentation).

Although Russian tax law imposes this responsibility only on professional trust manager, brokers or dealers, in practice, the tax authorities may require organizations recognized as tax residents of the Russian Federation that are not professional trust manager, dealers or brokers to act as tax agents and withhold the applicable tax when purchasing securities from non-resident individuals.

In some circumstances, a non-resident holder may be exempt from Russian personal income tax on the sale, exchange or other disposition of the shares and ADSs under the terms of a double tax treaty between the Russian Federation and the country of residence of the non-resident holder. Under the United States-Russia income tax treaty, capital gains from the sale of the shares and/or ADSs by U.S. holders should be relieved from taxation in Russia, unless 50% or more of our assets (as the term “fixed assets” is used in the Russian version of the United States-Russia income tax treaty) were to consist of immovable property located in Russia. If this 50% threshold is not met, individuals who are U.S. holders may seek to obtain the benefit of the United States-Russia income tax treaty in relation to capital gains resulting from the sale, exchange or other disposition of the shares and/or ADSs.

In order to apply the provisions of relevant double tax treaties, the individual holders should receive clearance from the Russian tax authorities as described below. See “— Tax treaty procedures” below.

Tax treaty procedures

The Russian Tax Code does not contain a requirement that a non-resident holder that is an organization must obtain tax treaty clearance from the Russian tax authorities prior to receiving any income in order to qualify for

benefits under an applicable tax treaty. However, a non-resident organization seeking to obtain relief from Russian withholding tax under a tax treaty must provide to a tax agent, before the income payment date, a confirmation of its tax treaty residence that complies with the applicable requirements in advance of receiving the relevant income. Starting from 2016, in order to apply the provisions of the international treaties of the Russian Federation, foreign organizations will also have to provide to the Russian organization which pays the income a confirmation that the foreign organization has an actual right to receive income (is a beneficiary owner of the income).

Starting from 2016, the rules of elimination of double taxation in respect of individuals act in a new version. A non-resident individual who derives income from a source in the Russian Federation in order to implement the provisions of international tax treaties will have to provide the tax agent on the income payment date a confirmation that an individual-recipient of income is a tax resident in the respective foreign country. In order to confirm the status of a tax resident an individual may use the passport of a foreign citizen or any other identification document, established by the federal law or recognized by the international treaty as such. If these documents do not make it possible to confirm the existence of an individual's tax resident status of a foreign country with which the international treaty is concluded, the tax agent should also be provided with the official confirmation of this status. Such confirmation should be issued by the competent authority of the respective foreign country authorized to issue such confirmations on the basis of the international tax treaty of the Russian Federation. If such confirmation is in a foreign language, an individual provides a notarized translation into Russian. It should be noted that the tax agent in the application of preferential provisions of the international treaty must submit to the tax authority at the place of its registration the information on foreign individuals, income paid to them from which tax had not been withheld on the basis of the international treaty, as well as the refund of the tax.

In order to apply the provisions of the international treaties of the Russian Federation, foreign organizations will have to provide to the tax agent which pays the income a confirmation that the foreign organization has a residence in the country with which the Russian Federation has the international tax treaty. Such confirmation should be certified by the competent authority of the respective foreign country. If such confirmation is in a foreign language, the tax agent should be provided with a translation into Russian. In addition, starting from 2016, foreign organizations will have to provide the tax agent which pays the income with a confirmation that the foreign organization has an actual right to receive income (is a beneficiary owner of the income).

In 2018, Russian legislation was amended in terms of confirming the actual right to receive income. The amendments apply to income payments made from January 1, 2018 and provide for a "pass-through approach" to identification of a party that has actual right to income. In accordance with this approach, if a foreign organization (foreign structure without forming a legal entity) that receives income recognizes a lack of actual right to receive such income, the provisions of the international treaties of the Russian Federation and/or the Russian Tax Code can be applied to another party if this party has actual right to such income, and, in case of income payment in the form of dividends, if this party directly and/or indirectly participates in the Russian organization that paid income in the form of dividends, with the submission of supporting documents to the tax agent which pays such income. Moreover, each subsequent party which directly participates in the party that recognized the lack of actual right to income in the form of dividends (in the respective sequence of participation) is entitled to recognize the actual right to such income.

The submission by the foreign organization of the above confirmations to the tax agent which pays the income before the income payment date constitutes grounds for an exemption of such income from withholding or withholding at reduced rates.

In the absence of such information, the tax agent is not entitled to apply rates established in accordance with the terms of the double tax treaty between the Russian Federation and the country of residence of the non-resident holder, and will have to apply the rate of 15% or 30% in certain cases.

At the same time, Russian legislation does not contain a specific list of documents that can be used as a confirmation of both the actual right to receive income and the actual residence of the foreign organization, thereby admitting their ambiguous interpretation which may lead to an additional tax burden for the foreign organization.

If a non-resident holder that is an organization does not obtain double tax treaty relief at the time that income is received and tax is withheld by a Russian tax agent, the non-resident holder may apply for a refund within three years from the end of the tax period (a calendar year) in which the tax was withheld. To process a claim for a refund, the Russian tax authorities require (i) a confirmation of the tax treaty residence of the non-resident at the time the income was paid, (ii) an application for the refund of the tax withheld in a format provided by the Russian tax authorities, and (iii) copies of the relevant contracts under which the foreign entity received income as well as payment documents confirming the payment of the tax withheld to the Russian budget (Form 1012DT for dividends and interest and Form 1011DT for other income are designed by the Russian tax authorities to combine requirements (i) and (ii) specified above and recommended for application). The Russian tax authorities will require a Russian translation of the above documents if they are prepared in a foreign language. The refund of the tax withheld should be granted within one month of the filing of the above set of documents with the Russian tax authorities. However, procedures for processing such claims have not been clearly established, and there is significant uncertainty regarding the availability and timing of such refunds.

Since 2014, in respect of dividend payments on shares (including represented by ADSs) that are recorded on depo account of foreign nominee holder, depo account of foreign authorized holder and depo account of depositary programs, a general rate established by the double tax treaty and not accounting for benefits is applied. Refund of the overpaid tax is made to the taxpayer upon the submission to the tax authorities of the documents mentioned above, as well as the following documents: (i) document confirming the ownership of shares by the taxpayer on the date determined by the decision of the Russian company on payment of income, (ii) document confirming the amount of income actually received on shares, (iii) documents containing information about the depositary, which transferred the income on shares in favor of a foreign organization (management company), which lawfully carried out the record of rights to shares held by the taxpayer, and (iv) document confirming that the legal entity, which carried out the record of rights of share ownership on the date determined by the decision of the Russian company on payment of income, complied with additional conditions provided by Russian tax legislation or international double tax treaty for the application of the reduced tax rate when paying dividends on shares. Due to the fact that these regulations entered into force only on January 1, 2014, the practice of such refunds have not been established yet, and that is why it is not possible to exclude risks associated with a possible non-refund of the tax withheld.

A resident of the United States who is fully eligible for benefits under the United States-Russia income tax treaty is referred to in this “Russian Income and Withholding Tax Considerations” section as a “U.S. holder.” Subject to certain provisions of the United States-Russia income tax treaty relating to limitations on benefits, a person generally will be a resident of the United States for treaty purposes and entitled to treaty benefits if such person is:

- liable, under the laws of the United States, for U.S. federal income tax (other than taxes in respect only of income from sources in the United States or capital situated therein) by reason of the holder’s domicile, residence, citizenship, place of incorporation, or any other similar criterion (and, for income derived by a partnership, trust or estate, residence is determined in accordance with the residence of the person liable to tax with respect to such income); and
- not also a resident of the Russian Federation for purposes of the United States-Russia income tax treaty.

The benefits under the United States-Russia income tax treaty discussed in this document generally are not available to United States persons who hold shares or ADSs in connection with the conduct of a business in the Russian Federation through a permanent establishment as defined in the United States-Russia income tax treaty.

Subject to certain exceptions, a United States person's permanent establishment under the United States-Russia income tax treaty is a fixed place of business through which such person carries on business activities in the Russian Federation (generally including, but not limited to, a place of management, a branch, an office and a factory). Under certain circumstances, a United States person may be deemed to have a permanent establishment in the Russian Federation as a result of activities carried on in the Russian Federation through agents of the United States person. This summary does not address the treatment of those holders.

United States-Russia income tax treaty procedures

Under current rules, to claim the benefit of a reduced rate of withholding under the United States-Russia income tax treaty, a non-resident generally must provide official certification from the U.S. tax authorities of eligibility for the treaty benefits in the manner required by Russian law.

A U.S. holder may obtain the appropriate certification by mailing completed forms, together with the holder's name, taxpayer identification number, the tax period for which certification is required, and other applicable information, to the U.S. Internal Revenue Service (the "**IRS**"). The procedures for obtaining certification are described in greater detail in the instructions to IRS Form 8802. As obtaining the required certification from the IRS may take at least six to eight weeks, U.S. holders should apply for such certification as soon as possible.

If tax is withheld by a Russian resident on dividends or other amounts at a rate different from that provided in the tax treaty, a U.S. holder may apply for a tax refund by filing a package of documents with the Russian local tax inspectorate to which the withholding tax was remitted within three years from the withholding date for U.S. holders which are legal entities, and within one year from the withholding date for individual U.S. holders. The package should include confirmations of residence of the foreign holder (IRS Form 6166), a copy of the agreement or other documents substantiating the payment of income, documents confirming the beneficial ownership of the dividends recipient and the transfer of tax to the budget. Under the provisions of the Russian Tax Code the refund of the tax should be effected within one month after the submission of the documents. However, procedures for processing such claims have not been clearly established, and there is significant uncertainty regarding the availability and timing of such refunds.

Neither the depositary nor we will have any obligation to assist a U.S. holder of shares or ADSs with the completion and filing of any tax forms.

Stamp duty

No Russian stamp duty will be payable by the holders upon any of the transactions with the shares or ADSs discussed in this section (e.g., on a purchase or sale of the shares or ADSs), except for transactions involving the receipt of the shares or ADSs by way of inheritance.

Certain U.S. Federal Income Tax Considerations

The following is a summary of material U.S. federal income tax consequences of the purchase, ownership and disposition of shares or ADSs by a "U.S. Holder." Solely for purposes of this "— Certain U.S. Federal Income Tax Considerations" section, a U.S. Holder is a beneficial owner of shares or ADSs that is, for U.S. federal income tax purposes: (1) an individual who is a citizen or resident of the United States, (2) a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (3) an estate the income of which is subject to U.S. federal income tax regardless of its source or (4) a trust, if a United States court can exercise primary supervision over the administration of the trust and one or more United States persons can control all substantial trust decisions, or if the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a United States person.

If an entity treated as a partnership for U.S. federal income tax purposes is a beneficial owner of shares or ADSs, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner and the activities of the partnership. A partner of a partnership holding shares or ADSs should consult its tax adviser regarding the associated tax consequences.

This summary does not discuss all aspects of U.S. federal income taxation that may be relevant to investors in light of their particular circumstances, such as investors subject to special tax rules (including, without limitation: (i) financial institutions; (ii) insurance companies; (iii) dealers in stocks, securities, or currencies or notional principal contracts; (iv) regulated investment companies; (v) real estate investment trusts; (vi) tax-exempt organizations; (vii) partnerships, pass-through entities, or persons that hold shares or ADSs through pass-through entities; (viii) holders that are not U.S. Holders; (ix) holders that own (directly, indirectly or constructively) 10% or more of our stock (by vote or value); (x) investors that hold shares or ADSs as part of a straddle, hedge, conversion, constructive sale or other integrated transaction for U.S. federal income tax purposes; (xi) investors that have a functional currency other than the U.S. dollar; (xii) persons subject to special tax accounting rules as a result of any item of gross income with respect to the shares or ADSs being taken into account in an applicable financial statement; and (xiii) U.S. expatriates and former long-term residents of the United States), all of whom may be subject to tax rules that differ significantly from those summarized below. This summary does not address tax consequences applicable to holders of equity interests in a holder of the shares or ADSs, including, but not limited to, U.S. federal estate, gift or alternative minimum tax considerations, or non-U.S., state or local tax considerations. This summary only addresses investors that will acquire shares or ADSs in an original offering, and it assumes that investors will hold their shares or ADSs as capital assets for U.S. federal income tax purposes (generally, property held for investment).

This summary is based upon current U.S. federal income tax law, including the U.S. Internal Revenue Code of 1986 (the “**Code**”), its legislative history, existing, temporary and proposed regulations thereunder, published rulings and court decisions, all of which are subject to differing interpretation or change (possibly with retroactive effect), and the United States-Russia income tax treaty, which is subject to change, possibly with retroactive effect. We have not sought, and will not seek, any ruling from the IRS or any opinion of counsel with respect to the tax consequences discussed below, and we cannot provide assurance that the IRS will not take a position contrary to the tax consequences discussed below or that any position taken by the IRS would not be sustained.

Investors should consult their tax advisers as to the consequences under U.S. federal, estate, gift, state, local and applicable non-U.S. tax laws of the purchase, ownership and disposition of shares or ADSs.

Ownership of ADSs in general

U.S. Holders of ADSs should generally be treated for U.S. federal income tax purposes as owners of the underlying shares represented by those ADSs, assuming the relevant deposit agreement and any related agreement include customary representations and obligations (particularly relating to any pre-release of ADSs) and such representations and obligations are properly complied with. In such case, except as noted, the U.S. federal income tax consequences discussed below should apply equally to U.S. Holders of ADSs and shares, and no gain or loss will be recognized upon an exchange of an ADS for the share represented by that ADS. A U.S. Holder’s tax basis in such shares will be the same as the U.S. Holder’s tax basis in such ADSs, and the holding period in such shares will include the holding period in such ADSs.

Taxation of dividends on shares or ADSs

Subject to the passive foreign investment company rules described below, for U.S. federal income tax purposes, the gross amount of a distribution, including any Russian withholding taxes, with respect to shares or ADSs will be treated as a taxable dividend to the extent of our current and accumulated earnings and profits, computed in accordance with U.S. federal income tax principles. Certain dividends received by non-corporate

U.S. Holders may be taxed at the lower applicable capital gains rate. This lower capital gains rate is only applicable to dividends paid by “qualified foreign corporations” (which term excludes PFICs, as defined below) and only with respect to shares or ADSs held for a minimum holding period (generally, 61 days during the 121-day period beginning 60 days before the ex-dividend date). A company will be a qualified foreign corporation if: (a) it is eligible for the benefits of an applicable United States income tax treaty; or (b) the stock with respect to which such dividend is paid is readily tradable on an established securities market in the United States. Non-corporate U.S. Holders are strongly urged to consult their tax advisers as to the applicability of the lower capital gains rate to dividends received with respect to shares or ADSs. Distributions in excess of our current and accumulated earnings and profits will be applied against and will reduce a U.S. Holder’s tax basis in shares or ADSs and, to the extent in excess of such tax basis, will be treated as gain from a sale or exchange of such shares or ADSs and will be treated as described under “Taxation on sale or other disposition of shares or ADSs” below. We do not intend to calculate our earnings and profits for U.S. federal income tax purposes and, unless we make such calculations, U.S. Holders should expect that any distributions with respect to shares or ADSs generally will be reported to them as a dividend, even if that distribution would otherwise be treated as a return of capital or as a capital gain pursuant to the rules described above. Such dividends will not be eligible for the dividends received deduction allowed to corporations.

If a dividend distribution is paid in rubles, the amount includible in income will be the U.S. dollar value of the dividend, calculated using the exchange rate in effect on the date the dividend is received by the U.S. Holder (or the date of the depository’s receipt in the case of the ADSs), regardless of whether the payment is actually converted into U.S. dollars on that date. Generally, any gain or loss resulting from currency exchange rate fluctuations during the period from the date the dividend is includible in the income of the U.S. Holder to the date the rubles are converted into U.S. dollars will be treated as U.S. source ordinary income or loss. U.S. Holders may be required to recognize foreign currency gain or loss on the receipt of a refund of Russian withholding tax pursuant to the United States-Russia income tax treaty to the extent the U.S. dollar value of the refund differs from the U.S. dollar equivalent of that amount on the date of receipt of the underlying dividend.

Russian withholding tax under the United States-Russia income tax treaty should be treated as a foreign income tax that, subject to generally applicable limitations and conditions, is eligible for a U.S. foreign tax credit against the U.S. federal income tax liability of the U.S. Holder. If Russian tax is withheld at a rate in excess of the applicable rate under the United States-Russia income tax treaty for which a U.S. Holder qualifies, a U.S. foreign tax credit for the excess amount may not be allowed to be claimed.

For U.S. foreign tax credit purposes, a dividend distribution will be treated as foreign source income and will generally be classified as “passive category income.” Additionally, a U.S. Holder who does not elect to claim a foreign tax credit may instead be eligible to claim a deduction for U.S. federal income tax purposes in respect of Russian withholding tax, but only for a year in which such holder elects to do so for all creditable foreign income taxes. The rules relating to the determination of the U.S. foreign tax credit, or deduction in lieu of the U.S. foreign tax credit, are complex and U.S. Holders should consult their tax advisers with respect to those rules.

Taxation on sale or other disposition of shares or ADSs

Subject to the passive foreign investment company rules described below, the sale or other disposition of shares or ADSs will generally result in the recognition of gain or loss in an amount equal to the difference between the amount realized on the sale or other disposition and the adjusted basis in such shares or ADSs. Such gain or loss generally will be treated as long-term capital gain or loss if the shares or ADSs have been held for more than one year as of the time of the sale or other disposition. Capital gains of non-corporate U.S. Holders derived from capital assets held for more than one year are eligible for reduced rates of taxation. The deductibility of capital losses is subject to significant limitations.

Gain or loss realized on the sale or other disposition of shares or ADSs will generally be treated as U.S. source income and as a result any Russian taxes imposed upon such sale or other disposition may not be

creditable against a U.S. Holder's U.S. federal income tax liability. U.S. Holders are strongly urged to consult their tax advisers as to the availability of tax credits for any Russian taxes withheld on the sale or other disposition of shares or ADSs.

If a U.S. Holder receives any foreign currency on the sale or other disposition of shares or ADSs, such U.S. Holder generally will realize an amount equal to the U.S. dollar value of such foreign currency on the settlement date of such sale or other disposition if (1) such U.S. Holder is a cash basis or electing accrual basis taxpayer and the shares or ADSs are treated as being "traded on an established securities market" or (2) such settlement date is also the date of such sale or other disposition. If the foreign currency so received is converted to U.S. dollars on the settlement date, such U.S. Holder should not recognize foreign currency gain or loss on such conversion. If the foreign currency so received is not converted into U.S. dollars on the settlement date, such U.S. Holder will have a basis in such foreign currency equal to its U.S. dollar value on the settlement date. Any gain or loss on a subsequent conversion or other disposition of such foreign currency generally will be treated as ordinary income or loss to such U.S. Holder and generally will be income or loss from sources within the United States for U.S. foreign tax credit purposes. Each U.S. Holder should consult its tax adviser regarding the U.S. federal income tax consequences of receiving foreign currency from the sale or other disposition of shares or ADSs.

Passive foreign investment company status

A non-U.S. company is a passive foreign investment company ("PFIC") in any taxable year in which, after taking into account the income and assets of certain subsidiaries, either (1) at least 75% of its gross income is passive income or (2) at least 50% of the average value of its assets (based on an average of the quarterly values of the assets) is attributable to assets that produce or are held to produce passive income. We believe that for U.S. federal income tax purposes, we were not a PFIC for the taxable year ending in 2018. However, the PFIC determination is made annually and may involve facts that are not within our control. In addition, there are special requirements that apply to income from the sale and ownership of commodities that need to be satisfied in order for amounts attributable to commodities to be treated as non-passive. If we were classified as a PFIC at any time that you hold our ADSs and shares, you may be subject to materially adverse U.S. federal income tax consequences compared to an investment in a company that is not considered a PFIC, including being subject to greater amounts of U.S. tax on distributions and gains on the sale or disposition of the ADSs and shares as well as being subject to additional U.S. tax filing requirements. Additionally, dividends paid by the company to non-corporate U.S. holders would not be eligible for the special reduced rate of tax described above under "Taxation of dividends on shares or ADSs." You should consult your tax advisers as to the consequences of an investment in a PFIC.

Information reporting and backup withholding

U.S. Holders may be subject to information and backup withholding on the payment of dividends on, and the proceeds received from the disposition of, shares or ADSs, unless: (1) the U.S. Holder is an exempt recipient, or (2) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding. Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against a U.S. Holder's federal income tax liability, and a U.S. Holder may obtain a refund of any excess amounts withheld under the backup withholding rules by timely filing the appropriate claim for refund with the IRS and furnishing all required information. U.S. Holders should consult their tax advisors regarding their qualification for exemption from backup withholding and the procedure for obtaining such an exemption, if applicable.

FATCA

Provisions under Sections 1471 through 1474 of the Code and applicable U.S. Treasury Regulations commonly referred to as "FATCA" generally impose 30% withholding on certain "withholdable payments" and,

in the future, may impose such withholding on “foreign passthru payments” made by a “foreign financial institution” (each as defined in the Code) that has entered into an agreement with the IRS to perform certain diligence and reporting obligations with respect to the foreign financial institution’s U.S.-owned accounts. Prospective investors should consult their tax advisors regarding the potential impact of FATCA and any non-U.S. legislation implementing FATCA on the investment in ADSs.

Documents on Display

The documents that are exhibits to or incorporated by reference in this document can be read at the SEC’s Public Reference Room at 100 F Street, NE, Washington, DC 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at +1 800-SEC-0330. These filings are also available at the website maintained by the SEC at www.sec.gov.

Some of our reports and other information can also be inspected at the offices of the NYSE at 20 Broad Street, New York, New York 10005.

Glossary

Blast furnace: A towering cylinder lined with heat-resistant (refractory) bricks, used by integrated steel mills to smelt pig iron from ore. Its name comes from the “blast” of hot air and gases forced up through the iron ore, coke and fluxing additions that load the furnace.

Carbon steel: A type of steel generally having no specified minimum quantity of any alloying element and containing only an incidental amount of any element other than carbon, silicon, manganese, copper, sulfur and phosphorus.

CIF: Cost, Insurance and Freight, a commercial term pursuant to which the seller must pay the costs, insurance and freight necessary to bring the goods to the named port of destination but the risk of loss or damage to the goods, as well as any additional costs due to events occurring after the time of delivery, are transferred from the seller to the buyer.

Coils: Steel sheet that has been wound. A slab, once rolled in a hot-strip mill, can be more than one mile long; coils are the most efficient way to store and transport sheet steel.

Continuous casting: A method of pouring steel directly from a ladle through a tundish into a special machine shaped to form billets and slabs. Continuous casting avoids the need for blooming mills for rolling billets into slabs. Continuous cast metal solidifies in a few minutes, versus several hours for an ingot. As a result of this, the chemical composition and mechanical properties of billets are more uniform.

FCA: Free Carrier, a commercial term pursuant to which the seller must deliver the goods, cleared for export, to the carrier nominated by the buyer at the named place. Costs for transportation and risk of loss transfer to the buyer after delivery to the carrier.

Flat-rolled steel/Flat products: Category of steel that includes sheet and strip, among others.

FOB: Free on Board, a commercial term pursuant to which the buyer bears all costs and risks of loss of or damage to the goods from the point the goods pass the ship’s rail at the named point of shipment.

Galvanized steel: Steel coated with a layer of zinc to provide corrosion resistance in underbody auto parts, garbage cans, storage tanks, fencing wire, etc. Sheet steel normally must be cold-rolled prior to galvanizing. Galvanized steel is subdivided into hot-dipped galvanized and electrogalvanized steel.

Hot-rolled: Section that is sold in its “as-produced” state off the hot mill with no additional treatment, aside from being pickled and oiled (if specified).

Magnetic separator: A device used in a process when magnetically susceptible mineral is separated from gangue minerals by applying a strong magnetic field.

Pipes: Tubes used to transport fluids or gases. Pipe and tube are often used interchangeably, with a given label applied primarily as a matter of historical use.

Probable reserves: In accordance with the JORC Code, those reserves which are the economically mineable part of the indicated mineral resources. Indicated reserves include all minerals conforming to the thickness and depth limits defined in the resource base, and for which known data points are not more than 2,000 meters apart.

Proved reserves: In accordance with the JORC Code, those reserves which are the economically mineable part of the measured mineral resources. Measured mineral resources means the tonnages of in-situ minerals contained in seams or sections of seams for which sufficient information is available to enable detailed or conceptual mine planning.

Raw steel: Steel in primary form of hot molten metal.

Rebar or Reinforcement bars: Round rolled products of plain or die-rolled sections of various types and classes used to strengthen concrete in highway and building construction.

Reserve: In accordance with the JORC Code, virgin and/or accessed parts of a mineral resource base, which could be economically extracted or produced at the time of determination, considering environmental, legal and technological constraints.

Rolled steel (products): Steel with certain forms and geometric dimensions manufactured by drafting metal between rotary rolls of rolling mills.

Run-of-mine, or ROM, coal: Coal that has not undergone the processes of classification and washing.

Saleable coal: Coal that has undergone the processes of classification and washing.

Scrap (Ferrous): Ferrous (iron-containing) material that generally is remelted and recast into new steel in EAFs. Integrated steel mills also use scrap metal for up to 25% of their basic oxygen furnace charge. Scrap metal includes waste steel generated from within metal-processing plants and steel mills through edge trimming and rejects.

Sections: Blooms or billets that are hot-rolled in a rolling mill to manufacture rounds, squares, bands, among other structural shapes, “L,” “U,” “T” or “I” shapes. Sections can also be produced by welding together pieces of flat products. Sections can be used for a wide variety of purposes in the construction, engineering and transport industries.

Semi-finished steel: Steel shapes (for example, blooms, billets or slabs) that later are rolled into finished products such as beams, bars or sheet.

Sheet steel: Thin, flat-rolled steel created in a hot-strip mill by rolling a cast slab flat while maintaining the side dimensions. The malleable steel lengthens to several thousand feet as it is squeezed by the rolling mill. The most common differences among steel bars, strip, plate and sheet are merely their physical dimensions of width and gauge (thickness).

Sintering: A process that combines iron-bearing particles into small chunks. Initially, these materials are too fine to withstand the air currents of the smelting process in the blast furnace and could be thrown away. The iron is now conserved in sinter as the chunks of sinter are heavier and therefore can be charged into the blast furnace.

Slab: The most common type of semi-finished steel. Traditional slabs measure 13-35 centimeters thick, 75-300 centimeters wide and are usually about 6-12 meters long, while the output of the recently developed “thin slab” casters is approximately five centimeters thick. After casting, slabs are sent to the hot-strip mill to be rolled into coiled sheet and plate products.

Special steel: Alloyed steel produced by the addition of various metals (e.g., manganese) in small quantities during the steelmaking process to improve mechanical properties such as strength and resistance to stress. Special steels are intermediary products between standard steel grades and stainless steel alloys (with a high content of nickel and chrome). Special steel products are typically used as long products (e.g., special bar quality, bearing steel, tool steel and high-speed steel).

Tailings: Material rejected from a mine after the valuable minerals have been recovered.

Welded mesh: Cold-rolled or drawn wire cuts of certain length welded together at specified distances in longitudinal and traverse directions into sheets of rectangular shapes.

Wire rod: Round, semi-finished steel that is rolled from a billet and coiled for further processing. Wire rod is commonly drawn into wire or used to tie bundles. Wire rod rolling mills (rolling facilities) can run as fast as 6,000 meters per minute.

Item 11. *Quantitative and Qualitative Disclosures about Market Risk*

In the normal course of business, our financial position is routinely subject to a variety of risks. We are exposed to market risks associated with foreign currency exchange rates, interest rates and commodity prices. We are also subject to the risks associated with the business environment in which we operate, including the collectability of accounts receivable.

We do not enter into hedging transactions to manage the risks specified above.

We do not hold or issue derivative financial instruments for trading purposes.

See notes 3 and 11.2 to the consolidated financial statements for more information on foreign currency translations, derivative financial instruments, market risks and risk management.

Currency Risk

The functional currencies for our main Russian and European subsidiaries are the Russian ruble and euro, respectively. The U.S. dollar is the functional currency of our other main international operations. Our reporting currency is the Russian ruble.

In the past we entered into forward transactions to buy U.S. dollars for euros to hedge our exposure to movements in foreign currency exchange rates arising in relation to euro-denominated accounts receivable of our trading subsidiaries. These derivatives were not designated as hedging contracts for accounting purposes. As of December 31, 2018, we did not have any forward transactions.

We are exposed to movements in U.S. dollar and euro exchange rates relative to the Russian ruble, our reporting currency. The following table sets forth our monetary assets and liabilities by currency as of December 31, 2018.

	<u>U.S. Dollar</u>	<u>Euro</u>
	(In millions of U.S. dollars)	(In millions of Russian rubles)
Current assets	157	812
Trade and other receivables	27	510
Cash and cash equivalents	130	302
Non-current liabilities	—	(219)
Long-term finance lease liabilities	—	(219)
Current liabilities	(54,954)	(101,294)
Short-term loans and borrowings	(51,732)	(98,285)
Trade and other payables	(3,222)	(2,953)
Short-term finance lease liabilities	—	(56)

Interest Rate Risk

Interest rate risk is the risk that changes in floating interest rates adversely impact our financial results. As of December 31, 2018, 2017 and 2016, the shares of the borrowings with floating rates in the total amount of the borrowings were 95% (including MosPrime — 0%, the CBR key rate — 62%, LIBOR, EURIBOR and others — 33%), 95% (including MosPrime — 0.03%, the CBR key rate — 66%, LIBOR, EURIBOR and others — 29%) and 91% (including MosPrime — 0.1%, the CBR key rate — 62%, LIBOR, EURIBOR and others — 29%), respectively.

We have not entered into transactions designed to hedge against interest rate risks, which may exist in connection with our current or future indebtedness. We monitor the market and assess our options for hedging interest rate risks and may enter into such arrangements in the future.

We manage interest rate risk through analysis of current interest rates. If there are significant changes in market interest rates management may consider refinancing of a particular financial instrument on more favorable terms.

The table below demonstrates our sensitivity to change of floating rates which management believes is an appropriate measure of the current market conditions.

	<u>Increase/decrease in MosPrime and the CBR key rate (%)</u>	<u>Effect on profit before tax (In millions of Russian rubles)</u>	<u>Increase/decrease in LIBOR (%)</u>	<u>Effect on profit before tax (In millions of Russian rubles)</u>	<u>Increase/decrease in EURIBOR (%)</u>	<u>Effect on profit before tax (In millions of Russian rubles)</u>
2016						
	+2.00%	(4,943)	+0.60%	(736)	+0.12%	(28)
	<u>−4.00%</u>	<u>9,887</u>	<u>−0.08%</u>	<u>98</u>	<u>−0.08%</u>	<u>19</u>
2017						
	+1.00%	(2,744)	+0.48%	(500)	+0.04%	(8)
	<u>−2.00%</u>	<u>5,488</u>	<u>−0.24%</u>	<u>250</u>	<u>−0.08%</u>	<u>16</u>
2018						
	+0.75%	(1,922)	+0.50%	(226)	+0.20%	(190)
	<u>−1.00%</u>	<u>2,563</u>	<u>−0.15%</u>	<u>68</u>	<u>−0.01%</u>	<u>9</u>

Commodity Price Risk

In the normal course of our business, we are primarily exposed to market risk of price fluctuations related to the purchase, production and sale of steel products, coal, coke and other products.

We do not use commodity derivatives or long-term fixed-price sales contracts to manage our commodity price risks.

Equity Price Risk

We also have minor investments in shares of Russian companies that are not publicly traded and, accordingly, their market values are not available. We consider that it is not practicable for us to estimate the fair values of these investments because we have not yet obtained or developed the valuation models necessary to make the estimates, and the cost of obtaining an independent valuation is believed by management to be excessive considering the significance of the investments. Accordingly, these investments are omitted from the risk information disclosure presented herein.

We do not use derivative instruments or any other arrangements to manage our equity price risks.

Item 12. *Description of Securities Other than Equity Securities*

Depository Fees and Charges

Our common American Depositary Shares, or common ADSs, each representing two common shares, are traded on the NYSE under the symbol “MTL.” The common ADSs are evidenced by common American Depositary Receipts, or common ADRs, issued by Deutsche Bank Trust Company Americas (“**DBTCA**”), as depository under the Deposit Agreement, dated July 27, 2004, among Mechel PAO, DBTCA, and holders and beneficial owners of common ADSs, as amended on May 21, 2007, May 19, 2008 and December 21, 2015. Common ADS holders are required to pay the following service fees to DBTCA:

<u>Service</u>	<u>Fees (In U.S. dollars)</u>
Issuance of common ADSs	Up to \$0.05 per common ADS
Cancellation of common ADSs	Up to \$0.05 per common ADS
Distribution of cash dividends or other cash distributions	Up to \$0.02 per common ADS
Distribution of common ADSs pursuant to (1) stock dividends, free stock distributions or (2) exercises of rights to purchase additional common ADSs or distribution of proceeds thereof	Up to \$0.05 per common ADS
Distribution of securities other than common ADSs or rights to purchase additional common ADSs or the distribution of proceeds thereof	Up to \$0.05 per common ADS
Common ADR transfer, combination or split-up fee	\$1.50 per transfer
Share register inspection annual fee	\$0.01 per common ADS
Operation and maintenance annual fee	\$0.02 per common ADS*

* This fee, when combined with the fees for cash distributions, shall not exceed \$0.02 per common ADS per year.

Our preferred American Depositary Shares, or preferred ADSs, each representing one-half of a preferred share, are traded on the NYSE under the symbol “MTL PR.” The preferred ADSs are evidenced by preferred American Depositary Receipts, or preferred ADRs, issued by DBTCA under the Deposit Agreement, dated May 12, 2010, among Mechel PAO, DBTCA, and holders and beneficial owners of preferred ADSs. Preferred ADS holders are required to pay the following service fees to DBTCA:

<u>Service</u>	<u>Fees (In U.S. dollars)</u>
Issuance of preferred ADSs	Up to \$0.05 per preferred ADS
Cancellation of preferred ADSs	Up to \$0.05 per preferred ADS
Distribution of cash dividends or other cash distributions	Up to \$0.02 per preferred ADS
Distribution of preferred ADSs pursuant to (1) stock dividends, free stock distributions or (2) exercises of rights to purchase additional preferred ADSs or distribution of proceeds thereof	Up to \$0.05 per preferred ADS
Distribution of securities other than preferred ADSs or rights to purchase additional preferred ADSs or the distribution of proceeds thereof	Up to \$0.05 per preferred ADS
Preferred ADR transfer, combination or split-up fee	\$1.50 per transfer
Share register inspection annual fee	\$0.01 per preferred ADS
Operation and maintenance annual fee	\$0.02 per preferred ADS*

* This fee, when combined with the fees for cash distributions, shall not exceed \$0.02 per preferred ADS per year.

In addition, holders of ADSs may also be charged for the following expenses: (1) taxes and governmental charges; (2) cable, telex and facsimile transmission and delivery charges; (3) transfer or registration fees of the Russian share registrar; (4) fees or charges of DBTCA for conversion of foreign currency into U.S. dollars; and (5) expenses of DBTCA in connection with the issuance of definitive certificates.

Holders of ADSs are responsible for any taxes or other governmental charges payable on their ADSs or on the deposited securities underlying the ADSs. DBTCA may refuse to transfer the ADSs or to allow holders to withdraw the deposited securities underlying their ADSs until such payment is made, or it may deduct the amount of taxes owed from any payments to ADS holders. It may also sell deposited securities, by public or private sale, to pay any taxes owed. ADS holders will remain liable if the proceeds of the sale are not enough to pay the taxes. If DBTCA sells deposited securities, it will, if appropriate, reduce the number of ADSs to reflect the sale and pay to ADS holders any proceeds, or send to ADS holders any property, remaining after it has paid the taxes.

Depository Payments for 2018, 2017 and 2016

In consideration for its appointment as depository, DBTCA agreed to reimburse us for costs of the maintenance of our ADS programs and of ADS-programs related investor relations activities. For the years ended December 31, 2018, 2017 and 2016, DBTCA reimbursed us approximately \$402,816, \$434,774 and \$825,993, respectively, in regard to our common ADS-program. For the years ended December 31, 2018, 2017 and 2016, DBTCA reimbursed us approximately \$378,975, \$121,001 and \$234,124, respectively, in regard to our preferred ADS-program.

In addition, for the years ended December 31, 2018, 2017 and 2016, DBTCA made the following payments on our behalf in relation to our ADS programs:

<u>Category</u>	<u>Year Ended December 31,</u>		
	<u>2018</u>	<u>2017</u>	<u>2016</u>
	(In U.S. dollars)		
NYSE listing fees	85,037	93,146	150,189
Proxy solicitation expenses	—	—	178,010
ADS holder identification expenses	—	18,000	9,000
Total	<u>85,037</u>	<u>111,146</u>	<u>337,199</u>

In addition, DBTCA waived the cost of various ADR program-related support services that it provided to us in 2018, 2017 and 2016. DBTCA had valued these services at \$412,500 per annum for common ADSs when DBTCA was re-appointed in 2014 and at \$160,000 per annum for preferred ADSs when DBTCA was appointed in 2015. The volume of the costs that DBTCA agrees to waive may vary depending on the depositary receipt program size within particular year. Under certain circumstances, including early termination of the appointment of DBTCA, we would be required to repay to DBTCA some or all of the payments made to us or on our behalf (including fees waived by it) since its appointment.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

As of March 21, 2019, we did not pay in full amounts due in respect of principal and interest under our export credit facility agreements and were in breach of certain financial and non-financial covenants under several credit facilities. See “Item 5. Operating and Financial Review and Prospects — Liquidity and Capital Resources — Restrictive Covenants,” “Item 3. Key Information — Risk Factors — Risks Relating to Our Financial Condition and Financial Reporting — Our creditors have accelerated and in the future may accelerate amounts due under our loan agreements due to our failure to comply with our payment and other obligations,” “Item 3. Key Information — Risk Factors — Risks Relating to Our Financial Condition and Financial Reporting — We may be unable to restructure all of our indebtedness or we may fail to comply with the new terms of the restructured indebtedness,” “Item 3. Key Information — Risk Factors — Risks Relating to Our Financial Condition and Financial Reporting — We have a substantial amount of outstanding indebtedness with restrictive financial covenants and most shares and assets in our subsidiaries are pledged,” “Item 3. Key Information — Risk Factors — Risks Relating to Our Financial Condition and Financial Reporting — If we fail to fulfill payment obligations under the group’s lease agreements, our lessors may require the return of the leased assets, which could materially adversely affect our business, financial condition, results of operations and prospects” and “Item 8. Financial Information — Litigation — Debt litigation.”

The table below summarizes the payment defaults, cross-defaults and other covenant breaches under our main facility agreements:

	Non-payment of principal or interest (yes/no)	Cross-default (yes/no)	Breach of financial covenants ⁽¹⁾ (yes/no)	Breach of non- financial covenants ⁽¹⁾ (yes/no)
VTB Bank	no	yes	yes	yes
Sberbank	no	yes	yes	yes
Gazprombank	no	yes	yes	yes
Universal Rolling Mill Facility Agreement	yes	yes	yes	yes
Other ⁽²⁾	yes	yes	yes	yes

(1) The breaches provided in this table are as of December 31, 2018.

(2) Includes export credit facility agreements.

The failure to pay the scheduled principal and interest amounts, as well as the breach of financial and other covenants in our loan agreements, which were not remedied by us or waived by our creditors, permit the creditors under those loan agreements to accelerate the payment of principal and interest under those loan agreements, as well as trigger cross-default provisions under a number of other facilities, permitting the respective lenders under such other facilities to accelerate the payment of principal and interest under their loans.

The failure to pay amounts due, the non-compliance with financial and non-financial covenants and the triggering of the cross-default provisions resulted in the reclassification of our group’s long-term debt into short-term liabilities in the amount of RUB 361,328 million as of December 31, 2018. In addition, cross-default provisions resulted in the reclassification of the long-term finance lease liability of RUB 1,320 million into short-term finance lease liabilities as of December 31, 2018.

Payment Defaults

As of March 21, 2019, the total amount in default for failure to pay principal or interest under our export credit facility agreements was approximately 29.4 billion rubles. Conversion from U.S. dollars and euros into rubles is made using the CBR exchange rate on March 21, 2019. The amounts provided below do not include various fines, surcharges and penalty fees, unless otherwise noted.

Universal Rolling Mill Facility Agreement

Facility Agreement for Chelyabinsk Metallurgical Plant from BNP Paribas, Gazprombank and UniCredit — the principal amount outstanding was \$154.9 million and €154.7 million (in aggregate approximately 21.2 billion rubles), including overdue principal in the amount of \$140.8 million and €110.5 million (in aggregate approximately 17.1 billion rubles). In addition, the amount of overdue interest was \$16.8 million and €3.4 million (in aggregate approximately 1.3 billion rubles).

Item 14. *Material Modifications to the Rights of Security Holders and Use of Proceeds*

None.

Item 15. *Controls and Procedures*

(a) *Disclosure Controls and Procedures*

As required by paragraph (b) of Rules 13a-15 and 15d-15 under the Securities Exchange Act of 1934, management has evaluated, with the participation of our chief executive officer and chief financial officer, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Disclosure controls and procedures refer to controls and other procedures designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the rules and forms of the Securities and Exchange Commission. Disclosure controls and procedures include, without limitation, controls and other procedures designed to ensure that information required to be disclosed by us in our reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported to management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding our required disclosure. In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management was required to apply its judgment in evaluating and implementing possible controls and procedures.

Based on the evaluation of our disclosure controls and procedures in place as of December 31, 2018, our controls and procedures were recognized effective.

(b) *Management's Annual Report on Internal Control over Financial Reporting*

Management is responsible for establishing and maintaining adequate internal control over financial reporting.

Internal control over financial reporting refers to a process designed by, or under the supervision of, our chief executive officer and chief financial officer and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS, and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and members of our Board of Directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on our financial statements.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process, and it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

Our management evaluated the effectiveness of our internal control over financial reporting as of December 31, 2018 using the framework set forth in the report of the Treadway Commission's Committee of Sponsoring Organizations ("COSO"), "Internal Control — Integrated Framework" (2013). Based on the assessment, our management believes our company maintained effective internal control over financial reporting as of December 31, 2018.

Ernst & Young LLC, an independent registered public accounting firm, has audited our consolidated financial statements and has also issued an attestation report on the effectiveness of our internal controls over financial reporting as of December 31, 2018, a copy of which appears below.

(c) Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Mechel PAO

Opinion on Internal Control over Financial Reporting

We have audited Mechel PAO and subsidiaries' (hereinafter referred to as the "**Group**") internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), (the COSO criteria). In our opinion, the Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statements of financial position of the Group as of December 31, 2018 and 2017, and the related consolidated statements of profit (loss) and other comprehensive income, changes in equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes, and our report dated March 21, 2019 expressed an unqualified opinion thereon that included an explanatory paragraph regarding the Group's ability to continue as a going concern.

Basis for Opinion

The Group's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definitions and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLC
Moscow, Russia

March 21, 2019

(d) Changes in Internal Control over Financial Reporting

There have been no material changes in our internal control over financial reporting identified in the evaluation required by paragraph (d) of Rule 13a-15 or Rule 15d-15 of the Exchange Act that occurred during the period covered by this annual report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 16A. Audit Committee Financial Expert

Our Board of Directors has determined that Georgy Petrov, Chairman of our Audit Committee, is an "audit committee financial expert." Mr. Petrov is independent in accordance with SEC Rule 10A-3. For a description of Mr. Petrov's experience, see "Item 6. Directors, Senior Management and Employees — Directors and Executive Officers."

Item 16B. Code of Ethics

We have adopted a code of business conduct and ethics that applies to our directors, officers and employees. It is available at www.mechel.com and www.mechel.ru. Hard copies of our code of business conduct and ethics are available free of charge to any person upon request. In order to request a hard copy, please send an inquiry to ir@mechel.com indicating postal address to which the hard copies should be sent and a contact person. No amendments were made to our code of business conduct and ethics in 2018.

Item 16C. Principal Accountant Fees and Services

Ernst & Young LLC has served as our independent registered public accountants for each of the fiscal years in the three year period ended December 31, 2018, for which audited financial statements appear in this Annual

Report on Form 20-F. The following table presents the aggregate fees for professional services and other services rendered by Ernst & Young LLC in 2018 and 2017, respectively.

	Year Ended December 31,	
	2018	2017
	(In millions of Russian rubles, net of VAT)	
Audit Fees	125.0	120.0
Audit-related Fees	0.7	0.4
Tax Fees	0.2	0.8
Other Fees	0.1	—
Total	<u>126.0</u>	<u>121.2</u>

Audit Fees

The amount of audit fees includes fees necessary to perform an audit or interim review in accordance with the standards of the Public Company Accounting Oversight Board (United States) and services that generally only the independent auditor can reasonably provide, such as comfort letters, statutory audits, attestation services and consents and assistance with, and review of, documents filed with the SEC.

Audit-related Fees

This category usually includes assurance and related services that are typically performed by the independent auditor. More specifically, these services could include, among others, employee benefit plan audits, IT-related audits, consultation concerning financial accounting and reporting standards.

Tax Fees

Tax services include, among others, tax consultation related to proposed and consummated transactions, restructuring, personal taxation and general tax consultation.

Other Fees

Other fees include subscription, consultancy and training fees.

Audit Committee Pre-Approval Policies and Procedures

The Sarbanes-Oxley Act of 2002 required that we implement a pre-approval process for all engagements with our independent public accountants. In compliance with Sarbanes-Oxley requirements pertaining to auditor independence, our Audit Committee pre-approves the engagement terms and fees of Ernst & Young LLC for all audit and non-audit services, including tax services. All audit, audit-related and tax services rendered by Ernst & Young LLC in 2018 were approved by the Audit Committee before Ernst & Young LLC was engaged for such services. No services of any kind were approved pursuant to a waiver permitted pursuant to 17 CFR 210.2-01(c)(7)(i)(C).

Item 16D. Exemptions from the Listing Standards for Audit Committees

None.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

We did not repurchase any of our shares, GDSs or ADSs in 2018.

Item 16F. Change in Registrant's Certifying Accountant

Not applicable.

Item 16G. Corporate Governance

The NYSE permits us to follow certain home country corporate governance practices, which differ from those required for U.S. companies under the NYSE Listed Company Manual. The following table sets forth the most important differences between the NYSE corporate governance requirements for U.S. companies under the NYSE Listed Company Manual Section 303A and our current practices.

NYSE Corporate Governance Rules for U.S. Companies

A majority of directors must be independent, as determined by the board. (Section 303A.01 and 02).

Non-management directors must meet at regularly scheduled executive sessions without management. (Section 303A.03).

Listed companies must have a nominating/corporate governance and a compensation committee, each composed entirely of independent directors and having a written charter specifying the committee's purpose and responsibilities, as well as annual performance evaluation of the committee. (Section 303A.04 and 05).

Listed companies must have an audit committee that satisfies the requirements of Rule 10A-3 under the Exchange Act. (Section 303A.06).

Audit committee must have a minimum of three members and have a written charter specifying the committee's purpose, an annual performance evaluation and its duties and responsibilities. (Section 303A.07(a) and (b)).

Listed companies must have an internal audit function. (Section 303A.07(c)).

Shareholders must be given the opportunity to vote on all equity compensation plans and material revisions thereto. (Section 303A.08).

Listed companies must adopt and disclose corporate governance guidelines. (Section 303A.09).

Listed companies must adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers. (Section 303A.10).

Our Corporate Governance Practices

We comply with this requirement, although it is not required for foreign private issuers like Mechel.

Our Bylaw on the Board of Directors, which is posted in the "Corporate Governance" section of our corporate website, provides that before each meeting of the board of directors, independent directors shall hold a consultation in the absence of management.

We have a Committee on Appointments and Remuneration, which has three independent members. The Bylaw on Appointments and Remuneration Committee of the Board of Directors is posted in the "Corporate Governance" section of our corporate website.

We comply with this requirement.

Our Audit Committee has three members. The Bylaw on the Audit Committee of the Board of Directors is posted in the "Corporate Governance" section of our corporate website.

We have an Internal Audit Department. The summary of the Bylaw on the Internal Audit Department is posted in the "Corporate Governance" section of our corporate website.

As a Russian company, we are subject to the mandatory requirements of the Russian Joint-Stock Companies Law. The items on which shareholders can vote cannot be altered.

Our corporate governance guidelines are reflected in our various corporate documents, such as the Bylaw on the Board of Directors and the Code of Corporate Governance, all of which are posted in the "Corporate Governance" section of our website.

Our Code of Business Conduct and Ethics is posted in the "Corporate Governance" section of our website.

PART III

Item 17. *Financial Statements*

See instead “Item 18. Financial Statements.”

Item 18. *Financial Statements*

The following financial statements, together with the report of Ernst & Young LLC, are filed as part of this annual report on Form 20-F.

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Item 19. Exhibits

Exhibit No.	Description
1.1	Charter of Mechel PAO (new version) registered on July 14, 2017 (English translation) is incorporated herein by reference to Exhibit 1.1 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2017, on Form 20-F.
4.1	Amendment Agreement No. 4 dated April 10, 2013 to Facility Agreement No. 2640 dated December 27, 2010 by and between VTB Bank (open joint stock company) and Mechel OAO (English translation) is incorporated herein by reference to Exhibit 4.1 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.2	Amendment Agreement No. 5 dated February 7, 2014 to Facility Agreement No. 2640 dated December 27, 2010 by and between VTB Bank (open joint stock company) and Mechel OAO (English translation) is incorporated herein by reference to Exhibit 4.2 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.3	Non-Revolving Loan Facility Agreement No. 5593 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.3 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.4	Amending Agreement No. 1 dated December 5, 2012 to Non-Revolving Loan Facility Agreement No. 5593 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.4 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.5	Novation Agreement No. 5593 dated December 5, 2012 to Non-Revolving Loan Facility Agreement No. 5593 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.5 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.6	Amending Agreement No. 2 dated August 9, 2013 to Non-Revolving Loan Facility Agreement No. 5593 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.6 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.7	Amending Agreement No. 3 dated September 27, 2013 to Non-Revolving Loan Facility Agreement No. 5593 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.7 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.8	Amending Agreement No. 4 dated December 19, 2013 to Non-Revolving Loan Facility Agreement No. 5593 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.8 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.

<u>Exhibit No.</u>	<u>Description</u>
4.9	Non-Revolver Loan Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.9 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.10	Amending Agreement No. 1 dated December 27, 2012 to Non-Revolver Loan Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.10 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.11	Amending Agreement No. 2 dated March 4, 2013 to Non-Revolver Loan Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.11 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.12	Novation Agreement No. 5594 dated March 4, 2013 to Non-Revolver Loan Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.12 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.13	Amending Agreement No. 3 dated August 9, 2013 to Non-Revolver Loan Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.13 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.14	Amending Agreement No. 4 dated September 27, 2013 to Non-Revolver Loan Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.14 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.15	Amending Agreement No. 5 dated December 19, 2013 to Non-Revolver Loan Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.15 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.16	Non-Revolver Loan Facility Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.16 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.17	Novation Agreement No. 8507 dated October 9, 2012 to Non-Revolver Loan Facility Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.17 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.

<u>Exhibit No.</u>	<u>Description</u>
4.18	Amending Agreement No. 1 dated December 27, 2012 to Non-Revolver Loan Facility Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.18 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.19	Amending Agreement No. 2 dated August 9, 2013 to Non-Revolver Loan Facility Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.19 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.20	Amending Agreement No. 3 dated September 27, 2013 to Non-Revolver Loan Facility Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.20 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.21	Amending Agreement No. 4 dated December 19, 2013 to Non-Revolver Loan Facility Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.21 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.22	Non-Revolver Loan Facility Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.22 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.23	Novation Agreement No. 8508 dated October 9, 2012 to Non-Revolver Loan Facility Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.23 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.24	Amending Agreement No. 1 dated December 27, 2012 to Non-Revolver Loan Facility Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.24 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.25	Amending Agreement No. 2 dated August 9, 2013 to Non-Revolver Loan Facility Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.25 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.26	Amending Agreement No. 3 dated September 27, 2013 to Non-Revolver Loan Facility Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.26 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.

<u>Exhibit No.</u>	<u>Description</u>
4.27	Amending Agreement No. 4 dated December 19, 2013 to Non-Revolver Loan Facility Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.27 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.28	Amendment and Restatement Agreement dated December 4, 2012 made between Southern Kuzbass Coal Company Open Joint Stock Company and the Mandated Lead Arrangers, the Original Lenders, the New Lenders, the Facility Agent, the Security Agent, the Joint & Several Creditor, the Original Special Rate Providers and the Special Rate Agent is incorporated herein by reference to Exhibit 4.28 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.29	Amendment Agreement dated December 3, 2013 made between Southern Kuzbass Coal Company Open Joint Stock Company and the Facility Agent is incorporated herein by reference to Exhibit 4.29 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.30	Amendment and Restatement Agreement dated December 4, 2012 made between OJSHC Yakutugol and the Mandated Lead Arrangers, the Original Lenders, the New Lenders, the Facility Agent, the Security Agent, the Joint & Several Creditor, the Original Special Rate Providers and the Special Rate Agent is incorporated herein by reference to Exhibit 4.30 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.31	Amendment Agreement dated December 3, 2013 made between OJSHC Yakutugol and the Facility Agent is incorporated herein by reference to Exhibit 4.31 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.32	Credit Facility Agreement No. 110100/1400 dated March 12, 2014 between the State Corporation “Bank for Development and Foreign Economic Affairs (Vnesheconombank)” and the Elgaugol OOO (English translation) is incorporated herein by reference to Exhibit 4.32 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.33	Credit Facility Agreement No. 110100/1401 dated March 12, 2014 between the State Corporation “Bank for Development and Foreign Economic Affairs (Vnesheconombank)” and the Elgaugol OOO (English translation) is incorporated herein by reference to Exhibit 4.33 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.34	Amendment Agreement No. 6 dated May 14, 2014 to Facility Agreement No. 2640 dated December 27, 2010 by and between VTB Bank (open joint stock company) and Mechel OAO (English translation) is incorporated herein by reference to Exhibit 4.34 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2013, on Form 20-F.
4.35	Amending Agreement No. 5 dated October 31, 2014 to Non-Revolver Loan Facility Agreement No. 5593 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.35 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2014, on Form 20-F.

<u>Exhibit No.</u>	<u>Description</u>
4.36	Amending Agreement No. 6 dated October 31, 2014 to Non-Revolving Loan Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.36 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2014, on Form 20-F.
4.37	Amending Agreement No. 5 dated October 31, 2014 to Non-Revolving Loan Facility Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.37 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2014, on Form 20-F.
4.38	Amending Agreement No. 5 dated October 31, 2014 to Non-Revolving Loan Facility Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.38 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2014, on Form 20-F.
4.39	Facilities Agreement dated September 15, 2010 made between Chelyabinsk Metallurgical Plant OAO and BNP Paribas S.A. is incorporated herein by reference to Exhibit 4.39 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.40	Deed of Amendment between Chelyabinsk Metallurgical Plant OAO and BNP Paribas S.A. dated March 6, 2012; Deed of Amendment between Chelyabinsk Metallurgical Plant OAO and BNP Paribas S.A. dated June 21, 2013; Deed of Amendment between Chelyabinsk Metallurgical Plant OAO and BNP Paribas S.A. dated June 21, 2013 is incorporated herein by reference to Exhibit 4.40 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.41	Additional Agreement No. 7 dated September 9, 2015 to Credit Agreement No. 2640 dated December 27, 2010 between VTB Bank (Public Joint Stock Company) and Mechel Open Joint Stock Company (English translation) is incorporated herein by reference to Exhibit 4.41 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.42	Amicable Agreement dated December 18, 2015 to Non-Revolving Credit Facility Agreement No. 5593 dated October 9, 2012 and Novation Agreement No. 5593 dated December 5, 2012 between Southern Kuzbass Coal Company OAO and Sberbank PJSC (English translation); Additional Agreement No. 7 dated March 4, 2016 to Non-Revolving Credit Facility Agreement No. 5593 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.42 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.43	Amicable Agreement dated December 18, 2015 to Non-Revolving Credit Facility Agreement No. 5594 dated October 9, 2012 and Novation Agreement No. 5594 dated March 4, 2013 between Southern Kuzbass Coal Company OAO and Sberbank PJSC (English translation); Additional Agreement No. 8 dated March 4, 2016 to Non-Revolving Credit Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.43 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.

<u>Exhibit No.</u>	<u>Description</u>
4.44	Amicable Agreement dated December 18, 2015 to Non-Revolving Credit Facility Agreement No. 8507 dated October 9, 2012 and Novation Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank PJSC (English translation); Additional Agreement No. 6 dated March 4, 2016 to Non-Revolving Credit Facility Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.44 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.45	Amicable Agreement dated December 18, 2015 to Non-Revolving Credit Facility Agreement No. 8508 dated October 9, 2012 and Novation Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank PJSC (English translation); Additional Agreement No. 6 dated March 4, 2016 to Non-Revolving Credit Facility Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass Coal Company OAO and Sberbank of Russia (English translation) is incorporated herein by reference to Exhibit 4.45 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.46	Additional agreement No. 2 dated August 20, 2015 to Credit Facility Agreement No. 226/12-B dated April 27, 2012 between Joint Stock Holding Company Yakutugol and Gazprombank (Joint Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.46 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.47	Additional agreement No. 1 dated December 25, 2015 to Additional Agreement No. 2 to Credit Facility Agreement No. 226/12-B dated April 27, 2012 between Joint Stock Holding Company Yakutugol and Gazprombank (Joint Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.47 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.48	Additional agreement No. 2 dated August 20, 2015 to Credit Facility Agreement No. 227/12-B dated April 27, 2012 between Southern Kuzbass Coal Company Open Joint Stock Company and Gazprombank (Joint Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.48 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.49	Additional agreement No. 1 dated December 24, 2015 to Additional Agreement No. 2 to Credit Facility Agreement No. 227/12-B dated April 27, 2012 between Southern Kuzbass Coal Company Open Joint Stock Company and Gazprombank (Joint Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.49 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.50	Additional agreement No. 1 dated August 28, 2015 to Credit Facility Agreement No. 84/13-B dated April 26, 2013 between Southern Kuzbass Coal Company Open Joint Stock Company and Gazprombank (Joint Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.50 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.

<u>Exhibit No.</u>	<u>Description</u>
4.51	Additional agreement No. 1 dated December 25, 2015 to Additional Agreement No. 1 to Credit Facility Agreement No. 84/13-B dated April 26, 2013 between Southern Kuzbass Coal Company Open Joint Stock Company and Gazprombank (Joint Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.51 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.52	Additional agreement No. 1 dated August 28, 2015 to Credit Facility Agreement No. 85/13-B dated April 26, 2013 between Joint Stock Holding Company Yakutugol and Gazprombank (Joint Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.52 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.53	Additional agreement No. 1 dated December 25, 2015 to Additional Agreement No. 1 to Credit Facility Agreement No. 85/13-B dated April 26, 2013 between Joint Stock Holding Company Yakutugol and Gazprombank (Joint Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.53 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.54	Additional Agreement No. 8 dated March 31, 2016 on amendment of certain terms and conditions of Non-Revolving Credit Facility Agreement No. 5593 dated October 9, 2012 and Additional Agreement No. 7 dated March 4, 2016 to Non-Revolving Credit Facility Agreement No. 5593 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.54 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.55	Additional Agreement No. 9 dated March 31, 2016 on amendment of certain terms and conditions of Non-Revolving Credit Facility Agreement No. 5594 dated October 9, 2012 and Additional Agreement No. 8 dated March 4, 2016 to Non-Revolving Credit Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.55 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.56	Additional Agreement No. 7 dated March 31, 2016 on amendment of certain terms and conditions of Non-Revolving Credit Facility Agreement No. 8507 dated October 9, 2012 and Additional Agreement No. 6 dated March 4, 2016 to Non-Revolving Credit Facility Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.56 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.57	Additional Agreement No. 7 dated March 31, 2016 on amendment of certain terms and conditions of Non-Revolving Credit Facility Agreement No. 8508 dated October 9, 2012 and Additional Agreement No. 6 dated March 4, 2016 to Non-Revolving Credit Facility Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.57 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.58	Amicable Agreement dated April 13, 2016 to Non-Revolving Credit Facility Agreement No. 5593 dated October 9, 2012 and Novation Agreement No. 5593 dated December 5, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.58 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.

<u>Exhibit No.</u>	<u>Description</u>
4.59	Amicable Agreement dated April 13, 2016 to Non-Revolver Credit Facility Agreement No. 5594 dated October 9, 2012 and Novation Agreement No. 5594 dated March 4, 2013 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.59 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.60	Amicable Agreement dated April 13, 2016 to Non-Revolver Credit Facility Agreement No. 8507 dated October 9, 2012 and Novation Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.60 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.61	Amicable Agreement dated April 13, 2016 to Non-Revolver Credit Facility Agreement No. 8508 dated October 9, 2012 and Novation Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.61 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2015, on Form 20-F.
4.62	Supplemental Agreement No. 8 dated December 23, 2016 to Credit Agreement No. 2640 dated December 27, 2010 between VTB Bank (Public Joint Stock Company) and Mechel Public Joint Stock Company (English translation) is incorporated herein by reference to Exhibit 4.62 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.63	Supplemental Agreement No. 11 dated December 9, 2016 to Non-Revolver Credit Facility Agreement No. 5593 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.63 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.64	Supplemental Agreement No. 12 dated December 9, 2016 to Non-Revolver Credit Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.64 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.65	Supplemental Agreement No. 10 dated December 9, 2016 to Non-Revolver Credit Facility Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.65 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.66	Supplemental Agreement No. 10 dated December 9, 2016 to Non-Revolver Credit Facility Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.66 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.67	Supplemental Agreement No. 3 dated June 15, 2016 to Credit Facility Agreement No. 226/12-B dated April 27, 2012 between Joint Stock Holding Company Yakutugol and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.67 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.

<u>Exhibit No.</u>	<u>Description</u>
4.68	Supplemental Agreement No. 4 dated December 28, 2016 to Credit Facility Agreement No. 226/12-B dated April 27, 2012 between Joint Stock Holding Company Yakutugol and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.68 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.69	Supplemental Agreement No. 3 dated June 16, 2016 to Credit Facility Agreement No. 227/12-B dated April 27, 2012 between Southern Kuzbass PAO and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.69 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.70	Supplemental Agreement No. 4 dated December 28, 2016 to Credit Facility Agreement No. 227/12-B dated April 27, 2012 between Southern Kuzbass PAO and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.70 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.71	Supplemental Agreement No. 2 dated June 16, 2016 to Credit Facility Agreement No. 84/13-B dated April 26, 2013 between Southern Kuzbass PAO and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.71 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.72	Supplemental Agreement No. 3 dated December 28, 2016 to Credit Facility Agreement No. 84/13-B dated April 26, 2013 between Southern Kuzbass PAO and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.72 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.73	Supplemental Agreement No. 2 dated June 15, 2016 to Credit Facility Agreement No. 85/13-B dated April 26, 2013 between Joint Stock Holding Company Yakutugol and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.73 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.74	Supplemental Agreement No. 3 dated December 28, 2016 to Credit Facility Agreement No. 85/13-B dated April 26, 2013 between Joint Stock Holding Company Yakutugol and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.74 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.75	Supplemental Agreement No. 5 dated April 6, 2017 to Credit Facility Agreement No. 226/12-B dated April 27, 2012 between Joint Stock Holding Company Yakutugol and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.75 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.76	Supplemental Agreement No. 5 dated April 6, 2017 to Credit Facility Agreement No. 227/12-B dated April 27, 2012 between Southern Kuzbass PAO and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.76 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.

<u>Exhibit No.</u>	<u>Description</u>
4.77	Supplemental Agreement No. 4 dated April 6, 2017 to Credit Facility Agreement No. 84/13-B dated April 26, 2013 between Southern Kuzbass PAO and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.77 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.78	Supplemental Agreement No. 4 dated April 6, 2017 to Credit Facility Agreement No. 85/13-B dated April 26, 2013 between Joint Stock Holding Company Yakutugol and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.78 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.
4.79	Amendment Agreement No. 12 dated October 30, 2017 on Making Amendments to Certain Provisions of Non-revolving Facility Agreement No. 5593 dated October 9, 2012 and of Amendment Agreement No. 7 dated March 4, 2016 to Non-revolving Facility Agreement No. 5593 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.79 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2017, on Form 20-F.
4.80	Amendment Agreement No. 13 dated October 30, 2017 on Making Amendments to Certain Provisions of Non-revolving Facility Agreement No. 5594 dated October 9, 2012 and of Amendment Agreement No. 8 dated March 4, 2016 to Non-revolving Facility Agreement No. 5594 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.80 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2017, on Form 20-F.
4.81	Amendment Agreement No. 11 dated October 30, 2017 on Making Amendments to Certain Provisions of Non-revolving Facility Agreement No. 8507 dated October 9, 2012 and of Amendment Agreement No. 6 dated March 4, 2016 to Non-revolving Facility Agreement No. 8507 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.81 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2017, on Form 20-F.
4.82	Amendment Agreement No. 11 dated October 30, 2017 on Making Amendments to Certain Provisions of Non-revolving Facility Agreement No. 8508 dated October 9, 2012 and of Amendment Agreement No. 6 dated March 4, 2016 to Non-revolving Facility Agreement No. 8508 dated October 9, 2012 between Southern Kuzbass PAO and Sberbank PJSC (English translation) is incorporated herein by reference to Exhibit 4.82 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2017, on Form 20-F.
4.83	Amendment Agreement No. 6 dated February 2, 2018 to Credit Facility Agreement No. 226/12-B dated April 27, 2012 between Yakutugol JSHC and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.83 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2017, on Form 20-F.

<u>Exhibit No.</u>	<u>Description</u>
4.84	Amendment Agreement No. 6 dated February 2, 2018 to Credit Facility Agreement No. 227/12-B dated April 27, 2012 between Southern Kuzbass PAO and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.84 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2017, on Form 20-F.
4.85	Amendment Agreement No. 5 dated February 2, 2018 to Credit Facility Agreement No. 84/13-B dated April 26, 2013 between Southern Kuzbass PAO and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.85 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2017, on Form 20-F.
4.86	Amendment Agreement No. 5 dated February 2, 2018 to Credit Facility Agreement No. 85/13-B dated April 26, 2013 between Yakutugol JSHC and Gazprombank (Joint-Stock Company) (English translation) is incorporated herein by reference to Exhibit 4.86 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2017, on Form 20-F.
4.87	Syndicated Loan Agreement dated July 12, 2018 between Chelyabinsk Metallurgical Plant Public Joint-Stock Company and VTB Bank (public joint-stock company) and VTB Bank (Europe) SE (English translation).
8.1	Key subsidiaries of Mechel.
12.1	Certification by the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
12.2	Certification by the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
13.1	Certification by the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
13.2	Certification by the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following financial information formatted in eXtensible Business Reporting Language (XBRL): (i) Consolidated Statement of Profit (Loss) and Other Comprehensive Income for the years ended December 31, 2018, 2017 and 2016, (ii) Consolidated Statement of Financial Position as of December 31, 2018 and 2017, (iii) Consolidated Statement of Changes in Equity for the years ended December 31, 2018, 2017 and 2016, (iv) Consolidated Statement of Cash Flows for the years ended December 31, 2018, 2017 and 2016, and (v) Notes to the Consolidated Financial Statements.

We hereby agree to furnish to the Securities and Exchange Commission, upon its request, copies of any instruments defining the rights of holders of long-term debt issued by Mechel or any of its consolidated subsidiaries.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

MECHEL PAO

By: /s/ OLEG V. KORZHOV

Name: Oleg V. Korzhov

Title: *Chief Executive Officer*

Date: March 21, 2019



CONSOLIDATED FINANCIAL STATEMENTS

for the year ended December 31, 2018

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
Mechel PAO

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of Mechel PAO, a public joint stock company, and subsidiaries (hereinafter referred to as the “Group”) as of December 31, 2018 and 2017, and the related consolidated statements of profit (loss) and other comprehensive income, changes in equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Group at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Group’s internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 21, 2019 expressed an unqualified opinion thereon.

The Group’s Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Group will continue as a going concern. As discussed in Note 4 to the consolidated financial statements, the Group has significant debt that it does not have the ability to repay without its refinancing or restructuring, has not complied with certain covenants of its major loan agreements with banks and has stated that substantial doubt exists about the Group’s ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 4 to the consolidated financial statements. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Group’s management. Our responsibility is to express an opinion on these financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLC

We have served as the Group’s auditor since 2003.
Moscow, Russia
March 21, 2019

MECHEL PAO
CONSOLIDATED STATEMENT OF PROFIT (LOSS) AND
OTHER COMPREHENSIVE INCOME
for the year ended December 31, 2018
(All amounts are in millions of Russian rubles, unless stated otherwise)

	Notes	Year ended December 31, 2018	Year ended December 31, 2017	Year ended December 31, 2016
Continuing operations				
Revenue from contracts with customers	26	312,574	299,113	276,009
Cost of sales		(177,756)	(160,356)	(146,322)
Gross profit	26	134,818	138,757	129,687
Selling and distribution expenses		(54,988)	(55,686)	(56,233)
Loss on write-off of non-current assets		(859)	(321)	(1,953)
Impairment of goodwill and other non-current assets	18	(7,222)	(6,081)	(5,202)
Allowance for expected credit losses on financial assets ...	13, 15	(940)	(332)	(758)
Taxes other than income taxes		(4,834)	(4,967)	(5,913)
Administrative and other operating expenses	25.1	(17,906)	(15,590)	(18,791)
Other operating income	25.3	1,711	1,387	1,853
Total selling, distribution and operating income and (expenses), net		(85,038)	(81,590)	(86,997)
Operating profit		49,780	57,167	42,690
Finance income	25.4	34,056	633	1,176
Finance costs including fines and penalties on overdue loans and borrowings and finance leases payments	25.5	(42,052)	(47,610)	(54,240)
Foreign exchange gain (loss), net		(25,775)	4,237	25,947
Share of profit (loss) of associates, net	8	10	18	(17)
Other income	25.6	512	1,495	598
Other expenses	25.6	(314)	(220)	(2,003)
Total other income and (expense), net		(33,563)	(41,447)	(28,539)
Profit before tax from continuing operations		16,217	15,720	14,151
Income tax expense	20	(2,681)	(3,150)	(4,893)
Profit for the period from continuing operations		13,536	12,570	9,258
Discontinued operations				
(Loss) profit after tax for the period from discontinued operations, net		—	—	(426)
Profit for the period		13,536	12,570	8,832
Attributable to:				
Equity shareholders of Mechel PAO		12,628	11,557	7,126
Non-controlling interests		908	1,013	1,706

See accompanying notes to the consolidated financial statements.

MECHEL PAO
CONSOLIDATED STATEMENT OF PROFIT (LOSS) AND
OTHER COMPREHENSIVE INCOME (continued)
for the year ended December 31, 2018
(All amounts are in millions of Russian rubles, unless stated otherwise)

	<u>Notes</u>	<u>Year ended December 31, 2018</u>	<u>Year ended December 31, 2017</u>	<u>Year ended December 31, 2016</u>
Other comprehensive income				
<i>Other comprehensive (loss) income that may be reclassified to profit or loss in subsequent periods, net of income tax:</i>		(9)	313	430
Exchange differences on translation of foreign operations . . .		(9)	313	430
<i>Other comprehensive income (loss) not to be reclassified to profit or loss in subsequent periods, net of income tax: . . .</i>		487	145	(23)
Re-measurement of defined benefit plans	22	487	145	(23)
Other comprehensive income for the period, net of tax . . .		478	458	407
Total comprehensive income (loss) for the period, net of tax		14,014	13,028	9,239
Attributable to:				
Equity shareholders of Mechel PAO		13,096	12,012	7,529
Non-controlling interests		918	1,016	1,710
Earnings (loss) per share				
Weighted average number of common shares	24	416,270,745	416,270,745	416,270,745
Basic and diluted, profit for the period attributable to common equity shareholders of Mechel PAO	24	30.34	27.76	17.12
Earnings per share from continuing operations (Russian rubles per share), basic and diluted	24	30.34	27.76	17.99
Loss per share from discontinued operations (Russian rubles per share)	24	—	—	(0.87)

See accompanying notes to the consolidated financial statements.

MECHEL PAO
CONSOLIDATED STATEMENT OF FINANCIAL POSITION
as of December 31, 2018
(All amounts are in millions of Russian rubles)

	Notes	December 31, 2018	December 31, 2017
Assets			
Non-current assets			
Property, plant and equipment	16, 18	189,879	197,875
Mineral licenses	17	32,068	33,240
Goodwill and other intangible assets	17, 18	16,883	19,211
Investments in associates	8	293	283
Deferred tax assets	20	5,488	96
Other non-current assets	14	630	758
Non-current financial assets		244	202
Total non-current assets		245,485	251,665
Current assets			
Inventories	12	43,423	37,990
Income tax receivables		121	107
Trade and other receivables	13	17,612	18,762
Other current assets	14	8,673	7,589
Other current financial assets	11.3	508	562
Cash and cash equivalents	15	1,803	2,452
Total current assets		72,140	67,462
Total assets		317,625	319,127
Equity and liabilities			
Equity			
Common shares	24	4,163	4,163
Preferred shares	24	833	833
Additional paid-in capital	24	24,378	24,378
Accumulated other comprehensive income		1,771	1,303
Accumulated deficit		(274,186)	(283,743)
Equity attributable to equity shareholders of Mechel PAO		(243,041)	(253,066)
Non-controlling interests	6, 7	9,846	8,933
Total equity		(233,195)	(244,133)
Non-current liabilities			
Loans and borrowings	11.1	6,538	17,360
Finance lease liabilities	11.6	2,413	1,878
Other non-current financial liabilities	11.4	44,510	40,916
Other non-current liabilities		120	138
Pension obligations	22	3,819	3,512
Provisions	23	3,719	3,814
Deferred tax liabilities	20	13,506	11,494
Total non-current liabilities		74,625	79,112
Current liabilities			
Loans and borrowings, including interest payable, fines and penalties on overdue amounts of RUB 9,877 million and RUB 41,992 million as of December 31, 2018 and 2017, respectively	11.1	412,294	422,533
Trade and other payables	19	34,800	33,469
Finance lease liabilities	11.6	5,880	7,476
Income tax payable		6,425	4,578
Taxes and similar charges payable other than income tax	21	6,106	6,696
Advances received		5,028	4,385
Other current financial liabilities	11.5	—	734
Other current liabilities		68	69
Pension obligations	22	772	849
Provisions	23	4,822	3,359
Total current liabilities		476,195	484,148
Total liabilities		550,820	563,260
Total equity and liabilities		317,625	319,127

See accompanying notes to the consolidated financial statements.

MECHEL PAO

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
for the year ended December 31, 2018

(All amounts are in millions of Russian rubles, unless shares numbers)

Attributable to equity shareholders of the parent										
Notes	Common shares		Preferred shares		Additional paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Equity attributable to shareholders of Mechel PAO	Non-controlling interests	Total equity
	Shares Quantity	Amount	Shares Quantity	Amount						
As of January 1, 2016	416,270,745	4,163	83,254,149	833	28,322	445	(301,565)	(267,802)	5,948	(261,854)
Profit for the period	—	—	—	—	—	—	7,126	7,126	1,706	8,832
Other comprehensive income (loss)										
Re-measurement losses on defined benefit plans	22	—	—	—	—	(23)	—	(23)	—	(23)
Exchange differences on translation of foreign operations		—	—	—	—	426	—	426	4	430
Total comprehensive income for the period		—	—	—	—	403	7,126	7,529	1,710	9,239
Reversal of unclaimed declared dividends to non-controlling interest upon expiration of limitation period		—	—	—	—	—	—	—	35	35
Dividends declared to equity shareholders of Mechel PAO	24	—	—	—	—	—	(5)	(5)	—	(5)
Dividends declared to non-controlling interests	24	—	—	—	—	—	—	—	(3)	(3)
Acquisition of non-controlling interests	6, 24	—	—	—	4	—	—	4	(4)	—
As of December 31, 2016		416,270,745	4,163	83,254,149	833	848	(294,444)	(260,274)	7,686	(252,588)

See accompanying notes to the consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (continued)
for the year ended December 31, 2018
(All amounts are in millions of Russian rubles, unless shares numbers)

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See accompanying notes to the consolidated financial statements.

MECHEL PAO

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (continued)
for the year ended December 31, 2018

(All amounts are in millions of Russian rubles, unless shares numbers)

	Notes	Attributable to equity shareholders of the parent						Non-controlling interests	Total equity
		Common shares		Preferred shares		Additional paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Equity attributable to shareholders of Mechel PAO
		Shares Quantity	Amount	Shares Quantity	Amount				
As of January 1, 2018		416,270,745	4,163	83,254,149	833	24,378	1,303	(283,743)	(253,066)
Adjustment on initial application of IFRS 9	3	—	—	—	—	—	—	(1,684)	(1,689)
As of January 1, 2018 adjusted for the effect of IFRS 9		416,270,745	4,163	83,254,149	833	24,378	1,303	(285,427)	(254,750)
Profit for the period		—	—	—	—	—	—	12,628	12,628
Other comprehensive income (loss)								908	13,536
Re-measurement losses on defined benefit plans	22	—	—	—	—	—	487	—	487
Exchange differences on translation of foreign operations		—	—	—	—	—	(19)	—	(9)
Total comprehensive income for the period		—	—	—	—	—	468	12,628	13,096
Dividends declared to equity shareholders of Mechel PAO	24	—	—	—	—	—	—	(1,387)	(1,387)
As of December 31, 2018 ...		416,270,745	4,163	83,254,149	833	24,378	1,771	(274,186)	(243,041)
								9,846	(233,195)

See accompanying notes to the consolidated financial statements.

MECHEL PAO
CONSOLIDATED STATEMENT OF CASH FLOWS
for the year ended December 31, 2018
(All amounts are in millions of Russian rubles)

	Notes	Year ended December 31,		
		2018	2017	2016
Cash flows from operating activities				
Profit for the period		13,536	12,570	8,832
Less loss after tax for the period from discontinued operations, net		—	—	426
Profit for the period from continuing operations		13,536	12,570	9,258
<i>Adjustments to reconcile profit from continuing operations to net cash provided by operating activities:</i>				
Depreciation of property, plant and equipment		12,454	12,555	11,813
Amortisation of mineral licenses and other intangible assets		1,405	1,672	1,901
Foreign exchange (gain) loss, net		25,775	(4,237)	(25,947)
Deferred income tax (benefit) expense	20	(2,596)	(3,401)	5,104
Allowance for expected credit losses on financial assets	13, 15	940	332	758
Write-off of trade and other receivables	25.1	2	109	113
Write-off of inventories to net realisable value	12	1,162	470	364
Revision in estimated cash flows of rehabilitation provision	25.3	(38)	—	(375)
Loss on write-off of non-current assets		859	321	1,953
Impairment of goodwill and other non-current assets	18	7,222	6,081	5,202
Net result from disposal of non-current assets	25.1, 25.3	(128)	21	57
Gain on sale of investments	25.6	—	(2)	(186)
Gain on restructuring and forgiveness of trade and other payables and write-off of trade and other payables with expired legal term	25.6	(425)	(963)	(115)
Effect of pension obligations	22	548	(33)	(171)
Finance income	25.4	(34,056)	(633)	(1,176)
Finance costs including fines and penalties on overdue loans and borrowings and finance leases payments	25.5	42,052	47,610	54,240
VEB commissions write-off	25.6	—	—	1,411
Gain on royalty and other proceeds associated with disposal of Bluestone	25.6	(3)	(474)	(121)
Provisions for legal claims, taxes and other provisions		4,940	4,222	1,246
Provision for non-recoverable advances to pension funds	25.6	—	—	408
Other		68	281	51
<i>Changes in working capital items:</i>				
Trade and other receivables		1,354	(318)	(5,542)
Inventories		(7,858)	(4,508)	(1,070)
Trade and other payables		4,150	(3,435)	(4,259)
Advances received		485	625	588
Taxes payable and other liabilities		683	(158)	1,122
Other current assets		(851)	(895)	(883)
Income tax paid		(3,562)	(4,530)	(2,101)
Net operating cash flows from discontinued operations		—	—	(436)
Net cash provided by operating activities		68,118	63,282	53,207

MECHEL PAO
CONSOLIDATED STATEMENT OF CASH FLOWS (continued)
for the year ended December 31, 2018
(All amounts are in millions of Russian rubles)

		Year ended December 31,		
	Notes	2018	2017	2016
Cash flows from investing activities				
Loans issued and other investments		—	(525)	(133)
Interest received		188	165	128
Royalty and other proceeds associated with disposal of Bluestone		3	474	103
Proceeds from disposal of subsidiaries, net of cash disposed		—	94	145
Purchases of available for sale securities		—	—	(4)
Proceeds from loans issued and other investments		9	144	31
Proceeds from disposals of property, plant and equipment		215	328	285
Purchases of property, plant and equipment		(5,472)	(6,460)	(4,742)
Purchases of intangible assets	17	(150)	(771)	—
Interest paid, capitalized		(440)	(587)	(782)
Net cash used in investing activities		(5,647)	(7,138)	(4,969)
Cash flows from financing activities				
Proceeds from loans and borrowings, including proceeds from factoring arrangement of RUB 918 million, RUB 272 million and nil for the periods ended December 31, 2018, 2017 and 2016, respectively		76,504	23,200	4,002
Repayment of loans and borrowings, including payments from factoring arrangement of RUB 435 million, RUB 1,123 million and RUB 2,625 million for the periods ended December 31, 2018, 2017 and 2016, respectively		(97,269)	(35,033)	(42,322)
Repayment of other current financial liabilities	11.5	(442)	—	—
Dividends paid to shareholders of Mechel PAO		(1,386)	(856)	(5)
Dividends paid to non-controlling interest		(8)	(122)	(2)
Interest paid, including fines and penalties		(33,308)	(31,948)	(33,872)
Acquisition of non-controlling interests in subsidiaries		—	(3,358)	—
Proceeds from sales of 49% stakes in Elga coal complex, with put-option granted	6	—	—	34,300
Repayment of obligations under finance lease		(2,780)	(3,513)	(3,238)
Deferred payments for acquisition of assets		(629)	(455)	—
Deferred consideration paid for the acquisition of subsidiaries in prior periods		(3,968)	(3,652)	(4,732)
Net cash used in financing activities		(63,286)	(55,737)	(45,869)
Foreign exchange loss (gain) on cash and cash equivalents, net		63	(637)	(1,807)
Allowance for expected credit losses on cash and cash equivalents	15	(91)	—	—
Net (decrease) increase in cash and cash equivalents		(843)	(230)	562
Cash and cash equivalents at beginning of period	15	2,452	1,689	3,079
Cash and cash equivalents, net of overdrafts at beginning of period	15	1,223	1,453	891
Cash and cash equivalents at end of period	15	1,803	2,452	1,689
Cash and cash equivalents, net of overdrafts at end of period	15	380	1,223	1,453

MECHEL PAO

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS for the year ended December 31, 2018

(All amounts are in millions of Russian rubles, unless stated otherwise)

1. Corporate information

(a) Information

Mechel PAO (“Mechel”, formerly — Mechel OAO and Mechel Steel Group OAO) was incorporated on March 19, 2003, under the laws of the Russian Federation in connection with a reorganization to serve as a holding company for various steel and mining companies owned by two individual shareholders (the “Controlling Shareholders”). During 2006, one of the Controlling Shareholders sold all his Mechel’s stock to the other Controlling Shareholder, Igor V. Zyuzin. Igor V. Zyuzin with his family members is the ultimate controlling party. In accordance with the changes in the Civil Code of the Russian Federation Mechel has registered changes in its Charter on March 17, 2016 and changed its name from Mechel OAO to Mechel PAO. The registered office is located at Krasnoarmeyskaya St. 1, Moscow, 125167, Russian Federation. Mechel and its subsidiaries are collectively referred to herein as the “Group”. Set forth below is a summary of the Group’s primary subsidiaries:

Name of subsidiary	Registered in	Core business	Date control acquired / date of incorporation (*)	Interest in voting stock held by the Group at December 31, 2018
Southern Kuzbass Coal Company (SKCC)	Russia	Coal mining	January 1999	99.1%
Chelyabinsk Metallurgical Plant (CMP)	Russia	Steel products	December 2001	94.2%
Vyartsilya Metal Products Plant (VMPP)	Russia	Steel products	May 2002	93.3%
Beloretsk Metallurgical Plant (BMP)	Russia	Steel products	June 2002	94.8%
Urals Stampings Plant (USP)	Russia	Steel products	April 2003	93.8%
Korshunov Mining Plant (KMP)	Russia	Iron ore mining	October 2003	90.0%
Mechel Nemunas (MN)	Lithuania	Steel products	October 2003	100.0%
Mechel Energo	Russia	Power generation and sale	February 2004	100.0%
Port Posiet	Russia	Transshipment	February 2004	97.8%
Izhstal	Russia	Steel products	May 2004	90.0%
Port Kambarka	Russia	Transshipment	April 2005	90.4%
Mechel Service	Russia	Trading	May 2005	100.0%
Mechel Coke	Russia	Coke production	June 2006	100.0%
Moscow Coke and Gas Plant (Moskoks)	Russia	Coke production	October 2006	99.5%
Southern Kuzbass Power Plant (SKPP)	Russia	Power generation	April 2007	98.3%
Kuzbass Power Sales Company (KPSC)	Russia	Electricity distribution	June 2007	72.1%
Bratsk Ferroalloy Plant (BFP)	Russia	Ferrosilicon production	August 2007	100.0%
Yakutugol	Russia	Coal mining	October 2007	100.0%
Port Temryuk	Russia	Transshipment	March 2008	100.0%
Mechel Carbon AG	Switzerland	Trading	April 2008	100.0%

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Name of subsidiary	Registered in	Core business	Date control acquired / date of incorporation (*)	Interest in voting stock held by the Group at December 31, 2018
HBL Holding GmbH (HBL)	Germany	Trading	September 2008	100.0%
Mechel Service Stahlhandel Austria GmbH and its subsidiaries	Austria	Trading	September 2012	100.0%
Elgaugol	Russia	Coal mining	August 2013	51.0%**
Elga-road	Russia	Railroad transportation	January 2016	51.0%**

* Date, when a control interest was acquired or a new company established.

** In 2016, the Group sold 49% stakes in Elgaugol and Elga-road to Gazprombank. Simultaneously with this transaction, the Group granted to Gazprombank a put option to sell 49% stakes in these companies to the Group. The transaction in fact represents a financial liability, and these entities are consolidated based on 100% ownership (Notes 6 and 11.4).

(b) Business

The Group operates in three business segments: steel (comprising steel and steel products), mining (comprising coal, iron ore and coke) and power (comprising electricity (generation and transportation) and heat power generation), and conducts operations in Russia, the CIS countries, Europe and Asia Pacific. The Group sells its products within Russia and foreign markets. Through acquisitions, the Group has added various businesses to explore new opportunities and build an integrated Group of steel, mining, ferroalloy and power companies. The Group operates in a highly competitive and cyclical industry; any local or global downturn in the industries may have an adverse effect on the Group's results of operations and financial condition. While the Group will utilize funds from operations, it expects to continue to rely on operating cash flow and long term debt to finance major investment projects, focus on restructuring of the loan portfolio and other financing sources for its capital needs. As discussed in Notes 4 and 5, management believes that the Group will secure adequate financing.

(c) Authorisation for issuance

These consolidated financial statements as of December 31, 2018 and for the year then ended were authorised for issuance on March 21, 2019.

2. Basis of preparation of the consolidated financial statements

(a) Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

The consolidated financial statements have been prepared on a historical cost basis, except for specific financial assets and liabilities that have been measured at fair value.

Russian associates and subsidiaries of the Group maintain their books and records in Russian rubles and prepare accounting reports in accordance with the accounting principles and practices mandated by Russian

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Accounting Standards (RAS). Foreign subsidiaries and associates maintain their books and records in different foreign functional currencies and prepare accounting reports in accordance with generally accepted accounting principles (GAAP) in various jurisdictions. The financial statements and accounting reports for the Group and its subsidiaries and associates for the purposes of preparation of the consolidated financial statements in accordance with IFRS have been translated and adjusted on the basis of the respective standalone RAS or other GAAP financial statements.

The accompanying consolidated financial statements differ from the financial statements issued for the RAS and other GAAP purposes in that they reflect certain adjustments, not recorded in the statutory books, which are appropriate to present the financial position, results of operations and cash flows in accordance with IFRS. The principal adjustments relate to: (1) purchase accounting; (2) recognition of interest expense and certain operating expenses; (3) valuation and depreciation of property, plant and equipment and mineral licenses; (4) defined benefit plans and other long-term benefits; (5) foreign currency translation; (6) deferred income taxes; (7) accounting for tax penalties, uncertainties and contingencies; (8) revenue recognition; (9) valuation allowances for unrecoverable assets; (10) accounting for financial instruments; (11) finance leases and (12) recording investments at fair value.

The consolidated financial statements of the Group comply with the Russian Federal Law No. 208 *On Consolidated Financial Statements* (Law “208-FZ”), which was adopted on July 27, 2010. The Law 208-FZ provides the legal basis for certain entities to prepare the financial statements in accordance with IFRS as issued by the IASB and subsequently endorsed for use in the Russian Federation. As of December 31, 2018, all currently effective standards and interpretations issued by the IASB have been endorsed for use in Russia. The consolidated financial statements are presented in millions of Russian rubles, except when otherwise indicated.

(b) Basis of consolidation

The consolidated financial statements comprise the financial statements of the Group and its subsidiaries for the year ended December 31, 2018. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Group has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee);
- Exposure, or rights, to variable returns from its involvement with the investee;
- The ability to use its power over the investee to affect its returns.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with the Group’s accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

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A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises the related assets (including goodwill), liabilities, non-controlling interest and other components of equity, while any resultant gain or loss is recognised in the consolidated statement of profit (loss) and other comprehensive income. Any investment retained is recognised at fair value.

3. Summary of significant accounting policies

(a) Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred and included in administrative expenses.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as of the acquisition date.

Any contingent consideration to be transferred by the acquirer will be recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument and within the scope of IFRS 9 *Financial Instruments* ("IFRS 9"), is measured at fair value with the changes in fair value recognised in the consolidated statement of profit (loss) and other comprehensive income.

Goodwill is initially measured at cost (being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests) and any previous interest held over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in the consolidated statement of profit (loss) and other comprehensive income.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill has been allocated to a cash-generating unit (CGU) and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the cash-generating unit retained.

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(b) Investments in associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

The considerations made in determining significant influence are similar to those necessary to determine control over subsidiaries.

The Group's investments in its associate are accounted for using the equity method.

Under the equity method, the investment in an associate is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate since the acquisition date. Goodwill relating to the associate is included in the carrying amount of the investment and is not tested for impairment separately.

The consolidated statement of profit (loss) and other comprehensive income reflects the Group's share of the results of operations of the associate. Any change in OCI of those investees is presented as part of the Group's OCI movements. In addition, when there has been a change recognised directly in the equity of the associate, the Group recognises its share of any changes, when applicable, in the statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and the associate are eliminated to the extent of the interest in the associate.

The aggregate of the Group's share of profit or loss of an associate is shown on the face of the consolidated statement of profit (loss) and other comprehensive income outside operating profit and represents profit or loss after tax and non-controlling interests in the subsidiaries of the associate.

The financial statements of the associate are prepared for the same reporting period as the Group. When necessary, adjustments are made to bring the accounting policies in line with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognise an impairment loss on its investment in its associate. At each reporting date, the Group determines whether there is objective evidence that the investment in the associate is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the investment in associate and its carrying value, and then recognises the loss as 'Share of profit (loss) of associates' in the consolidated statement of profit (loss) and other comprehensive income.

Upon loss of significant influence over the associate, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate upon loss of significant influence and the fair value of the retained investment and proceeds from disposal is recognised in the consolidated statement of profit (loss) and other comprehensive income.

(c) Current versus non-current classification

The Group presents assets and liabilities in the consolidated statement of financial position based on current/non-current classification. An asset is current when it is:

- Expected to be realised or intended to be sold or consumed in the normal operating cycle;

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- Held primarily for the purpose of trading;
- Expected to be realised within twelve months after the reporting period; or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in the normal operating cycle;
- It is held primarily for the purpose of trading;
- It is due to be settled within twelve months after the reporting period; or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period.

The Group classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

(d) Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability; or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the consolidated financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 — quoted (unadjusted) market prices in active markets for identical assets or liabilities;
- Level 2 — valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable;

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- Level 3 — valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognised in the consolidated financial statements at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

(e) Revenue from contracts with customers

Revenue from contracts with customers is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

Revenue from contracts with customers is inflows from sales of goods that constitute ongoing major operations of the Group and is reported as such in the consolidated statement of profit (loss) and other comprehensive income. Inflows from incidental and peripheral operations, net of related costs, are considered gains and are included in other operating income and other income in the consolidated statement of profit (loss) and other comprehensive income.

The following criteria are also applicable to other specific revenue transactions from contracts with customers:

Sales of goods and rendering services

Revenue from the sale of goods and rendering services is recognised when (or as) the Group satisfies a performance obligation by transferring promised goods and services to a customer. An asset is transferred when (or as) the customer obtains control of the asset. The Group is engaged into contracts for sales of goods which include transportation and freight services. In these contracts the Group accounts for two separate performance obligations: the obligation to provide goods to the customer and the obligation to arrange the delivery (transportation, freight) of goods to the customer. Revenue is recognised at a point of time when control over the goods passes to the customer (at the loading port, place or after delivery to the first carrier). Revenue related to freight and transportation component is recognised over time as the service is rendered. Revenue from the sale of goods and rendering services is measured at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services, net of returns and allowances, trade discounts, associated sales taxes (VAT) and export duties.

Certain contracts are provisionally priced so that price is not settled until the final price based on the market price for the relevant period is determined. Revenue from these transactions is initially recognised based on related coal market indices. An adjustment to the final price on provisionally priced contracts is recorded in revenue.

Sales of power

In the Power segment (Note 26), revenue is recognised based on unit of power measure (kilowatts) delivered to customers, since at that point revenue recognition criteria are met. The billings are usually done on a monthly basis, several days after each month end.

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Variable consideration

If the consideration in a contract includes a variable amount, the Group estimates the amount of consideration to which it will be entitled in exchange for transferring the goods to the customer.

Some contracts with customers provide a right of return, trade discounts or volume rebates. IFRS 15 *Revenue from Contracts with customers* (“IFRS 15”) requires the estimated variable consideration to be constrained to prevent over-recognition of revenue. The application of the constraint does not result in more revenue being deferred than under previous IFRS.

Significant financing component

The Group decided to use the practical expedient provided in IFRS 15, which allows not to adjust the promised amount of consideration for the effects of a significant financing component in the contracts where the Group expects, at contract inception, that the period between the Group’s transfer of a promised good or service to a customer and when the customer pays for that good or service will be one year or less.

Warranty obligations

The Group provides warranties to its customers under the Russian Federation Law requirements. These warranties represent assurance type warranties and do not require to provide any additional service to the Group’s customers. This type of warranties is accounted for under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* (“IAS 37”), consistent with its current practice.

Trade receivables

A receivable represents the Group’s right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due). Refer to accounting policies of financial assets in Note 3 (n).

The disclosure of significant accounting judgements relating to revenue from contracts with customers is provided in Note 3 (u).

(f) Taxes

Current income tax

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date in the countries where the Group operates and generates taxable income.

Uncertain tax positions

The Group’s policy is to comply fully with the applicable tax regulations in the jurisdictions in which its operations are subject to income taxes. The Group’s estimates of current income tax expense and liabilities are calculated assuming that all tax computations filed by the Group’s subsidiaries will be subject to a review or

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audit by the relevant tax authorities. The Group and the relevant tax authorities may have different interpretations of how regulations should be applied to actual transactions. Such uncertain tax positions are accounted for in accordance with IAS 12 *Income Taxes* ("IAS 12") and IAS 37. The Group applies single most likely outcome method of uncertain tax positions estimation.

Deferred tax

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:

- When the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside profit or loss is recognised in correlation to the underlying transaction either in OCI or directly in equity.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

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Tax benefits acquired as part of a business combination, but not satisfying the criteria for separate recognition at that date, are recognised subsequently if new information about facts and circumstances change. The adjustment is either treated as a reduction in goodwill (as long as it does not exceed goodwill) if it was incurred during the measurement period or recognised in profit or loss.

(g) Foreign currencies

The Group's consolidated financial statements are presented in Russian rubles to comply with the Law 208-FZ. Russian ruble is also the parent company's functional currency.

For each entity, the Group determines the functional currency and items included in the financial statements of each entity are measured using that functional currency. The functional currencies of the main Russian and European subsidiaries of the Group are the Russian ruble and euro, respectively. The U.S. dollar is the functional currency of other main international operations of the Group. The Group uses the direct method of consolidation and on disposal of a foreign operation; the gain or loss that is reclassified to profit or loss reflects the amount that arises from using this method.

(i) Transactions and balances

Transactions in foreign currencies are initially recorded by the Group's entities at their respective functional currency exchange rates at the date the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at the exchange rates as of the reporting date. Differences arising on settlement or translation of monetary items are recognised in profit or loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined.

The following table presents the exchange rates for the functional and operating currencies at various subsidiaries, other than the presentation currency:

Currency	Exchange rates* at			Average exchange rates* for the year ended		
	December 31, 2018	December 31, 2017	December 31, 2016	December 31, 2018	December 31, 2017	December 31, 2016
U.S. dollar	69.47	57.60	60.66	62.71	58.35	67.03
Euro	79.46	68.87	63.81	73.95	65.90	74.23

() Exchange rates shown in Russian rubles for one currency unit.*

The majority of the balances and operations not already denominated in the presentation currency were denominated in the U.S. dollar and euro. The Russian ruble is not a convertible currency outside the territory of Russia. Official exchange rates are determined daily by the Central Bank of the Russian Federation ("CBR") and are generally considered to be a reasonable approximation of market rates.

(ii) Group companies

On consolidation, the assets and liabilities of foreign operations are translated into rubles at the rate of exchange prevailing at the reporting date and their statements of profit (loss) and other comprehensive income

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are translated at the average exchange rate for the period. The exchange differences arising on translation for consolidation are recognised in OCI. On disposal of a foreign operation, the component of OCI relating to that particular foreign operation is recognised in profit or loss.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition are treated as assets and liabilities of the foreign operation and translated at the exchange rate as of the reporting date.

(h) Non-current assets held for sale and discontinued operations

The Group classifies non-current assets (or disposal group) as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. Such non-current assets (or disposal group) classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

The criteria for held for sale classification is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (or disposal groups). For the sale to be highly probable, the appropriate level of management must be committed to a plan to sell the asset (or disposal group), and an active program to locate a buyer and complete the plan must have been initiated.

Property, plant and equipment and intangible assets are not depreciated or amortised once classified as held for sale. Assets and liabilities classified as held for sale are presented separately as current items in the consolidated statement of financial position.

A disposal group qualifies as discontinued operation if it is a component of an entity that either has been disposed of, or is classified as held for sale, and:

- Represents a separate major line of business or geographical area of operations;
- Is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations; or
- Is a subsidiary acquired exclusively with a view to resale.

Discontinued operations are excluded from the results of continuing operations and are presented as a single amount as profit or loss after tax from discontinued operations in the consolidated statement of profit (loss) and other comprehensive income.

(i) Mineral licenses

The Group's mining segment production activities are located within Russia. The Group's mineral reserves and deposits are situated on the land belonging to government and regional authorities. Mining minerals requires a subsoil license from the state authorities with respect to identified mineral deposits. The Group obtains licenses from such authorities and pays certain taxes to explore and produce from these deposits. These licenses expire up to 2037, with the most significant licenses expiring between 2020 and 2033, and management believes that they may be extended at the initiative of the Group without substantial cost as it happened in the past. Management intends to extend such licenses for deposits expected to remain productive subsequent to their license expiry dates.

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Mineral licenses acquired separately are measured on initial recognition at cost. The cost of mineral licenses acquired in a business combination is their fair value at the date of acquisition. Mineral licenses are amortised under a unit of production basis over proved and probable reserves of the relevant area.

In order to calculate proved and probable reserves, estimates and assumptions are used about a range of geological, technical and economic factors, including but not limited to quantities, grades, production techniques, recovery rates, production costs, transport costs, commodity demand, commodity prices and exchange rates. There are numerous uncertainties inherent in estimating proved and probable reserves, and assumptions that are valid at the time of estimation may change significantly when new information becomes available.

The Group established a policy according to which internal mining engineers review proved and probable reserves annually. This policy does not change the Group's approach to the measurement of proved and probable reserves as of their acquisition dates as part of business combinations that involve independent mining engineers. The Group's proved and probable reserve estimates as of the reporting date were made by internal mining engineers and the majority of the assumptions underlying these estimates had been previously reviewed and verified by independent mining engineers.

The carrying values of the mineral licenses were reduced proportionate to the depletion of the respective mineral reserves at each deposit related to mining and production of reserves adjusted for the reserves re-measurement and purchase accounting effects. Reduction in carrying values of the mineral licenses is included in the depletion charge for the period within the Cost of sales in the consolidated statement of profit (loss) and other comprehensive income. No residual value is assumed in the mineral license valuation.

(j) Property, plant and equipment

Property, plant and equipment and construction in progress are stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. The initial cost of an asset comprises its purchase price or construction cost, any costs directly attributable to bringing the asset into operation, the initial estimate of the rehabilitation provision, and, for qualifying assets (where relevant), borrowing costs and other costs incurred in connection with the borrowings. The purchase price or construction cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset.

When significant parts of property, plant and equipment are required to be replaced at intervals, the Group depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the property, plant and equipment as a replacement if the recognition criteria are satisfied. Where a separately depreciated asset, or part of an asset, is replaced, the expenditure is capitalised. Where part of the asset was not separately considered as a component and therefore not depreciated separately, the replacement value adjusted for prices inflation is used to estimate the carrying amount of the replaced asset(s) which is immediately written off. All other repair and maintenance costs are recognised in the consolidated statement of profit (loss) and other comprehensive income as incurred.

The capitalised value of a finance lease is also included in property, plant and equipment. The present value of the expected cost for the rehabilitation of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

Inventories planned to be used for construction and spare parts with useful lives over one year are recorded within property, plant and equipment.

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Mining assets and processing plant and equipment

Mining assets and processing plant and equipment are those assets, including construction in progress, which are intended to be used only for the needs of a certain mine or field, and upon full extraction exhausting of the reserves of such mine or the field, these assets cannot be further used for any other purpose without a capital reconstruction.

Items of production mines are stated at cost, less accumulated depreciation and accumulated impairment losses, if any.

Costs of developing new underground mines are capitalized. Underground development costs, which are costs incurred to make the mineral physically accessible, include costs to prepare property for shafts, driving main entries for ventilation, haulage, personnel, construction of airshafts, roof protection and other facilities. Additionally, interest expense subject to allocation to the cost of developing mining properties and to constructing new facilities is capitalized until assets are ready for their intended use.

Exploration and evaluation activity involves the search for mineral resources, the determination of technical feasibility and the assessment of commercial viability of identified proved and probable reserves. Once the legal right to explore has been acquired, exploration and evaluation expenditure is charged to profit or loss as incurred, unless the Group concludes that a future economic benefit is more likely than not to be realized.

As part of its surface mining operations, the Group incurs stripping costs both during the development phase and production phase of its operations. Stripping costs incurred in the development phase of a mine, before the production phase commences, are capitalized as part of cost of constructing the mine. In general case, the capitalization of development stripping costs ceases when the mine is commissioned and ready for use as intended by management. Stripping costs undertaken during the production phase of mine are charged to profit and loss as cost of sales as incurred.

In some cases, the further development of a mine may require stripping operations, equivalent by scale to those that were incurred in the development phase of a mine. In such cases, production stripping costs are capitalized similarly to the capitalization of costs during the development phase of a mine.

Stripping costs incurred in the production phase are capitalized, if all of the following criteria according to *IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine* are satisfied:

- (a) it is probable that the future economic benefit associated with the stripping activity will flow to the entity;
- (b) the entity can identify the component of the ore body for which access has been improved;
- (c) the costs relating to the stripping activity associated with that component can be measured reliably.

When mining assets and processing plant and equipment are placed in production, the applicable capitalized costs, including mine development costs, are depleted using the unit-of-production method at the ratio of tonnes of mineral mined or processed to the estimated proved and probable mineral reserves that are expected to be mined during the estimated lives of the mines. Capitalized production stripping costs are also depleted using the unit-of-production method on a basis consistent with the mine production and reserves to which they relate. The unit-of-production method is used for the underground mine development structure costs as their useful lives coincide with the estimated lives of mines, provided that all repairs and maintenance are timely carried out.

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A decision to abandon, reduce or expand activity on a specific mine is based upon many factors, including general and specific assessments of mineral reserves, anticipated future mineral prices, anticipated costs of developing and operating a producing mine, the expiration date of mineral licenses, and the likelihood that the Group will continue exploration on the mine. Based on the results at the conclusion of each phase of an exploration program, properties that are not economically feasible for production are re-evaluated to determine if future exploration is warranted and that carrying values are appropriate. The ultimate recovery of these costs depends on the discovery and development of economic ore reserves or the sale of the companies owning such mineral rights.

Other property, plant and equipment

Capitalized production costs for internally developed assets include material, direct labor costs, and allocated material and manufacturing direct overhead costs. When construction activities are performed over an extended period, borrowing costs incurred in connection with the borrowing of funds are capitalized. Construction-in-progress and equipment held for installation are not depreciated until the constructed or installed asset is substantially ready for its intended use.

Property, plant and equipment are depreciated using the straight-line method, apart from railway of the Elga coal deposit which is depreciated using the units of production method as discussed in (u) Significant accounting judgements, estimates and assumptions). Upon sale or retirement, the acquisition or production cost and related accumulated depreciation are removed from the consolidated statement of financial position and any gain or loss is included in the consolidated statement of profit (loss) and other comprehensive income.

The following useful lives are used as a basis for calculating depreciation:

<u>Category of asset</u>	<u>Useful economic lives estimates, years</u>
Buildings and constructions	5-85
Operating machinery and equipment	2-30
Transportation vehicles	2-25
Other equipment	2-15

(k) Leases

The determination of whether an arrangement is (or contains) a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Group is classified as a finance lease.

Finance leases are capitalised at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognised in finance costs in the consolidated statement of profit (loss) and other comprehensive income.

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A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

An operating lease is a lease other than a finance lease. Operating lease payments are recognised as an operating expense in the consolidated statement of profit (loss) and other comprehensive income on a straight-line basis over the lease term.

(l) Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale (a qualifying asset) are capitalised as part of the cost of the respective asset. Borrowing costs consist of interest including exchange differences arising from foreign currency borrowings and other costs that an entity incurs in connection with the borrowing of funds.

Where funds are borrowed specifically to finance a project, the amount capitalised represents the actual borrowing costs incurred. Where the funds used to finance a project form part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Group during the period.

According to IAS 23 *Borrowing Costs* ("IAS 23"), borrowing costs may include exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs. Foreign exchange differences on borrowings directly attributable to the acquisition, construction or production of a qualifying asset are considered by the Group to be eligible for capitalization in the amount of difference between actual amount of interest costs and potential amount of interest costs calculated using a weighted average of rates applicable to ruble-nominated borrowings of the Group during the period. All other borrowing costs are recognised in the consolidated statement of profit (loss) and other comprehensive income in the period in which they are incurred.

(m) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses.

Intangible assets with determinable useful lives are amortised using the straight-line method over their estimated period of benefit, ranging from two to twenty five years.

(n) Financial instruments — initial recognition and subsequent measurement

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(i) Financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

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The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15 (Note 3 (e)).

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in three categories:

- Financial assets at amortised cost;
- Financial assets at fair value through OCI;
- Financial assets at fair value through profit or loss.

Financial assets at amortised cost

This category of financial assets is the most relevant to the Group. The Group measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial 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 SPPI on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest rate (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

This category generally applies to trade and other receivables excluding trade receivables on provisionally priced contracts.

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Financial assets at fair value through OCI

The Group measures financial assets at fair value through OCI if both of the following conditions are met:

- The financial asset is held within a business model with the objective of both holding to collect contractual cash flows and selling; 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.

For financial assets at fair value through OCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the consolidated statement of profit (loss) and other comprehensive income and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in OCI. Upon derecognition of financial assets represented by debt instruments at fair value through OCI the cumulative fair value change recognised in OCI is recycled to profit or loss in opposite to equity instruments at fair value through OCI with the cumulative fair value change remained in OCI.

The Group has no instruments measured at fair value through OCI.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading, financial assets designated upon initial recognition at fair value through profit or loss, or financial assets mandatorily required to be measured at fair value. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at fair value through profit or loss, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortised cost or at fair value through OCI, as described above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Trade receivables on provisionally priced contracts are measured at fair value through profit or loss. Trade receivables on provisionally priced contracts are remeasured at each reporting date based on the market price for the relevant period.

Financial assets at fair value through profit or loss are carried in the consolidated statement of financial position at fair value with net changes in fair value recognised in the consolidated statement of profit (loss) and other comprehensive income.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

- The rights to receive cash flows from the asset have expired; or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through"

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arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Allowance for expected credit losses of financial assets

Further disclosures relating to impairment of financial assets are also provided in the following notes:

- Financial assets — Note 11.
- Trade and other receivables — Note 13.

Allowance for expected credit losses is recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, expected credit losses are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month expected credit losses). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime expected credit losses).

For purposes of measuring probability of default, the Group defines default as a situation when the exposure meets one or more of the following criteria:

- the customer is more than 90 days past due on its contractual payments;
- international rating agencies have classified the customer in the default rating class;
- the customer meets the unlikelihood-to-pay criteria listed below:
 - the customer is insolvent;
 - the customer is in breach of financial covenants; and
 - it is becoming likely that the customer will enter bankruptcy.

For trade receivables and contract assets, the Group applies a simplified approach in calculating expected credit losses. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime expected credit losses at each reporting date.

To estimate the allowance for expected credit losses for trade and other receivables the Group applied 2-dimension model. For individual significant balances with specific characteristics the individual allowance rates were applied based on the historical experience of relationships with those counterparties, individual analysis of their current financial position and forward-looking factors specific to the debtors and the economic environment. For all other balances which are similar by the nature the standard simplified approach was applied with the use of a provision matrix based on the Group's historical credit loss experience adjusted for forward-looking information. The provision rates are based on days past due for groupings of various homogeneous counterparties. At each reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note 11.2. The Group does not hold collateral as security.

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Allowance for expected credit losses on cash and cash equivalents is calculated based on the 12-month expected loss basis and reflects the short maturities of the exposures.

(ii) Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments.

Subsequent measurement

The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. Gains or losses on liabilities held for trading are recognised in the consolidated statement of profit (loss) and other comprehensive income.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in IFRS 9 are satisfied.

Loans and borrowings

This is the category most relevant to the Group. After initial recognition, loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the consolidated statement of profit (loss) and other comprehensive income. This category generally applies to loans and borrowings (Note 11).

Put options written on non-controlling interests

The Group initially measures a financial liability at the present value of the redemption amount in the parent's consolidated financial statements for written puts on non-controlling interests, therefore, when the Group grants non-controlling interests a put option to sell part or all of their interests in a subsidiary during a

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certain period, on the date of grant, the non-controlling interests are classified as a financial liability. The Group remeasures the financial liability at the end of each reporting period based on the estimated present value of the consideration to be transferred upon the exercise of the put option. The respective finance cost is recognised in the consolidated statement of profit (loss) and other comprehensive income within finance costs.

Call options written on preferred shares

In the consolidated financial statements the Group initially measures a financial liability for call options granted in respect of preferred shares at fair value. Determining the fair value of the call options at the recognition date is subject to judgment. The Group calculated the fair value of call options using mix of the Black-Scholes option pricing model and model of Asian options. The models require input of assumptions, including expected volatility, expected term, risk-free interest rate and dividend yield and other subjective assumptions. The Group remeasures the financial liability at the end of each reporting period at fair value. The respective finance cost or income is recognised in the consolidated statement of profit (loss) and other comprehensive income within finance costs or finance income.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the consolidated statement of profit (loss) and other comprehensive income.

(iii) Interest income

For all financial instruments measured at amortised cost interest income is recorded using the EIR. The EIR is the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset. Interest income is included in finance income in the consolidated statement of profit (loss) and other comprehensive income.

(o) Derivative financial instruments

The Group uses derivative financial instruments, such as cross currency swap and cross currency option. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

For the year ended December 31, 2018, 2017 and 2016, the Group did not have any derivatives designated as hedging instruments.

(p) Inventories

Inventories are measured at the lower of cost or net realisable value. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and selling expenses.

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The cost of inventories is determined under the weighted average cost method, and includes all costs in bringing the inventory to its present location and condition. The elements of costs include direct material, labor and allocable material and manufacturing overhead.

Costs of production in process and finished goods include the purchase costs of raw materials and conversion costs such as direct labor and allocation of fixed and variable production overheads. Raw materials are valued at a purchase cost inclusive of freight and other shipping costs.

Coal and iron ore inventory costs include direct labor, supplies, depreciation of equipment and mining assets, and amortisation of licenses to use mineral reserves, mine operating overheads and other related costs. Operating overheads are charged to expenses in the periods when the production is temporarily paused or abnormally low.

(q) Impairment of non-current assets

Further disclosures relating to impairment of non-current assets are also provided in the following notes:

- Intangible assets — Note 17.
- Impairment of goodwill and other non-current assets — Note 18.

The Group assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or CGU's fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. The Group's CGUs represent single entities with one component of business in each case.

In assessing value in use, the Group uses assumptions that include estimates regarding the discount rates, growth rates and expected changes in selling prices, sales volumes and operating costs, as well as capital expenditures and working capital requirements during the forecasted period. The estimated future cash flows expected to be generated by the asset, when the quoted market prices are not available, 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. The growth rates are based on the Group's growth forecasts, which are largely in line with industry trends. Changes in selling prices and direct costs are based on historical experience and expectations of future changes in the market. In determining fair value less costs of disposal, recent market transactions are taken into account.

The Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Group's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. A long-term growth rate is calculated and applied to project future cash flows after the fifth year.

For CGUs involved in mining activity future cash flows include estimates of recoverable minerals that will be obtained from proved and probable reserves, mineral prices (considering current and historical prices, price trends and other related factors), production levels, capital and reclamation costs, all based on the life of mine models prepared by the Group's engineers.

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Impairment losses of continuing operations are recognised in the consolidated statement of profit (loss) and other comprehensive income.

For impaired assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognised impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the asset's or CGU's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the consolidated statement of profit (loss) and other comprehensive income unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

Goodwill is tested for impairment annually as of December 31 and when circumstances indicate that the carrying value may be impaired.

Impairment is determined for goodwill by assessing the recoverable amount of each CGU to which the goodwill relates. When the recoverable amount of the CGU is less than its carrying amount, an impairment loss is recognised. Impairment losses relating to goodwill cannot be reversed in future periods.

(r) Cash and cash equivalents

Cash and cash equivalents in the consolidated statement of financial position comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above, net of outstanding bank overdrafts as they are considered an integral part of the Group's cash management.

(s) Provisions

General

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, including legal or tax proceedings' obligations, and a reliable estimate can be made of the amount of the obligation. The expense relating to a provision is presented in the consolidated statement of profit (loss) and other comprehensive income, net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

Rehabilitation provision

Mine rehabilitation costs will be incurred by the Group either while operating, or at the end of the operating life of the Group's facilities and mine properties. The Group assesses its mine rehabilitation provision at each reporting date. The Group recognises a rehabilitation provision where it has a legal and constructive obligation as a result of past events, and it is probable that an outflow of resources will be required to settle the obligation, and

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a reliable estimate of the amount of obligation can be made. The nature of these restoration activities includes: dismantling and removing structures; rehabilitating mines and tailings dams; dismantling operating facilities; closing plant and waste sites; and restoring, reclaiming and revegetating affected areas.

The obligation generally arises when the asset is installed or the ground/environment is disturbed at the mining operation's location. When the liability is initially recognised, the present value of the estimated costs is capitalised by increasing the carrying amount of the related mining assets to the extent that it was incurred as a result of the development/construction of the mine.

Changes in the estimated timing of rehabilitation or changes to the estimated future costs are dealt with prospectively by recognising an adjustment to the rehabilitation provision and a corresponding adjustment to the asset to which it relates, if the initial estimate was originally recognised as part of an asset measured in accordance with IAS 16 *Property, Plant and Equipment* ("IAS 16").

Any reduction in the rehabilitation provision and, therefore, any deduction from the asset to which it relates, may not exceed the carrying amount of that asset. If it does, any excess over the carrying value is taken immediately to the consolidated statement of profit (loss) and other comprehensive income.

Over time, the discounted liability is increased for the change in present value based on the discount rates that reflect current market assessments and the risks specific to the liability. The periodic unwinding of the discount is recognised in the consolidated statement of profit (loss) and other comprehensive income as part of finance costs.

For closed sites, changes to estimated rehabilitation costs are recognised immediately in the consolidated statement of profit (loss) and other comprehensive income.

Environmental expenditures and liabilities

Environmental expenditures that relate to current or future revenues are expensed or capitalised as appropriate. Expenditures that relate to an existing condition caused by past operations and do not contribute to current or future earnings are expensed. Liabilities for environmental costs are recognised when a clean-up is probable and the associated costs can be reliably estimated. Generally, the timing of recognition of these provisions coincides with the commitment to a formal plan of action or, if earlier, on divestment or on closure of inactive sites. The amount recognised is the best estimate of the expenditure required. Where the liability will not be settled for a number of years, the amount recognised is the present value of the estimated future expenditure.

(t) Pensions and other post-employment benefits

Defined benefit pension and other post-retirement plans

The Group has a number of defined benefit pension plans and other long-term benefits that cover the majority of production employees.

Benefits under these plans are primarily based upon years of service and average earnings. The Group accounts for the cost of defined benefit plans and other long-term benefits using the projected unit credit method. Under this method, the cost of providing pensions is charged to the consolidated statement of profit (loss) and other comprehensive income, so as to attribute the total pension cost over the service lives of employees in accordance with the benefit formula of the plan.

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The Group's obligation in respect of defined retirement benefit plans and other long-term benefits is calculated separately for each defined benefit plan and other long-term benefit plan by discounting the amounts of future benefits that employees have already earned through their service in the current and prior periods. The discount rate applied represents the yield at the yearend on highly rated long-term bonds.

Where there is a change in actuarial assumptions, the resulting actuarial gains and losses are recognised directly in other comprehensive income.

For unfunded plans, the Group recognises a pension liability, which is equal to the projected benefit obligation. For funded plans, the Group offsets the fair value of the plan assets with the projected benefit obligations and recognises the net amount of pension liability. The market value of plan assets is measured at each reporting date.

State pension fund

The Group's Russian companies are legally obligated to make defined contributions to the Russian Pension Fund at the rate of 10% from employee's annual income over RUB 1 million and at the rate of 22% from employee's annual income not exceeding RUB 1 million, managed within the framework of the social security scheme of the Russian Federation (a defined contribution plan financed on a pay-as-you-go basis). The Group's contributions to the Russian Pension Fund relating to defined contribution plans are charged to income in the year, to which they relate and are recognized within social security costs (Note 25.2).

(u) Significant accounting judgments, estimates and assumptions

The preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported carrying amounts of assets and liabilities, and disclosure of contingent assets and liabilities as of the date of the consolidated financial statements, and the amounts of revenues and expenses recognised during the reporting period. Estimates and assumptions are continually evaluated and are based on the Group's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results could differ from those estimates. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

Judgments

In the process of applying the Group's accounting policies, management has made the following judgments, which have the most significant effect on the amount recognised in the consolidated financial statements.

Capitalization of interest related to the Elga coal deposit and railway construction

In 2013 and 2014, Elgaugol OOO ("Elgaugol") and the Russian State Corporation "Bank for Development and Foreign Economic Affairs" ("VEB") signed credit agreements for financing of the Elga coal project approved by the VEB's Supervisory Board in September 2013. The use of proceeds under these facilities is limited to the development of the Elga coal project. Borrowing costs under these VEB facilities that are directly attributable to the construction of the Elga coal project are capitalized. Borrowing costs consist of interest including exchange differences arising from revaluation of foreign currency borrowings and other costs that the Group incurs in connection with the debt servicing.

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Railway depreciation method

In 2015, the Group commenced to depreciate the railway of the Elga coal deposit using units of production method. In applying the units of production method, depreciation is normally calculated based on produced and delivered tonnes in the period as a percentage of total expected tonnes to be produced and delivered in current and future periods over the Elga coal deposit life cycle. The Group's analysis has shown that the consumption of the economic benefits of the asset is linked to production and delivery of coal. The Group assesses the total or ultimate railway capacity in tonnes at least at each financial year end and, if expectations differ from previous estimates, the changes will be accounted for as a change in an accounting estimate in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* ("IAS 8").

DEMP property complex

On June 25, 2016, by the decree of the Council of Ministers of the self-proclaimed People's Republic of Donetsk, the State Enterprise "Yuzovsky metallurgical plant" was established on the basis of the property complex of the Group's subsidiary Donetsk Electrometallurgical Plant ("DEMP"). The Group's ability to manage and control the assets of the DEMP property complex is restricted by this decree. The Group concluded that the assets included in the DEMP's property complex do not meet the recognition criteria and derecognised these assets in the consolidated financial statements. The DEMP's assets were fully impaired based on the results of impairment tests as of January 1, 2014 and December 31, 2014 due to conservation of production since 2013. The loss of control over the assets of nil carrying value has no impact on the financial result for the year ended December 31, 2016, 2017 and 2018.

Principal vs agent arrangements

Revenue is recognised when a customer obtains control over the goods or services. Determining the timing of the transfer of control — at a point in time or over time — requires judgement. The Group is engaged into contracts which include transportation and freight services. Under certain agreements, the Group is responsible for providing shipping services after the date at which control over the goods passes to the customer at the loading port or place. Freight and transportation services are required to be accounted for as separate performance obligations with revenue recognised over time as the service is rendered. The Group has concluded that it acts as a principal when it is primarily responsible for fulfilling the promise to provide transportation services and as an agent when it is not primarily responsible for fulfilling the promise to provide transportation services. As a result, for operations when the Group acts as a principal the amounts of transportation costs and freight services, which are included in the transaction price and incurred by the Group in fulfilling its performance obligations shall be recorded as revenue and recognised over time as the obligation is fulfilled. For agent services related to transportation of goods sold, when cost of transportation is included into the goods price, the revenue and selling expenses are recognised on a net basis.

Taxation

The Group is subject to taxation to the largest extent in Russia, and secondarily in other jurisdictions. The 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 activity of the Group may be challenged by the relevant regional and federal authorities. Russian tax authorities take assertive position in its 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. As such, significant additional taxes,

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penalties and interest may be assessed. Fiscal periods remain open to review by the authorities in respect of the taxes for three calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods. The fact that a year has been reviewed does not close that year, or any tax declaration applicable to that year, from further review during the three-year period.

In the event that a taxpayer submits a revised tax declaration in which the stated amount of tax is less than the amount previously declared, tax audit of a taxpayer may be performed, but only with the respect to the changes in the tax declaration.

In other tax jurisdictions where the Group conducts operations or holds shares, taxes are generally charged on their worldwide income. In the most jurisdictions agreements to avoid double taxation were signed with other jurisdictions; however, the risk of additional taxation exists, especially in respect of certain domiciles where some of the Group entities are located.

The Russian transfer pricing legislation, which came into force on January 1, 2012, allows the Russian tax authority to apply transfer pricing adjustments and impose additional profits tax liabilities in respect of all “controlled” transactions if the transaction price differs from the market level of prices. The list of “controlled” transactions includes transactions performed with related parties and certain types of cross-border transactions. For domestic transactions the transfer pricing rules apply only if the amount of all transaction with related party exceeds RUB 1,000 million since 2014.

In order to support the level of prices applied for the “controlled” transactions the Group should provide evidence that prices of “controlled” transactions are based on market prices and to prepare the reports for submission to the Russian tax authorities. Otherwise, the Russian tax authorities have the right to challenge the prices determined by the Group for such transactions and to charge additional taxes, penalties and fines. In cases where the domestic transaction resulted in an accrual of additional tax liabilities for one party, another party could correspondingly adjust its profit tax liabilities according to the special notification issued by the authorized body in due course. Special transfer pricing rules apply to transactions with securities and derivatives.

Due to the uncertainty and absence of current practice of application of the current Russian transfer pricing legislation the Russian tax authorities may challenge the level of prices applied by the Group under the “controlled” transactions and accrue additional tax liabilities unless the Group is able to demonstrate the use of market prices with respect to the “controlled” transactions, and that there has been proper reporting to the Russian tax authorities, supported by appropriate available transfer pricing documentation.

The Group believes that it uses the market prices in “controlled” transactions and does not expect any claims of tax authorities related to the prices used in such transactions. However, due to the uncertainty and limited practice of the Russian legislation in the area of transfer pricing relevant tax claims may be raised and the respective effect is currently impossible to estimate.

In addition, in November 2014, the legislation of the Russian Federation has been significantly revised in order to prevent the misuse of low-tax jurisdictions for tax avoidance in the Russian Federation. Changes in the legislation set out the rules for the taxation of income of a foreign organization recognised as a controlled foreign corporation. The foreign organization is recognised as a controlled foreign corporation, if it is not a tax resident of the Russian Federation and the share of the controlling Russian entities or individuals in the organization is more than 25% (in some cases, more than 10%). Starting from the calculation of the profits of controlled foreign

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corporation for 2017 and beyond, the amount of non-taxable income of 10 million rubles is established. The Russian tax law also provides for certain conditions under which the income of controlled corporations qualifies as tax exempt. Starting 2016, the taxable income of the controlling party is increased by the profits of the controlled foreign corporation earned in the financial year ended prior to the reporting year.

Provision for legal claims

The Group is subject to various other lawsuits, claims and proceedings related to matters incidental to the Group's business, licenses, tax positions. Accruals for probable cash outflows have been made based on an assessment of a combination of litigation and settlement strategies. It is possible that results of operations in any future period could be materially affected by changes in assumptions or by the actual effectiveness of such strategies.

Environmental contingencies

In the course of the Group's operations, the Group may be subject to environmental claims and legal proceedings. The quantification of environmental exposures requires an assessment of many factors, including changing laws and regulations, improvements in environmental technologies, the quality of information available related to specific sites, the assessment stage of each site investigation, preliminary findings and the length of time involved in remediation or settlement. Management does not believe that any pending environmental claims or proceedings will have a material adverse effect on the Group's financial position and results of operations.

Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below or in the related accounting policy note. The Group based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market change or circumstances arising beyond the control of the Group.

In particular, the Group has identified a number of areas where significant estimates and assumptions are required. Further information on each of these areas and how they impact the various accounting policies are described with the associated accounting policy note within the related qualitative and quantitative note as described below.

Deferred tax assets and uncertain tax positions

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgment is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits and the existence of taxable temporary differences (Note 20). Various factors are considered to assess the probability of the future utilization of deferred tax assets for individual subsidiaries and for the consolidated group of taxpayers, including past operating results, operational plans for not longer than five years as this term is considered reliable and accurate for forecast, same assumptions for operational plans as used for determination of the expected future cash flows from the cash generating units, financial plans based on

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historical data and expectation built on the debt portfolio, terms of the expiration of tax losses carried forward depending on respective tax legislation, and tax planning strategies based on changes in tax regulation for tax losses offsetting for 2018-2020. If actual results differ from these estimates or if these estimates must be adjusted in future periods, the Group's financial position, results of operations and cash flows may be affected. In the event that the assessment of future utilization of deferred tax assets must be changed, this effect is recognised in the consolidated statement of profit (loss) and other comprehensive income.

The carrying amount of deferred tax assets is reviewed at each reporting date and is adjusted to reflect the likelihood that the estimated taxable profit and taxable temporary differences will be sufficient to recover the asset in whole or in part.

Impairment of property, plant and equipment and other non-current assets

The Group assesses at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, the Group makes an estimate of the asset's recoverable amount. Impairment exists when the carrying value of an asset or CGU exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The fair value less costs of disposal calculation is based on available data from binding sales transactions, conducted at arm's length for similar assets or observable market prices less incremental costs for disposing of the asset. 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 assessment of the time value of money and the risks specific to the assets.

Impairment is based on a large number of factors, such as changes in current competitive conditions, expectations of growth in the industry, changes in cost of capital, changes in the future availability of financing, technological obsolescence, and other changes in circumstances that indicate that impairment exists. The determination of the recoverable amount of a cash-generating unit involves the use of estimates by management. Methods used to determine the value in use include discounted cash flow-based methods, which require the Group to make an estimate of the expected future cash flows from the cash-generating unit and also to choose a suitable discount rate in order to calculate the present value of those cash flows. These estimates, including the methodologies used, may have a material impact on the value in use and, ultimately, the amount of any impairment (Note 18).

Impairment of goodwill

The Group determines whether goodwill is impaired at least on an annual basis and when circumstances indicate that the carrying value may be impaired. This requires an estimation of the value in use of the cash generating units to which the goodwill is allocated. Estimating the value in use requires the Group to make an estimate of the expected future cash flows from the cash-generating unit and also to choose a suitable discount rate in order to calculate the present value of those cash flows. More details of the assumptions used in estimating the value in use of the cash-generating units to which goodwill is allocated are provided in Note 18.

Useful lives of items of property, plant and equipment

The Group assesses the remaining useful lives of items of property, plant and equipment at least at each financial year end and, if expectations differ from previous estimates, the changes are accounted for as a change in an accounting estimate in accordance with IAS 8. These estimates may have a material impact on the amount of the carrying values of property, plant and equipment and on depreciation expense for the period.

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Mineral reserves

Mineral reserves and the associated mine plans are a material factor in the Group's computation of depletion charge. Estimation of reserves involves some degree of uncertainty. The uncertainty depends mainly on the amount of reliable geological and engineering data available at the time of the estimate and the interpretation of this data, which also requires use of subjective judgment and development of assumptions. Mine plans are periodically updated which can have a material impact on the depletion charge for the period. More details are provided in Note 3(i).

Fair value of financial instruments

Where the fair value of financial assets and financial liabilities recorded in the consolidated statement of financial position cannot be derived from active markets, their fair value is determined using valuation techniques, including discounted cash flow models and other specific models. The inputs to these models are taken from observable markets where possible, but when these are not available, a degree of judgment is required in establishing fair values. The judgments include considerations of inputs such as dividend yield, terms of redemption, liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments (Note 10).

Provisions

The outcomes of various legal proceedings, disputes and claims to the Group are subject to significant uncertainty. Management evaluates, among other factors, the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss. Unanticipated events or changes in these factors may require the Group to increase or decrease the amount recorded or to be recorded for a matter that has not been previously recorded because it was not considered probable (Note 23).

Pensions and other post-employment benefits

The cost of defined benefit pension plans and other post-employment benefits and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions which may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates and future pension increases. Due to the complexity of the valuation, the underlying assumptions and its long-term nature, a defined benefit obligation and other long-term benefit plans are highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date. More details are provided in Note 22.

Rehabilitation provisions

The Group reviews rehabilitation provisions at each reporting date and adjusts them to reflect the current best estimate. Rehabilitation provisions are recognised in the period in which they arise and are stated at the best estimate of the present value of estimated future costs. These estimates require extensive judgment about the nature, cost and timing of the work to be completed, and may change with future changes to costs, environmental laws and regulations and remediation practices. Changes in the estimated timing of rehabilitation or changes to the estimated future costs are dealt with prospectively by recognizing an adjustment to the rehabilitation provision and a corresponding adjustment to the asset to which it relates, if the initial estimate was originally recognised as part of an asset measured in accordance with IAS 16 (Note 16).

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Impairment of financial assets

The Group makes allowances for expected credit losses resulting from the expected inability of customers to make required payments. When evaluating the adequacy of an allowance for expected credit losses management bases its estimates on the current overall economic conditions, the ageing of accounts receivable balances, historical write-off experience, debtor creditworthiness and changes in payment terms. The amount of ECLs is sensitive to changes in circumstances and of forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of customer's actual default in the future (Note 13).

Determining net realisable value of inventories

The Group makes write-downs for obsolete and slow-moving raw materials and spare parts. In addition, finished goods of the Group are carried at net realisable value (Note 12). Estimates of net realisable value of finished goods are based on the most reliable evidence available at the time the estimates are made. These estimates take into consideration fluctuations of price or cost directly relating to events occurring subsequent to the end of the reporting period to the extent that such events confirm conditions existing at the end of the period.

For other judgments, estimates and assumptions and details refer to:

- Mineral licenses (Note 3(i));
- Property, plant and equipment (Note 3(j));
- Deferred tax assets (Note 3(f));
- Non-current assets held for sale and discontinued operations (Note 3(h));
- Inventories (Note 3(p));
- Impairment of non-current assets (Note 3(q));
- Pensions and other post-employment benefits (Note 3(t));
- Provisions (Note 3(s));
- Fair value measurement (Note 3(d)).

(v) Reclassifications and rounding

Certain reclassifications have been made to the prior periods' consolidated financial statements to conform to the current year presentation. Such reclassifications affect the presentation of certain items in the consolidated statement of financial position, consolidated statement of profit (loss) and other comprehensive income, consolidated statement of cash flows and notes to the consolidated financial statements and have no impact on net income or equity.

All amounts disclosed in these consolidated financial statements and notes have been rounded to the nearest millions of Russian rubles units unless otherwise stated.

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(w) New and amended standards and interpretations adopted by the Group

The Group applied for the first time certain standards and amendments, which are effective for annual periods beginning on or after January 1, 2018. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective. The nature and the effect of these changes are described below.

The Group applies for the first time IFRS 15 and IFRS 9 that require restatement of previous financial statements.

IFRS 15 Revenue from Contracts with Customers

IFRS 15 supersedes IAS 11 *Construction Contracts* ("IAS 11"), IAS 18 *Revenue* ("IAS 18") and related Interpretations and it applies to all revenue arising from contracts with customers, unless those contracts are in the scope of other standards. The new standard establishes a five-step model to account for revenue arising from contracts with customers. Under IFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The Group has initially adopted IFRS 15 from January 1, 2018 using the full retrospective method.

The standard requires entities to exercise judgement, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers. The standard also specifies the accounting for the incremental costs of obtaining a contract and the costs directly related to fulfilling a contract.

Based on the results of the Group's final assessment, the effect of adoption of IFRS 15 on revenue recognition is not significant to the Group's consolidated financial statements.

IFRS 9 Financial Instruments

IFRS 9 replaces IAS 39 *Financial Instruments: Recognition and Measurement* ("IAS 39") for annual periods beginning on or after January 1, 2018.

Changes in the accounting policies resulting from the adoption of IFRS 9 have been applied as of January 1, 2018, with no restatement of comparative information. Consequently, the difference between the carrying amount of financial instruments under IAS 39 and the carrying amount under IFRS 9, related to debt restructurings accounted for as debt modifications, was recognised in the opening retained earnings (accumulated deficit). The impact of IFRS 9 adoption as of January 1, 2018 is as follows:

- Increase in loans and borrowings amounted to RUB 2,551 million;
- Decrease in deferred tax liabilities amounted to RUB 862 million;
- The corresponding decrease in accumulated deficit and non-controlling interests amounted to RUB 1,684 million and RUB 5 million, respectively.

Effect from the changes in accounting policy upon adoption of other aspects of IFRS 9 was not significant.

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IFRIC 22 Foreign Currency Transactions and Advance Consideration

The Interpretation clarifies that, in determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration, the date of the transaction is the date on which an entity initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, then the entity must determine the date of the transactions for each payment or receipt of advance consideration. This Interpretation does not have any impact on the Group's consolidated financial statements.

Amendments to IAS 28 Investments in Associates and Joint Ventures ("IAS 28") — Clarification that measuring investees at fair value through profit or loss is an investment-by-investment choice

The amendments clarify that an entity that is a venture capital organisation, or other qualifying entity, may elect, at initial recognition on an investment-by-investment basis, to measure its investments in associates and joint ventures at fair value through profit or loss. If an entity that is not itself an investment entity, has an interest in an associate or joint venture that is an investment entity, then it may, when applying the equity method, elect to retain the fair value measurement applied by that investment entity associate or joint venture to the investment entity associate's or joint venture's interests in subsidiaries. This election is made separately for each investment entity associate or joint venture, at the later of the date on which: (a) the investment entity associate or joint venture is initially recognised; (b) the associate or joint venture becomes an investment entity; and (c) the investment entity associate or joint venture first becomes a parent. These amendments do not have any impact on the Group's consolidated financial statements.

Standards issued but not effective

The standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are discussed below. The Group intends to adopt these standards and amendments, if applicable, when they become effective.

IFRS 16 Leases

IFRS 16 *Leases* ("IFRS 16") was issued in January 2016 and it replaces IAS 17 *Leases* ("IAS 17"), IFRIC 4 *Determining whether an Arrangement contains a Lease* ("IFRIC 4"), SIC-15 *Operating Leases-Incentives* and SIC-27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under IAS 17. The standard includes two recognition exemptions for lessees — leases of 'low-value' assets (e.g., personal computers) and short-term leases (i.e., leases with a lease term of 12 months or less). At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

Lessees will be also required to remeasure the lease liability upon the occurrence of certain events (e.g., a change in the lease term, a change in future lease payments resulting from a change in an index or rate used to determine those payments). The lessee will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset.

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Lessor's accounting under IFRS 16, which becomes effective for annual periods beginning on or after January 1, 2019, is substantially unchanged from today's accounting under IAS 17. Lessors will continue to classify all leases using the same classification principle as in IAS 17 and distinguish between two types of leases: operating and finance leases.

The Group plans to adopt IFRS 16 from January 1, 2019 retrospectively with a cumulative effect recognised at the date of initial application. The right-of use assets would be measured at the amount equal to the lease liability adjusted for the amount of any prepaid or accrued lease payments relating to that lease recognised in the balance sheet as of December 31, 2018. The Group will apply the standard to contracts that were previously identified as leases applying IAS 17 and IFRIC 4. The Group will use the exemptions proposed by the standard on lease contracts for which the lease terms ends within 12 months as of the date of initial application. Also, the Group uses the following practical expedient: direct costs are excluded from the measurement of the right-of-use asset at the date of initial application. The Group's weighted average incremental borrowing rate applied to lease liabilities is 9.17% as of January 1, 2019.

In previous years and in 2018, the majority of the Group's outstanding short-term and long-term lease agreements were cancellable. IAS 17 requires disclosing operating lease commitments for non-cancellable leases only, while under IFRS 16 the Group is also required to include in lease liabilities the payments relating to the term periods covered by an option to terminate the lease if the lessee is reasonably certain not exercise that option.

Impact on the consolidated statement of financial position (increase/(decrease)) as of January 1, 2019:

	<u>Millions of Russian rubles</u>
Assets	
Property, plant and equipment (right-of-use assets)	2,636
Deferred tax asset	28
Total assets	<u>2,664</u>
Liabilities	
Non-current lease liabilities	3,099
Current lease liabilities	111
Total liabilities	<u>3,210</u>
Net impact on equity	<u>(546)</u>

On adoption of IFRS 16, the Group will recognise lease liabilities in relation to leases which had previously been classified as operating lease under the principles of IAS 17. These liabilities will be measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of January 1, 2019.

IFRIC 23 Uncertainty over Income Tax Treatment

The Interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of IAS 12 and does not apply to taxes or levies outside the scope of IAS 12, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments.

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The Interpretation specifically addresses the following:

- Whether an entity considers uncertain tax treatments separately;
- The assumptions an entity makes about the examination of tax treatments by taxation authorities;
- How an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates;
- How an entity considers changes in facts and circumstances.

An entity must determine whether to consider each uncertain tax treatment separately or together with one or more other uncertain tax treatments. The approach that better predicts the resolution of the uncertainty should be followed. The interpretation is effective for annual reporting periods beginning on or after January 1, 2019, but certain transition reliefs are available. The Group will apply interpretation from its effective date. Since the Group operates in a complex multinational tax environment, applying the Interpretation may affect its consolidated financial statements and the required disclosures. In addition, the Group may need to establish processes and procedures to obtain information that is necessary to apply the Interpretation on a timely basis.

Amendments to IFRS 10 and IAS 28: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The amendments address the conflict between IFRS 10 and IAS 28 in dealing with the loss of control of a subsidiary that is sold or contributed to an associate or joint venture. The amendments clarify that the gain or loss resulting from the sale or contribution of assets that constitute a business, as defined in IFRS 3, between an investor and its associate or joint venture, is recognised in full. Any gain or loss resulting from the sale or contribution of assets that do not constitute a business, however, is recognised only to the extent of unrelated investors' interests in the associate or joint venture. The IASB has deferred the effective date of these amendments indefinitely, but an entity that early adopts the amendments must apply them prospectively. The Group will apply these amendments when they are effective.

Amendments to IAS 19: Plan Amendment, Curtailment or Settlement

The amendments to IAS 19 *Plan Amendment, Curtailment or Settlement* ("IAS 19") address the accounting when a plan amendment, curtailment or settlement occurs during a reporting period. The amendments specify that when a plan amendment, curtailment or settlement occurs during the annual reporting period, an entity is required to:

- Determine current service cost for the remainder of the period after the plan amendment, curtailment or settlement, using the actuarial assumptions used to remeasure the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event
- Determine net interest for the remainder of the period after the plan amendment, curtailment or settlement using: the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event; and the discount rate used to remeasure that net defined benefit liability (asset).

The amendments also clarify that an entity first determines any past service cost, or a gain or loss on settlement, without considering the effect of the asset ceiling. This amount is recognised in profit or loss. An entity then determines the effect of the asset ceiling after the plan amendment, curtailment or settlement. Any change in that effect, excluding amounts included in the net interest, is recognised in other comprehensive income.

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The amendments apply to plan amendments, curtailments, or settlements occurring on or after the beginning of the first annual reporting period that begins on or after January 1, 2019, with early application permitted. These amendments will apply only to any future plan amendments, curtailments, or settlements of the Group.

Amendments to IAS 28: Long-term interests in associates and joint ventures

The amendments clarify that an entity applies IFRS 9 to long-term interests in an associate or joint venture to which the equity method is not applied but that, in substance, form part of the net investment in the associate or joint venture (long-term interests). This clarification is relevant because it implies that the expected credit loss model in IFRS 9 applies to such long-term interests.

The amendments also clarified that, in applying IFRS 9, an entity does not take account of any losses of the associate or joint venture, or any impairment losses on the net investment, recognised as adjustments to the net investment in the associate or joint venture that arise from applying IAS 28.

The amendments should be applied retrospectively and are effective from January 1, 2019, with early application permitted. The Group does not expect any effect on its consolidated financial statements.

Amendments to IFRS 3 Business Combinations

The IASB issued amendments to the definition of a business in IFRS 3 Business Combinations to help entities determine whether an acquired set of activities and assets is a business or not. They clarify the minimum requirements for a business, remove the assessment of whether market participants are capable of replacing any missing elements, add guidance to help entities assess whether an acquired process is substantive, narrow the definitions of a business and of outputs, and introduce an optional fair value concentration test.

An entity applies those amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020, with early application permitted. These amendments will apply on future business combinations of the Group.

Amendments to IAS 1 and IAS 8: Definition of Material

In October 2018, the IASB issued amendments to IAS 1 *Presentation of Financial Statements* and IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* to align the definition of 'material' across the standards and to clarify certain aspects of the definition. The amendments clarify that materiality will depend on the nature or magnitude of information, or both.

The amendment should be applied prospectively and is effective for annual reporting periods beginning on or after January 1, 2020. The Group does not expect significant effect on its consolidated financial statements.

Annual Improvements 2015-2017 Cycle (issued in December 2017)

These improvements include:

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IFRS 3 Business Combinations

The amendments clarify that, when an entity obtains control of a business that is a joint operation, it applies the requirements for a business combination achieved in stages, including remeasuring previously held interests in the assets and liabilities of the joint operation at fair value. In doing so, the acquirer remeasures its entire previously held interest in the joint operation.

An entity applies those amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2019, with early application permitted. These amendments will apply on future business combinations of the Group.

IFRS 11 Joint Arrangements

A party that participates in, but does not have joint control of, a joint operation might obtain joint control of the joint operation in which the activity of the joint operation constitutes a business as defined in IFRS 3. The amendments clarify that the previously held interests in that joint operation are not remeasured.

An entity applies those amendments to transactions in which it obtains joint control on or after the beginning of the first annual reporting period beginning on or after January 1, 2019, with early application permitted. These amendments are currently not applicable to the Group but may apply to future transactions.

IAS 12 Income Taxes

The amendments clarify that the income tax consequences of dividends are linked more directly to past transactions or events that generated distributable profits than to distributions to owners. Therefore, an entity recognises the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where the entity originally recognised those past transactions or events.

An entity applies those amendments for annual reporting periods beginning on or after January 1, 2019, with early application is permitted. When an entity first applies those amendments, it applies them to the income tax consequences of dividends recognised on or after the beginning of the earliest comparative period. Since the Group's current practice is in line with these amendments, the Group does not expect any effect on its consolidated financial statements.

IAS 23 Borrowing Costs

The amendments clarify that an entity treats as part of general borrowings any borrowing originally made to develop a qualifying asset when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete.

An entity applies those amendments to borrowing costs incurred on or after the beginning of the annual reporting period in which the entity first applies those amendments. An entity applies those amendments for annual reporting periods beginning on or after January 1, 2019, with early application permitted. Since the Group's current practice is in line with these amendments, the Group does not expect any effect on its consolidated financial statements.

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4. Going concern

The economic environment and economic conditions in the major segments of the Group's operations retain uncertainty about the level of demand for the Group's products, the pricing of major products mined or manufactured by the Group, operating and financial results, the availability of free cash flow for repayment or ability to refinance and restructure current liabilities.

As of December 31, 2018, the Group's total liabilities exceeded total assets by RUB 233,195 million.

As of December 31, 2018, restructuring was not finalized with respect to the Group's credit facilities with ECA-covered loans creditors and therefore the Group was not in compliance with the payment schedules under certain credit facilities and a number of financial and non-financial covenants contained in the Group's loan agreements totaling to RUB 406,077 million of the Group's debt. As of December 31, 2018, the Group's debt payable on demand was RUB 406,077 million, including RUB 361,328 million of long-term debt classified as short-term debt as of that date because debt restructuring was not finalized with respect to the Group's credit portfolio and due to contractual cross-default provisions, and RUB 2,128 million of fines and penalties accrued on overdue loans and overdue interest. As of the date of approval of the consolidated financial statements, these breaches constitute an event of default and, as a result, the lenders may request accelerated repayment of a substantial portion of the Group's debt. The Group does not have the resources to enable it to comply with such accelerated repayment requests immediately.

The management has concluded that the existing uncertainty about the Group's availability of free cash flow for repayment or ability to refinance and restructure current liabilities described above represents a material uncertainty that may cast significant doubt upon the Group's ability to continue as a going concern. Based on management's plans and actions undertaken as noted herein, management believes that the Group will achieve restructuring with all of its lenders and secure adequate financing to continue in operational existence for the foreseeable future. The management's strategy includes enhancement of crude steel production, increase in sales of the major steel products as well as diversifying products range into specialty products, rails and beams targeting higher marginal market niches. Together with the further development of the Group's mining assets providing additional volumes of high-grade coking coal both to the Russian consumers and to exports markets the Group expects it to result in an increase in profitability. The Group's detailed monthly operational plans include further optimization of the costs structure and on-going control over the production costs and selling expenses.

The consolidated financial statements have been prepared assuming that the Group will continue as a going concern. Accordingly, the consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts, the amounts and classification of liabilities or any other adjustments that might result from the Group being unable to continue as a going concern.

5. Capital management

The equity capital of the Group was formed by injecting shares of its operating subsidiaries into Mechel PAO. This together with obtaining profits allowed the Group to raise debt to finance major investment projects as well as to acquire new companies. Although it has always been the Group's priority to create and grow the shareholders' value, during the past several years, the Group has become more focused on managing its debt, which has been the major source for expansion and growth.

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Metals and mining industry is known for its capital intensive investment cycle requiring secure long-term financing. In 2012-2015, high price volatility on the coal seaborne market and metal market resulted in the decrease in the Group's operating profit and impairments of non-current assets. Devaluation of the national currency (Russian ruble) affected the amount of foreign exchange losses and increase in cost of financing on local and foreign debt markets. These facts became the major reason for the losses incurred by the Group in the past and resulted in a negative equity.

Given current economic circumstances and the amount of debt, the Group's primary objective is to focus on resolving the debt issues through a long-term restructuring of the loan portfolio and bringing down both cost of financing and actual interest payments as well as use of all available free cash flow for repayment of debt. The Group's long-term policy is to maintain a strong capital base to maintain investor, creditor and market confidence and to ensure sustainable future development of the business. The Group's management constantly monitors profitability and leverage ratios. The Group's capital management has always been based on a number of covenants, of which 'Net Debt to EBITDA' and 'EBITDA to Net Interest Expense' are the main indicators the management uses for control. The level of dividends is monitored by the Board of Directors of the Group.

The Group was required to comply with the following ratios under the most significant loan agreements with the Russian state-owned banks as of December 31, 2018:

<u>Restrictive covenants</u>	<u>Requirement</u>	<u>Actual as of December 31, 2018</u>
Mechel's EBITDA to Net Interest Expense	Shall not be less than 1.75:1.0	1.79:1.0
Mechel's EBITDA to Consolidated Financial Expense	Shall not be less than 1.75:1.0	1.82:1.0
Mechel's Net Debt to EBITDA	Not exceed 6.0:1.0	6.39:1.0
Mechel's Total Debt to EBITDA	Not exceed 4.5:1.0	6.25:1.0
Mechel's Cash flow from operating activities to EBITDA . . .	Shall not be less than 0.8:1.0	0.90:1.0
Mechel's EBITDA to Revenue	Shall not be less than 0.2:1.0	0.24:1.0

The Group was required to comply with the following ratios under the most significant loan agreements with the Russian state-owned banks as of December 31, 2017¹:

<u>Restrictive covenants</u>	<u>Requirement</u>	<u>Actual as of December 31, 2017</u>
Mechel's EBITDA to Net Interest Expense	Shall not be less than 1.50:1.0	1.78:1.0
Mechel's EBITDA to Consolidated Financial Expense	Shall not be less than 1.50:1.0	1.86:1.0
Mechel's Net Debt to EBITDA	Not exceed 8.0:1.0	6.35:1.0
Mechel's Total Debt to EBITDA	Not exceed 5.5:1.0	6.07:1.0
Mechel's Cash flow from operating activities to EBITDA . . .	Shall not be less than 0.8:1.0	0.78:1.0
Mechel's EBITDA to Revenue	Shall not be less than 0.2:1.0	0.27:1.0

In 2012-2015, following a sudden fall of the commodity markets the Group violated most of such covenants and defaulted on major credit facilities of interest and debt payments. Limited free cash flow available for debt service forced the Group to start negotiations with creditors about review of schedule of the debt maturity profile. Current restructuring arrangements with major creditors are aimed at rescheduling repayment of principal, gradual amortisation and decrease in interest payments by partial capitalization.

¹ Detailed information in respect of restrictive covenant calculations is presented in Note 11.1.

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Cost of debt is also important for the Group's capital management. Throughout the restructuring process, the Group changed the floating interest rates dependent on the Russian money market (Mosprime rate) to the key rate of the Central Bank of the Russian Federation, which is less volatile and better represents the cost of funds for the local banks set by the Central Bank of the Russian Federation. The management believes that it will allow the Group to avoid sudden splashes in the cost of debt due to temporary demand/supply fluctuations. In 2016, under the restructuring agreements, the outstanding balance of U.S. dollar-denominated long-term loans was partially converted from U.S. dollar into Russian ruble, which will allow to reduce the effect of foreign currency fluctuations. In 2018, the Group refinanced existing pre-export credit facility by receiving a new euro-denominated loan from VTB. The loan matures in April 2022 (Note 11.1 (a)).

The main goal for the Group is to achieve long-term restructuring of the loan portfolio with a grace period for repayment of debts and gradual decrease in debt balance, which will permit to restore working capital, improve efficiency of operations and provide ability to sustain full service of debt in accordance with newly agreed repayment schedules as well as use of all available free cash flow for repayment of debt.

In June 2016, a 49% stake in the Elga coal complex (OOO Elgaugol, Elga-road OOO and Mecheltrans Vostok OOO) was sold to Gazprombank by exercising an option held by Gazprombank for a total consideration of RUB 34,300 million. All proceeds received from the sale of the shares were used for repayment of the Group's debt re-assigned from Sberbank to Gazprombank, and to repay overdue payment to Sberbank. Simultaneously with the sale of a 49% stake, a put option in respect of this stake was granted to Gazprombank (see Note 6).

The objectives, policies and processes for managing capital during the year ended December 31, 2018 and 2017 were not changed.

6. Business combinations and changes in non-controlling interests

There were no new business combinations in the year ended December 31, 2018, 2017 and 2016.

On December 22, 2011, the Group acquired 100% of the shares of Daveze Ltd, which held 100% of ownership interest in DEMP, a steel plant located in Donetsk, Ukraine (Note 3(u)), for a consideration of \$537,000 thousand (RUB 17,058 million at exchange rate as of December 22, 2011) to be paid in monthly installments during the period from December 2011 until December 2018. The Group paid monthly installments and disclosed the respective payments in the consolidated statement of cash flows within cash outflows from financing activities. The Group fully repaid the consideration in February 2019.

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The following table summarizes changes in non-controlling interests for the year ended December 31, 2018, 2017 and 2016:

Balance as of December 31, 2015	5,948
Change in non-controlling interests in existing subsidiaries of the Group	(4)
Reversal of unclaimed declared dividends to non-controlling interests upon expiration of limitation period	35
Dividends declared to non-controlling interests	(3)
Profit for the period	1,706
Other comprehensive income	4
Balance as of December 31, 2016	7,686
Change in non-controlling interests in existing subsidiaries of the Group (Note 24)	590
Dividends declared to non-controlling interests	(359)
Profit for the period	1,013
Other comprehensive income	3
Balance as of December 31, 2017	8,933
Adjustment on initial application of IFRS 9	(5)
Balance as of January 1, 2018 adjusted for the effect of IFRS 9	8,928
Profit for the period	908
Other comprehensive income	10
Balance as of December 31, 2018	9,846

In June 2016, 49% share in the Elga coal complex was sold to Gazprombank by exercising an option held by Gazprombank for a total consideration of RUB 34,300 million. The Group sold to Gazprombank upon its request a 49% stake in Elgaugol OOO, the owner of the subsoil license for the Elga coal deposit, a 49% stake in Elga-road, the owner of the Railway Ulak-Elga, which had been contributed to the registered capital of this newly established company in March 2016, a 49% stake in Mecheltrans Vostok OOO, the rail line's transportation operator (collectively, the "target companies").

Simultaneously with the sale of a 49% stake in the target companies a put option with fixed price and annual interest at the key rate of the Central Bank of the Russian Federation plus 2% was granted to Gazprombank to sell the stake (in full or in part) in the target companies to the Group within three years following a five-year grace period or in case of a breach of conditions stipulated by such agreement. This allowed the Group to retain control over 100% of shares and therefore this transaction in fact represents a financial liability. Put options are signed by Yakutugol and Mecheltrans (sellers of the stakes in target companies) and are guaranteed by Mechel Mining and SKCC. If the Group fails to perform under these put options Gazprombank has the right to buy out (call option) the remaining stakes owned by the Group in the target companies and a 100% stake in Mechel Port Vanino. A 1.99% stake in each of the target companies is pledged in favor of Gazprombank as a security for the call option. For accounting for this financial liability see Note 11.4.

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7. Material partly-owned subsidiaries

Financial information of subsidiaries that have material non-controlling interests is provided below.

Proportion of equity interest held by non-controlling interests:

<u>Name</u>	<u>At December 31, 2018</u>	<u>At December 31, 2017</u>
SKCC and subsidiaries*	0.9%	0.9%
Kuzbass Power Sales Company (KPSC)	27.9%	27.9%
Chelyabinsk Metallurgical Plant (CMP)	5.8%	5.8%
Southern Urals Nickel Plant (SUNP)	15.9%	15.9%
Beloretsk Metallurgical Plant (BMP)	8.6%	8.6%
Korshunov Mining Plant (KMP)	10.0%	10.0%
Urals Stampings Plant (USP)	6.2%	6.2%
Izhstal	10.0%	10.0%

* Hereinafter SKCC and subsidiaries are represented by Southern Kuzbass Coal Company (SKCC), Tomusinsky Open Pit Mine (TOPM), Tomusinsky Energoupravlenie.

The summarised financial information for these subsidiaries is provided below. This information is based on amounts before inter-company eliminations. SUNP was recognised as abandoned operations activity according to a decision to close SUNP without sale for the nine months of 2016. Therefore, SUNP's results for the nine months period ended September 30, 2016 are not disclosed in summarised statements of profit and loss and summarized cash flow information below. The SUNP's results for the fourth quarter of 2016 are disclosed in summarised statements of profit or loss and summarized cash flow information below. Profit allocated to SUNP non-controlling interest was RUB 19 million for the year ended December 31, 2016.

Summarised statements of profit (loss) and other comprehensive income for 2018:

	<u>SKCC and subsidiaries</u>	<u>KPSC</u>	<u>CMP</u>	<u>SUNP</u>	<u>BMP</u>	<u>KMP</u>	<u>USP</u>	<u>Izhstal</u>
Revenue from contracts with customers	32,251	24,084	124,372	88	25,899	9,989	16,549	21,173
Cost of sales	(18,123)	(12,077)	(101,829)	(47)	(24,095)	(6,222)	(13,131)	(19,392)
Total selling, distribution and operating expenses, net	(9,064)	(11,894)	(11,988)	(170)	(1,867)	(4,250)	(1,099)	(2,498)
Total other income and (expense), net	(4,514)	343	(5,114)	722	1,034	2,103	2,090	(1,097)
Profit (loss) before tax	550	456	5,441	593	971	1,620	4,409	(1,814)
Income tax (expense) benefit	(1,707)	(94)	1,443	(115)	(34)	46	(109)	228
(Loss) profit for the year from continuing operations	(1,157)	362	6,884	478	937	1,666	4,300	(1,586)
Total comprehensive (loss) income	(1,157)	362	6,884	478	937	1,666	4,300	(1,586)
Attributable to non-controlling interests	12	101	345	76	83	166	269	(154)
Dividends paid to non-controlling interests	—	—	—	—	—	—	—	—

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Summarised statements of profit (loss) and other comprehensive income for 2017:

	SKCC and subsidiaries	KPSC	CMP	SUNP	BMP	KMP	USP	Izhstal
Revenue from contracts with customers	31,993	22,418	118,557	102	24,206	11,492	12,725	18,696
Cost of sales	(18,173)	(10,754)	(102,398)	(24)	(21,464)	(6,136)	(10,089)	(16,199)
Total selling, distribution and operating expenses, net	(7,844)	(11,182)	(11,894)	(184)	(1,634)	(5,576)	(909)	(3,486)
Total other income and (expense), net	12,769	340	(506)	531	379	2,913	1,382	(906)
Profit (loss) before tax	18,745	822	3,759	425	1,487	2,693	3,109	(1,895)
Income tax (expense) benefit	(718)	(170)	544	(85)	(91)	212	(144)	194
Profit (loss) for the year from continuing operations	18,027	652	4,303	340	1,396	2,905	2,965	(1,701)
Total comprehensive income (loss)	18,027	652	4,303	340	1,396	2,905	2,965	(1,701)
Attributable to non-controlling interests	103	182	256	54	114	281	183	(170)
Dividends paid to non-controlling interests	198	—	—	—	—	—	—	—

Summarised statements of profit (loss) and other comprehensive income for 2016:

	SKCC and subsidiaries	KPSC	CMP	SUNP	BMP	KMP	USP	Izhstal
Revenue from contracts with customers	27,171	20,695	107,119	16	22,718	8,782	12,471	14,357
Cost of sales	(18,115)	(10,518)	(84,441)	(8)	(20,311)	(6,064)	(9,908)	(12,456)
Total selling, distribution and operating expenses, net	(6,284)	(9,865)	(11,261)	13	(1,746)	(3,029)	(1,035)	(1,254)
Total other income and (expense), net	3,995	274	1,209	530	(640)	2,742	756	(476)
Profit before tax	6,767	586	12,626	551	21	2,431	2,284	171
Income tax (expense) benefit	(592)	(128)	297	(27)	29	25	(170)	266
Profit for the year from continuing operations	6,175	458	12,923	524	50	2,456	2,114	437
Total comprehensive income	6,175	458	12,923	524	50	2,456	2,114	437
Attributable to non-controlling interests	241	128	757	83	4	245	132	44
Dividends paid to non-controlling interests	—	—	—	—	—	—	—	—

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Summarised statements of financial position as of December 31, 2018:

	<u>SKCC and subsidiaries</u>	<u>KPSC</u>	<u>CMP</u>	<u>SUNP</u>	<u>BMP</u>	<u>KMP</u>	<u>USP</u>	<u>Izhstal</u>
Current assets	49,771	3,735	38,571	1,507	9,594	13,863	10,217	5,171
Non-current assets	81,868	4,187	174,639	6,201	6,442	23,221	19,139	1,803
Current liabilities	(101,714)	(2,757)	(176,114)	(108)	(4,751)	(2,336)	(4,870)	(12,765)
Non-current liabilities	(40,888)	(31)	(4,921)	(204)	(141)	(917)	(137)	(1,987)
Total equity	<u>10,963</u>	<u>(5,134)</u>	<u>(32,175)</u>	<u>(7,396)</u>	<u>(11,144)</u>	<u>(33,831)</u>	<u>(24,349)</u>	<u>7,778</u>
Attributable to:								
Equity shareholders of Mechel								
PAO	11,157	(3,706)	(30,314)	(6,223)	(10,182)	(30,462)	(22,837)	7,010
Non-controlling interests	(194)	(1,428)	(1,861)	(1,173)	(962)	(3,369)	(1,512)	768

Summarised statements of financial position as of December 31, 2017:

	<u>SKCC and subsidiaries</u>	<u>KPSC</u>	<u>CMP</u>	<u>SUNP</u>	<u>BMP</u>	<u>KMP</u>	<u>USP</u>	<u>Izhstal</u>
Current assets	43,303	3,492	44,440	7,245	10,104	11,111	11,005	4,958
Non-current assets	86,396	4,158	86,353	—	6,810	23,006	15,958	2,880
Current liabilities	(136,469)	(2,804)	(99,119)	(135)	(6,502)	(1,599)	(6,700)	(12,059)
Non-current liabilities	(4,019)	(76)	(5,252)	(192)	(145)	(390)	(160)	(1,981)
Total equity	<u>10,789</u>	<u>(4,770)</u>	<u>(26,422)</u>	<u>(6,918)</u>	<u>(10,267)</u>	<u>(32,128)</u>	<u>(20,103)</u>	<u>6,202</u>
Attributable to:								
Equity shareholders of Mechel								
PAO	10,990	(3,443)	(24,913)	(5,820)	(9,383)	(28,929)	(18,856)	5,587
Non-controlling interests	(201)	(1,327)	(1,509)	(1,098)	(884)	(3,199)	(1,247)	615

Summarised cash flow information for the year ended December 31, 2018:

	<u>SKCC and subsidiaries</u>	<u>KPSC</u>	<u>CMP</u>	<u>SUNP</u>	<u>BMP</u>	<u>KMP</u>	<u>USP</u>	<u>Izhstal</u>
Operating	13,152	193	13,015	(264)	(1,891)	1,325	3,950	1,647
Investing	547	(97)	(76,283)	264	1,870	(1,003)	(1,163)	(89)
Financing	(13,651)	(99)	63,200	—	(169)	(322)	(2,829)	(1,604)
Increase (decrease) in cash and cash equivalents, net	<u>48</u>	<u>(3)</u>	<u>(68)</u>	<u>—</u>	<u>(190)</u>	<u>—</u>	<u>(42)</u>	<u>(46)</u>

Summarised cash flow information for the year ended December 31, 2017:

	<u>SKCC and subsidiaries</u>	<u>KPSC</u>	<u>CMP</u>	<u>SUNP</u>	<u>BMP</u>	<u>KMP</u>	<u>USP</u>	<u>Izhstal</u>
Operating	3,434	112	8,036	(211)	(1,221)	500	560	751
Investing	8,008	(38)	(2,950)	210	1,477	(329)	949	73
Financing	(11,445)	(45)	(4,826)	—	(323)	(172)	(1,590)	(755)
(Decrease) increase in cash and cash equivalents, net	<u>(3)</u>	<u>29</u>	<u>260</u>	<u>(1)</u>	<u>(67)</u>	<u>(1)</u>	<u>(81)</u>	<u>69</u>

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Summarised cash flow information for the year ended December 31, 2016:

	SKCC and subsidiaries	KPSC	CMP	SUNP	BMP	KMP	USP	Izhstal
Operating	14,923	707	14,900	806	(491)	86	2,119	987
Investing	25,989	(554)	(8,035)	(806)	398	310	(1,226)	(33)
Financing	(41,114)	200	(6,418)	—	151	(396)	(839)	(949)
(Decrease) increase in cash and cash equivalents, net	(202)	353	447	—	58	—	54	5

8. Investments in associates

Investments in associates comprised of:

Investee	Percent of shares held at		Investment carrying value at	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
Mechel Somani Carbon (Mining segment)	—	51%	—	—
TPTU (Mining segment)	40%	40%	189	184
TRMZ (Mining segment)	25%	25%	104	99
Total investments in associates			293	283

TPTU (Tomusinskiy Transportation Management Center) shares are owned by SKCC. The core business is provision of transportation services. TRMZ (Tomusinskiy Auto Repair Shop) shares are owned by SKCC. TRMZ provides repair services.

The following table shows movements in the investments in associates:

	Mechel Somani Carbon Private Limited (Mining segment)	TPTU (Mining segment)	TRMZ (Mining segment)	Total
December 31, 2015	44	157	83	284
Share of (loss) profit	—	18	7	25
Provision for impairment of investments	(42)	—	—	(42)
Exchange differences	(2)	—	—	(2)
December 31, 2016	—	175	90	265
Share of profit	—	9	9	18
December 31, 2017	—	184	99	283
Share of profit	—	5	5	10
December 31, 2018	—	189	104	293

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9. Related party disclosures

Note 1 provides information about the Group's structure, including details of the subsidiaries and the holding company. The following table provides the total amount of transactions that have been entered into with the related parties in 2018, 2017 and 2016.

	2018			2017			2016		
	Purchases	Sales	Other loss (income)	Purchases	Sales	Other loss (income)	Purchases	Sales	Other loss (income)
Associates	121	103	(33)	230	134	(6)	200	117	(11)
Controlling shareholders and entities under control of the Group's Controlling shareholders	280	52	(9)	267	50	(33)	278	45	41
Total	401	155	(42)	497	184	(39)	478	162	30

As of December 31, 2018 and 2017, the Group had the following balances in settlement with related parties:

	December 31, 2018			December 31, 2017		
	Financial assets from	Financial liabilities to	Total outstanding, net	Financial assets from	Financial liabilities to	Total outstanding, net
Associates	7	(13)	(6)	16	(23)	(7)
Controlling shareholders and entities under control of the Group's Controlling shareholders	50	(500)	(450)	47	(35)	12
Total	57	(513)	(456)	63	(58)	5

(a) Transactions with associates

The Group's associates provide to the Group's subsidiaries transportation and auto repair services. During the year ended December 31, 2018, 2017 and 2016, the Group purchased from its associates transportation services in the amount of RUB 71 million, RUB 98 million and RUB 114 million, respectively, and repair services in the amount of RUB 50 million, RUB 132 million and RUB 86 million, respectively.

(b) Controlling shareholders and entities under control of the Group's Controlling shareholders

As of December 31, 2018 and 2017, the amounts of accounts receivable fully covered by the allowance for expected credit losses included amounts receivable of RUB 24,391 million and RUB 24,391 million, respectively, described below. In December 2013, the Group, related party (an entity wholly owned by the Controlling Shareholder) and the former Estar metallurgical plants (hereinafter referred to as "metallurgical plants") signed an assignment agreement. Under that agreement, the Group assigned to its related party the right to collect amounts due from the metallurgical plants, and the related party is to repay this amount to the Group through November 2017. In November 2017, the Group extended the terms of repayment through 2022. The amount of receivables and allowance for expected credit losses have been reclassified to Non-current financial assets (Note 13).

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The outstanding cash balance in Coalmetbank, entity under control of the Group's controlling shareholders, was RUB 703 million and RUB 1,217 million as of December 31, 2018 and December 31, 2017, respectively.

(c) Compensation to key management personnel

The total compensation to key management personnel was included in general and administrative expenses in the consolidated statement of profit (loss) and other comprehensive income and consisted of the short-term employee benefits in the amount of RUB 561 million, RUB 613 million and RUB 543 million in the year ended December 31, 2018, 2017 and 2016, respectively. There are no share-based payments to key management personnel. The Group's directors and executive officers are also provided with voluntary medical insurance and the use of wireless services.

10. Fair value measurement

Set out below is a comparison by class of the carrying amounts and fair value of the Group's financial liabilities that are carried in the consolidated financial statements:

		<u>December 31, 2018</u>		<u>December 31, 2017</u>	
	<u>Level</u>	<u>Carrying amount</u>	<u>Fair value</u>	<u>Carrying amount</u>	<u>Fair value</u>
Financial liabilities measured at amortised cost					
Loans and borrowings:					
— Floating rate loans and borrowings	3	384,608	356,444	402,024	355,794
— Bonds	1	11,195	10,876	14,759	13,984
— Fixed rate loans and borrowings	3	23,029	21,852	23,110	20,505
Other non-current financial liabilities (Note 11.4)	3	44,510	40,528	40,916	33,854
Financial liabilities measured at fair value					
Other current financial liabilities (Note 11.5)	2	—	—	734	734
Total		463,342	429,700	481,543	424,871

The fair value of loans and borrowings was calculated based on the present value of future principal and interest cash flows, discounted at the Group's interest rates adjusted for risk premium at the reporting dates (Level 3).

Management assessed that the fair values of cash and short-term deposits, trade receivables, trade payables, bank overdrafts and other current financial liabilities approximate their carrying amounts largely due to the short-term maturities of these instruments.

As of December 31, 2018 and 2017, trade receivables of RUB 1,938 million and RUB 1,348 million arising from provisionally priced contracts were measured at fair value through profit or loss upon recognition (level 2).

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

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11. Financial assets and financial liabilities

11.1 Financial liabilities: loans and borrowings

The Group has the following principal and interest amounts outstanding for loans and bonds:

	December 31, 2018		December 31, 2017	
	Interest rate, %	Amount of outstanding debt	Interest rate, %	Amount of outstanding debt
Short-term borrowings and current portion of long-term debt				
In Russian rubles				
Banks and financial institutions	9.3-9.6	3,634	9.3-12	2,410
Corporate lenders	6.7	10	6.7	65
Weighted average interest rate for the period	9.4		11.9	
In euro				
Banks and financial institutions	1.3-2.8	580	—	—
Corporate lenders	3.0	22	—	2
Weighted average interest rate for the period	1.5		—	
Current portion of long-term debt	—	398,171	—	378,063
Interest payable	—	7,749	—	20,420
Fines and penalties on overdue amounts	—	2,128	—	21,573
Total short-term borrowings and current portion of long-term debt		412,294		422,533
	December 31, 2018		December 31, 2017	
	Interest rate, %	Amount of outstanding debt	Interest rate, %	Amount of outstanding debt
Long-term debt				
In Russian rubles				
Banks and financial institutions	5.0-10.0	242,499	5.0-15.0	253,421
Bonds issue	8.0-12.3	10,979	8.0-14.0	14,459
Corporate lenders	6.7	73	6.7	5
Weighted average interest rate for the period	9.3		9.5	
In U.S. dollars				
Banks and financial institutions	3.9-9.9	54,719	2.2-8.9	102,040
Corporate lenders	3.0	138		—
Weighted average interest rate for the period	8.6		8.3	
In euro				
Banks and financial institutions	0.8-7.0	96,301	0.8-7.0	25,498
Weighted average interest rate for the period	4.8		2.7	
Current part of long-term loans and borrowings		(398,171)		(378,063)
Total long-term debt		6,538		17,360

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Aggregate scheduled maturities of the debt outstanding as of December 31, 2018 were as follows:

Payable by	
On demand	406,077
2019 (current portion)	6,217
2020	3,972
2021	2,430
2022	16
2023	88
Thereafter	32
Total	<u>418,832</u>

The unused portion under all credit facilities as of December 31, 2018 and 2017 was RUB 573 million and RUB 475 million, respectively.

The outstanding balances of principal amount of short-term and long-term debt by denominated currencies and major banks as of December 31, 2018 and 2017 were as follows:

Short-term and long-term debt	December 31, 2018	December 31, 2017
Russian ruble-denominated		
Gazprombank	142,635	148,238
VTB	73,416	72,570
Sberbank	25,723	26,459
Bonds	10,979	14,459
Eximbank of Russia	3,305	3,049
Uralsib	—	2,214
Eurasian Development Bank	—	517
Raiffeisen Bank	—	139
Other	1,137	2,715
Total	<u>257,195</u>	<u>270,360</u>
U.S. dollar-denominated		
Sberbank	23,147	14,626
BNP	10,759	8,894
VEB	8,794	10,090
VTB	7,573	6,172
MCB	4,037	4,096
Pre-export facility	7	57,829
Other	540	333
Total	<u>54,857</u>	<u>102,040</u>

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Short-term and long-term debt	December 31, 2018	December 31, 2017
Euro-denominated		
VTB	74,794	3,334
BNP	15,752	13,504
ING Bank	2,541	2,182
NatWest Markets	1,549	1,342
Commerzbank	1,317	875
Raiffeisen Bank	14	411
UniCredit Bank (former Bayerische Hypo-und-Vereinsbank)	—	2,970
Other	936	882
Total	96,903	25,500
Total short-term and long-term debt	408,955	397,900

(a) Pre-export facility agreement

In 2018, the Group refinanced existing pre-export credit facility by receiving a new euro-denominated loan from VTB in the amount of RUB 66,368 million (EUR 897 million at the date of transactions). The loan matures in April 2022. The outstanding balances of the pre-export credit facility as of December 31, 2018 and 2017 were RUB 7 million (\$100 thousand at exchange rate as of December 31, 2018) and RUB 57,829 million (\$1,003,964 thousand at exchange rate as of December 31, 2017), respectively.

The finance income in the amount of RUB 12,854 million was recorded in the consolidated statements of profit (loss) and other comprehensive income for the year ended December 31, 2018 as a result of refinancing of pre-export credit facility.

(b) VTB facilities

The outstanding balances of the ruble-denominated facilities as of December 31, 2018 and 2017 were RUB 73,416 million and RUB 72,570 million, respectively, bearing interest at 9.3% p.a.

In December 2016, the Group signed amendments to the restructuring agreements and, in April 2017, VTB confirmed the restructuring terms under the credit facilities of Mechel PAO, CMP, SKCC and Yakutugol including an extension of the repayment grace period until 2020 and the final maturity until 2022 and annual interest rate at the level of the key rate of the Central Bank of the Russian Federation plus 1.5% for the ruble-denominated credit facilities. In accordance with the restructuring terms, the repayment of a RUB 30,000 million credit facility issued to Mechel PAO is made in equal installments within 36 months starting February 22, 2017 from the proceeds received from VTB under the credit facility issued to CMP².

In December 2016, the Group signed the prolongation agreement providing with the final maturity until April 2022 for the euro-denominated credit facility of MCAG in the amount of RUB 2,812 million

² Cash flows arising from settlement of VTB credit facilities were disclosed on a gross basis (as cash inflows and cash outflows within financing activities in the amount of RUB 5,000 million for the year ended December 31, 2018). All payments under the credit facility issued to Mechel PAO are made upon receipt of the respective proceeds from VTB under the credit facility issued to CMP.

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(44,068 thousand euro at the exchange rate as of December 31, 2016). The outstanding balances as of December 31, 2018 and 2017 were RUB 3,396 million and RUB 3,334 million, respectively.

As part of the restructuring requirement, in January 2017, the Group signed a call option agreement with VTB providing VTB with an option to acquire preferred shares of Mechel PAO (Note 11.5).

In April 2017, the U.S. dollar-denominated credit facilities of MTAG were transferred from Sberbank to VTB according to the assignment agreement between Sberbank and VTB. The outstanding balance of these credit facilities as of December 31, 2018 and 2017 was RUB 7,573 million and RUB 6,172 million, respectively, bearing interest at 9.4% p.a.

In 2018, the Group received a new euro-denominated loan from VTB bearing interest at 12M EURIBOR plus 5.5% p.a. in the amount of EUR 897 million (RUB 66,368 million at the date of transactions) in order to refinance the existing pre-export credit facilities in the amount of EUR 864 million (RUB 63,844 million at the date of transactions) and for other purposes in the amount of EUR 33 million (RUB 2,524 million at the date of transactions).

There were no overdue principal amount and overdue interest on VTB credit facilities as of December 31, 2018 and 2017. The fines and penalties on overdue amounts of nil and RUB 10,196 million were recorded in loans and borrowings in the consolidated statement of financial position as of December 31, 2018 and 2017, respectively. In October 2018, the Group fulfilled the terms of restructuring agreement signed in 2015. Consequently, finance income in the amount of RUB 12,101 million, including fines and penalties in the amount of RUB 9,878 million, was recognized in the consolidated statements of profit (loss) and other comprehensive income for the year ended December 31, 2018.

(c) Gazprombank facilities

The outstanding balances of the ruble-denominated facilities as December 31, 2018 and 2017 were RUB 142,635 million and RUB 148,238 million, respectively, bearing interest at 9.3-9.5% p.a.

In 2015, the Group signed restructuring agreements (became effective in 2016) and in April 2017, Gazprombank confirmed the restructuring terms of the credit facilities of SKCC, Yakutugol, CMP, Mechel Service, Mechel-Energo, BMP, Port Posiet, Mechel Coke and USP including an extension of the repayment grace period until 2020 and of the final maturity until 2022 and annual interest rate at the level of the key rate of the Central Bank of the Russian Federation plus 1.5% for the ruble-denominated credit facilities.

In March 2018, the Group fully repaid the overdue interest accrued prior to the credit facilities restructuring in 2016. Consequently, fines and penalties in the amount of RUB 7,323 million were recorded as finance income in the consolidated statements of profit (loss) and other comprehensive income for the year ended December 31, 2018.

As of December 31, 2018 and 2017, there were no overdue principal amount and overdue interest on Gazprombank credit facilities. The fines and penalties on overdue amounts of nil and RUB 7,323 million were recorded in loans and borrowings in the consolidated statement of financial position as of December 31, 2018 and 2017, respectively. The finance income in the amount of RUB 7,323 million was recorded in the consolidated statement of profit (loss) and other comprehensive income for the year ended December 31,

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2018 and fines and penalties in the amount of RUB 56 million and RUB 2,031 million were recorded as finance costs in the consolidated statement of profit (loss) and other comprehensive income for the year ended December 31, 2017 and 2016, respectively.

(d) Sberbank facilities

The outstanding balances of the ruble-denominated facilities as of December 31, 2018 and 2017 were RUB 25,723 million and RUB 26,459 million, respectively, bearing interest at 9.3% p.a.

In 2016, the Group signed restructuring agreements and amicable settlements agreement approved by the courts with Sberbank and, in April 2017, Sberbank confirmed the restructuring terms under the relevant credit facilities including an extension of the repayment grace period until 2020 and the final maturity until 2022 and annual interest rate at the level of the key rate of the Central Bank of the Russian Federation plus 1.5% for the ruble-denominated credit facilities and 3M LIBOR plus 7% for the U.S. dollar-denominated credit facilities.

In April 2017, the U.S. dollar-denominated credit facilities of MTAG were transferred from Sberbank to VTB according to the assignment agreement between Sberbank and VTB. The outstanding balances of the U.S. dollar-denominated facilities as of December 31, 2018 and 2017 were RUB 23,147 million (\$333,198 thousand at exchange rate as of December 31, 2018) and RUB 14,626 million (\$253,927 thousand at exchange rate as of December 31, 2017), respectively, bearing interest at 9.4% p.a.

As of December 31, 2018 and 2017, there were no overdue principal amount and overdue interest on Sberbank credit facilities. The fines and penalties on overdue amounts of RUB 506 million and RUB 1,872 million were recorded in loans and borrowings in the consolidated statement of financial position as of December 31, 2018 and 2017, respectively. The fines and penalties in the amount of nil, RUB 4 million and RUB 2,244 million were recorded as finance costs in the consolidated statement of profit (loss) and other comprehensive income for the year ended December 31, 2018, 2017 and 2016, respectively.

(e) VEB facility

In September 2017, the Group signed a new credit agreement, providing the Group with refinancing of existing credit facilities and the final maturity until April 2022. According to the agreement, VEB provided a credit facility in the amount of up to \$190 million to refinance existing credit facilities.

The Elgaugol's outstanding balances under VEB credit facility as of December 31, 2018 and 2017 were RUB 8,794 million (\$126,583 thousand at exchange rate as of December 31, 2018) and RUB 10,090 million (\$175,172 thousand at exchange rate as of December 31, 2017), respectively, bearing interest at 5.5% p.a.

As of December 31, 2018 and 2017, there were no overdue principal amount and overdue interest on VEB credit facilities. The use of proceeds under the facility is limited to the development of the Elga coal project.

There were no fines and penalties on overdue amounts recorded in loans and borrowings in the consolidated statement of financial position as of December 31, 2018.

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(f) Bonds

On July 30, 2009, Mechel PAO issued 5,000,000 ruble-denominated bonds in an aggregate principal amount of RUB 5,000 million. The coupon interest rate as of December 31, 2018 amounted to 10.5% p.a. The maturity date is July 15, 2021. The balance outstanding as of December 31, 2018 was RUB 969 million, including RUB 352 million classified as short-term debt and RUB 617 million classified as long-term debt.

On September 7, 2010, Mechel PAO placed two issues of 5,000,000 ruble-denominated bonds each in an aggregate principal amount of RUB 10,000 million. The coupon interest rate as of December 31, 2018 amounted to 12.25% p.a. The maturity date is February 25, 2020. The balance outstanding as of December 31, 2018 was RUB 2,589 million, including RUB 1,642 million classified as short-term debt and RUB 947 million classified as long-term debt.

On February 22, 2011, Mechel PAO placed two issues of 5,000,000 ruble-denominated bonds each in an aggregate principal amount of RUB 10,000 million. The coupon interest rate as of December 31, 2018 amounted to 8.0% p.a. The maturity date is February 9, 2021. The balance outstanding as of December 31, 2018 was RUB 820 million and was classified as long-term debt that should be paid in 2021.

On June 9, 2011, Mechel PAO placed two issues of 5,000,000 ruble-denominated bonds each in an aggregate principal amount of RUB 10,000 million. The coupon interest rate as of December 31, 2018 amounted to 10.6% p.a. The maturity date is May 27, 2021. The balance outstanding as of December 31, 2018 was RUB 4,132 million, including RUB 1,622 million classified as short-term debt and RUB 2,510 million classified as long-term debt.

On June 14, 2011, Mechel PAO issued 5,000,000 ruble-denominated bonds in an aggregate principal amount of RUB 5,000 million. The coupon interest rate as of December 31, 2018 amounted to 10.6% p.a. The maturity date is June 1, 2021. The balance outstanding as of December 31, 2018 was RUB 2,469 million, including RUB 988 million classified as short-term debt and RUB 1,481 million classified as long-term debt.

(g) Other loans

Other loans represent Russian ruble, U.S. dollar and euro-denominated long-term and short-term loans bearing interest at 0.8%-10.9% p.a. The outstanding balance under other loan agreements amounted to RUB 41,887 million and RUB 44,123 million as of December 31, 2018 and 2017, respectively.

As of December 31, 2018, the Group's overdue principal amount and overdue interest on other loans amounted to RUB 25,209 million and RUB 1,726 million, respectively, as of December 31, 2017 — RUB 17,409 million and RUB 1,527 million, respectively. The fines and penalties on overdue amounts of RUB 1,622 million and RUB 2,182 million were recorded in loans and borrowings in the consolidated statement of financial position as of December 31, 2018 and 2017, respectively. The fines and penalties in the amount of RUB 858 million, RUB 1,038 million and RUB 642 million was recorded as finance costs in the consolidated statements of profit (loss) and other comprehensive income for the year ended December 31, 2018, 2017 and 2016, respectively.

In 2010-2017, the Group signed revolving credit agreements for working capital financing up to RUB 7,472 million with several banks. These revolving credit lines allow the Group to withdraw, repay and re-draw in the agreed amounts, timing and number of times until the arrangement expires. Borrowings bear interest at 5.3-7.0% p.a.

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(h) Pledges

In order to secure bank financings, the Group pledged shares in certain key subsidiaries, including 100% - 1 share of Yakutugol, 95% + 4 shares of SKCC, 91.66% of CMP, 50% + 2 shares of common shares of BMP, 80% + 3 shares of KMP, 87.5%+3 shares of Mechel Mining, 75% + 2 shares of USP, 33.33% + 1 share of common shares of Izhtal, 25% + 1 share of Port Posiet, 50.99% of registered capital of Elgaugol, 25% of registered capital of Mecheltrans, 100% of registered capital of Fincom-invest OOO, 25% of registered capital of BFP, 25% of registered capital of Port Temryuk, 1.99% of registered capital of Mecheltrans Vostok OOO, 1.99% of registered capital of Elga-road as of December 31, 2018.

As of December 31, 2018 and 2017, the carrying value of property, plant and equipment pledged under the loan agreements amounted to RUB 117,370 million and RUB 121,926 million, respectively (Note 16). Carrying value of inventories pledged under the loan agreements amounted to RUB 3,472 million and RUB 2,450 million as of December 31, 2018 and 2017, respectively. Accounts receivable pledged as of December 31, 2018 and 2017 amounted to RUB 1,044 million and RUB 372 million, respectively. Additionally, CMP pledged its rights to receive future payments (revenue) related to the contract with Russian Railways JSC in the amount of RUB 6,947 million (\$100 million).³

(i) Covenants

The Group's loan agreements contain a number of covenants and restrictions, which include, but not limited to, financial ratios, minimum value of shareholders' equity and certain cross-default provisions. The covenants also include, among other restrictions, limitations on: (1) raising of additional borrowings; (2) amount of dividends in common and preferred shares; and (3) amounts that can be spent for capital expenditures, new investments and acquisitions. Covenant breaches if not waived generally permit lenders to demand accelerated repayment of principal and interest.

The Group was required to comply with the following ratios under the most significant loan agreements with the Russian state-owned banks as of December 31, 2018⁴:

<u>Restrictive covenants</u>	<u>Requirement</u>	<u>Actual as of December 31, 2018</u>
Mechel's EBITDA to Net Interest Expense	Shall not be less than 1.75:1.0	1.79:1.0
Mechel's EBITDA to Consolidated Financial Expense	Shall not be less than 1.75:1.0	1.82:1.0
Mechel's Net Debt to EBITDA	Shall not exceed 6.00:1.0	6.39:1.0
Mechel's Total Debt to EBITDA	Shall not exceed 4.50:1.0	6.25:1.0
Mechel's Cash flow from operating activities to EBITDA . . .	Shall not be less than 0.80:1.0	0.90:1.0
Mechel's EBITDA to Revenue	Shall not be less than 0.20:1.0	0.24:1.0

As of December 31, 2018, the Group was not in compliance with several covenants set by the loan agreements with the Russian state-owned banks (such as Net Debt to EBITDA, Total Debt to EBITDA ratios and non-financial covenants). Also, the Group was not in compliance with covenants contained in the loan

³ CMP's accounts receivable from Russian Railways JSC as of December 31, 2018 amounted to RUB 834 million.

⁴ Net Debt and Total Debt are calculated according to the respective definitions set by the credit agreements. Generally, Total Debt includes outstanding loans, finance lease, bonds and other finance liability balances; Net Debt is equal to Total Debt less cash and cash equivalents.

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agreements with foreign banks (such as Net Borrowings to EBITDA ratio, EBITDA to Net Interest Expense ratio and targeted amount of Adjusted Shareholder's Equity). There was a default on payments of principal and interest in the amount of RUB 25,215 million and RUB 1,728 million, respectively, which is represented primarily by ECA-covered loans (represented by the credit facilities of BNP, ING, NatWest, Commerzbank and other international banks). As a result, the long-term debt of RUB 361,328 million was reclassified to short-term liabilities as of December 31, 2018.

11.2 Financial instruments risk management objectives and policies

The Group is exposed to foreign currency risk, credit risk and liquidity risk. Management reviews and agrees policies for managing each of these risks, which are summarised below.

Liquidity risk

Liquidity risk is the risk that arises when the maturity of assets and liabilities does not match. An unmatched position potentially enhances profitability, but can also increase the risk of losses. The Group has procedures with the objective of minimizing such losses such as maintaining sufficient cash and other highly liquid current assets to meet its liabilities as and when they fall due.

As of December 31, 2018, the Group was in breach of a number of financial and non-financial covenants contained in the Group's loan agreements which led to cross-defaults under other loan and finance lease agreements, permitting the respective lenders under such other facilities to accelerate the payment of principal and interest under their loans.

The following tables show the remaining contractual maturities at the reporting date of the Group's non-derivative financial liabilities, which are based on contractual undiscounted cash flows (including interest payment computed using contractual rates, or if floating, based on rates current at the reporting date) and the earliest the Group can be required to pay.

	Maturity						Total
	On demand	Within 1 year	More than 1 year but less than 2 years	More than 2 years but less than 3 years	More than 3 years but less than 4 years	More than 4 years	
At December 31, 2018							
Loans and borrowings, including							
interest payable	406,337	7,185	4,520	2,550	16	119	420,727
Finance lease liabilities	1,664	5,186	908	886	745	350	9,739
Trade and other payables	15,891	15,270	352	186	16	—	31,715
Other financial liabilities	—	—	—	55,742	—	—	55,742

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	Maturity						
	On demand	Within 1 year	More than 1 year but less than 2 years	More than 2 years but less than 3 years	More than 3 years but less than 4 years	More than 4 years	Total
At December 31, 2017							
Loans and borrowings, including							
interest payable	416,316	9,959	6,678	7,293	5,215	1,651	447,112
Finance lease liabilities	4,075	4,625	633	584	557	526	11,000
Trade and other payables	394	29,540	542	166	—	—	30,642
Other financial liabilities	—	869	—	—	55,905	—	56,774

Credit risk

Credit risk arises when a failure by counterparties to discharge their obligations could reduce the amount of future cash inflows from financial assets on hand at the reporting date.

The Group is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

Customer credit risk is managed by each subsidiary subject to the Group's established policy, procedures and control relating to customer credit risk management. Credit quality of a customer is assessed and individual credit limits are defined in accordance with this assessment. Outstanding customer receivables are regularly monitored.

The contractual credit period for sales of goods is about 30 days on average. No interest is charged on trade receivables.

An impairment analysis is performed at each reporting date on an individual basis for major customers. In addition, a large number of minor receivables are grouped into homogenous groups and assessed for impairment collectively. The calculation is based on actual incurred historical data.

The maximum exposure to credit risk arising from the Group's financial assets is presented as follows:

	December 31, 2018	December 31, 2017
Restricted cash (excluding cash on hand)	51	20
Trade and other receivables	17,718	18,825
Other financial assets	533	795
— <i>Promissory notes</i>	212	210
— <i>Loans issued</i>	305	571
— <i>Bonds</i>	16	14
Total	18,302	19,640

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Foreign currency risk

Foreign currency risk is the risk that the value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchanges rates. This risk arises when commercial transactions and recognised assets and liabilities are denominated in a currency different from the Group's functional currencies.

The Group undertakes transactions denominated in foreign currencies and consequently is exposed to foreign currency risk. Approximately 25% of the Group's sales are denominated in U.S. dollars and 13% of the Group's sales are denominated in euro, 14% of the Group's borrowings are denominated in U.S. dollars and 24% of the Group's borrowings are denominated in euro. The Group does not have formal arrangements to mitigate foreign currency risk. However, management of the Group believes that the foreign currency risk is partly mitigated for the Group by the situation where approximately 38% of total sales of the Group are denominated in U.S. dollars and euros that reduces the negative impact of changes in exchange rates for the Group's borrowings and purchases denominated in foreign currencies, mostly in U.S. dollars.

The Group's exposure at the reporting date to foreign currency risk arising from recognised assets and liabilities denominated in a currency other than the functional currency of the entity to which they relate to is set out in the table below:

<u>Assets and liabilities denominated in U.S. dollars</u>	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Current assets	157	829
Trade and other receivables	27	111
Cash and cash equivalents	130	718
Current liabilities	(54,954)	(118,677)
Short-term loans and borrowings	(51,732)	(112,277)
Trade and other payables	(3,222)	(5,614)
Short-term finance lease liabilities	—	(786)
 <u>Assets and liabilities denominated in euro</u>	 <u>December 31, 2018</u>	 <u>December 31, 2017</u>
Current assets	812	746
Trade and other receivables	510	711
Cash and cash equivalents	302	35
Non-current liabilities	(219)	(88)
Long-term finance lease liabilities	(219)	(88)
Current liabilities	(101,294)	(27,399)
Short-term loans and borrowings	(98,285)	(25,304)
Trade and other payables	(2,953)	(2,064)
Short-term finance lease liabilities	(56)	(31)

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Sensitivity analysis

The table below demonstrates the Group's sensitivity to a devaluation of the Russian ruble against U.S. dollar and euro which management believes is an appropriate measure in the current market conditions and which would impact its operations:

	Change in U.S. dollar to Russian ruble exchange rate	Effect ((decrease)/ increase) on profit before tax	Change in Euro to Russian ruble exchange rate	Effect ((decrease)/ increase) on profit before tax
2016	+20%	(24,811)	+20%	(4,654)
	-20%	24,811	-20%	4,654
2017	+10%	(11,785)	+10%	(2,674)
	-10%	11,785	-10%	2,674
2018	+14%	(7,672)	+14%	(14,098)
	-14%	7,672	-14%	14,098

Interest rate risk

Interest rate risk is the risk that changes in floating interest rates adversely impacts the financial results of the Group. As of December 31, 2018 and 2017, the share of the borrowings with floating rates in the total amount of the borrowings were 95% (incl. Mosprime – 0%, key rate of the Central Bank of the Russian Federation – 62%, LIBOR, EURIBOR and others – 33%) and 95% (incl. Mosprime – 0.03%, key rate of the Central Bank of the Russian Federation – 66%, LIBOR, EURIBOR and others – 29%), respectively.

The table below demonstrates the Group's sensitivity to the change of floating rates.

	Increase/decrease in Mosprime and the key rate of the Central Bank of Russian Federation (%)	Effect ((decrease)/ increase) on profit before tax	Increase/ decrease in LIBOR (%)	Effect ((decrease)/ increase) on profit before tax	Increase/ decrease in EURIBOR (%)	Effect ((decrease)/ increase) on profit before tax
2016	+2.00%	(4,943)	+0.60%	(736)	+0.12%	(28)
	-4.00%	9,887	-0.08%	98	-0.08%	19
2017	+1.00%	(2,744)	+0.48%	(500)	+0.04%	(8)
	-2.00%	5,488	-0.24%	250	-0.08%	16
2018	+0.75%	(1,922)	+0.50%	(226)	+0.20%	(190)
	-1.00%	2,563	-0.15%	68	-0.01%	9

11.3 Other current financial assets

In November 2011, the owners of the metallurgical plants (refer to Note 9(b)) and the Group entered into a loan agreement pursuant to which a loan of \$944,530 thousand (RUB 28,433 million at exchange rate as of

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November 10, 2011) was granted by the Group. The loan consists of several tranches which bear interest at the range of 1-8.5% p.a. To secure the loan, shares in the major metallurgical plants (or shares in parent companies of such metallurgical plants) were pledged. The proceeds from this loan were used by the metallurgical plants to repay most of the accounts receivable owed to the Group. According to the loan agreement, in the event that the loan is not repaid at maturity (September 30, 2012), the Group was entitled to enforce the pledge over the pledged metallurgical plants assets and thereby take control of these assets subject to approval from the Russian Federal Antimonopoly Service. The Group has not taken possession of assets provided as collateral because these entities are under the bankruptcy procedure and burdened with substantial amount of debt.

The Group evaluates the recoverability of the loan based on the fair value of the pledged assets. As of December 31, 2018, 2017 and 2016, this loan in the amount of RUB 10,240 million, RUB 9,800 million and RUB 50,320 million, respectively, was fully provided for as the fair value of the pledged assets was nil as at these dates. In 2017, this loan was partially written off in the amount of \$664,556 thousand (RUB 39,297 million as at exchange rate at March 14, 2017) due to liquidation of certain debtors.

11.4 Other non-current financial liabilities

The Group recognised other non-current financial liabilities under the put option of Gazprombank (see Note 6) in the amount of RUB 44,056 million as of December 31, 2018 and RUB 40,260 million as of December 31, 2017 (estimated at the present value of the consideration to be transferred upon the exercise of the put option discounted at the key rate of the Central Bank of the Russian Federation plus 2%). The respective finance cost was recognised in the consolidated statement of profit (loss) and other comprehensive income in the amount of RUB 3,796 million, RUB 4,062 million and RUB 1,898 million for 2018, 2017 and 2016, respectively (Note 25.5).

11.5 Other current financial liabilities

As a part of the restructuring requirements of the credit facility with VTB, in January 2017, the Group signed a call option agreement with VTB providing VTB with an option to acquire a 5% stake (6,937,846 preferred shares) of the preferred shares of the Mechel PAO at a price of 47.3682 rubles per share or to pay cash to VTB in the amount calculated as a difference between the weighted average market value of preferred shares for the last six months from the date of the call from the VTB and the price of 47.3682 rubles per share or combination of these two options. Until the execution of the call option 6,937,846 preferred shares were pledged.

At the date of the call option agreement, the Group recognised the financial liability at fair value in the amount of RUB 815 million. The corresponding amount was capitalized as restructuring fees within loans and borrowings considering this call option agreement as part of the restructuring requirement.

In April 2017, VTB notified the Group of its decision to exercise the option. The Group has requested to extend the commencement day of the option period by one year till April 1, 2018. On August 9, 2017, the Group and VTB signed an amendment agreement postponing the option period start date till April 1, 2018, removing an option to acquire 5% of preferred shares and granting VTB the right to receive only a cash consideration in the amount equal to the higher of RUB 620 million less agreed payments or the amount calculated as a difference between the weighted average market value of preferred shares for the last six months from the date of the call from VTB and the price of 47.3682 rubles per share multiplied by the number of option shares.

On August 10, 2018, VTB notified the Group of its decision to exercise the option and receive cash of RUB 442 million. On August 22, 2018, RUB 442 million has been paid by the Group in full.

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11.6 Finance lease liabilities

The Group has finance leases for various items of plant and machinery. The Group's obligations under finance leases are not secured. Future minimum lease payments under finance leases together with the present value of the net minimum lease payments were as follows:

	Minimum payments		Present value of payments	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
Payable in 1 year	6,849	8,700	5,880	7,476
Payable in 2 years	908	633	702	457
Payable in 3 years	886	584	751	458
Payable in 4 years	745	557	680	481
Payable in 5 years and thereafter	350	526	280	482
Total minimum lease payment	9,738	11,000	8,293	9,354
Less amounts representing finance charges	(1,445)	(1,646)	—	—
Present value of finance lease liabilities	8,293	9,354	8,293	9,354
Current portion of finance lease liabilities			5,880	7,476
Non-current portion of finance lease liabilities			2,413	1,878

Discount rate used for the calculation of the present value of minimum lease payments equals the implicit rate for the lessor and varies on different groups of equipment from 7.2% p.a. to 11.4% p.a. (U.S. dollar-denominated contracts), from 8.1% p.a. to 10.4% p.a. (euro-denominated contracts) and from 8.6% p.a. to 34.7% p.a. (Russian ruble-denominated contracts). Interest expense charged to the consolidated statements of profit (loss) and other comprehensive income in 2018, 2017 and 2016 amounted to RUB 1,104 million, RUB 1,230 million and RUB 1,500 million, respectively.

The Group's finance lease contracts contain a number of covenants and restrictions, which include, but not limited to, compliance with payment schedule and certain cross-default provisions. As of December 31, 2018 and 2017, the Group was not in compliance with certain Group's covenants under a number of loan agreements. There was also a breach of restrictive covenants on overdue principal amount of nil and 158 million as of December 31, 2018 and 2017, respectively. As a result, the long-term finance lease liability of RUB 1,320 million and RUB 3,898 million was reclassified to short-term finance lease liabilities due to covenant violations as of December 31, 2018 and 2017, respectively.

The total amount of commitments under the signed lease contracts as of December 31, 2018 and 2017 is equal to nil and RUB 75 million, respectively.

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12. Inventories

	December 31, 2018	December 31, 2017
Raw materials	14,980	15,050
Work in progress	8,681	6,990
Finished goods and goods for resale	19,762	15,950
Total inventories at the lower of cost and net realisable value	43,423	37,990

During 2018, RUB 1,162 million (2017: RUB 470 million, 2016: RUB 364 million) was recognised as an expense within cost of sales for inventories carried at net realisable value. The amount of inventories recognised as an expense during the period was RUB 115,126 million for 2018 (2017: RUB 102,613 million, 2016: RUB 95,019 million).

13. Trade and other receivables

	December 31, 2018	December 31, 2017
Trade receivables, including from contracts with . . .	24,039	23,878
— <i>domestic customers</i>	19,037	19,064
— <i>foreign customers</i>	5,002	4,814
Less allowance for expected credit losses on trade receivables	(6,749)	(5,630)
Total trade receivables, net	17,290	18,248
Other receivables	3,410	3,967
Less allowance for expected credit losses on other receivables	(3,088)	(3,453)
Total other receivables, net	322	514
Total accounts receivable, net	17,612	18,762

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Set out below is the information about the credit risk exposure on the Group's trade receivables by ageing as of December 31, 2018 and 2017:

	December 31, 2018		December 31, 2017	
	Trade receivables	Expected credit losses	Trade receivables	Expected credit losses
Current	14,734	(659)	14,930	(333)
=<30 days	2,178	(106)	2,361	(60)
31-60 days	497	(62)	521	(55)
61-90 days	199	(57)	205	(42)
91-180 days	334	(142)	407	(102)
181-365 days	579	(377)	584	(302)
>1 year	5,518	(5,346)	4,870	(4,736)
Total trade receivables	24,039	(6,749)	23,878	(5,630)

The Group does not hold any collateral over these balances.

The movements in the allowance for expected credit losses on trade and other receivables were as follows:

	Total
At December 31, 2015	(40,218)
Charge for the year	(613)
Utilised amounts	6,637
Disposal of subsidiaries	11
Exchange rate difference	242
At December 31, 2016	(33,941)
Charge for the year	(343)
Utilised amounts	603
Reclassified to non-current financial assets (Note 9)	24,391
Exchange rate difference	207
At December 31, 2017	(9,083)
Charge for the year	(791)
Utilised amounts	575
Exchange rate difference	(538)
At December 31, 2018	(9,837)

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14. Other current and non-current assets

	December 31, 2018	December 31, 2017
Other current assets		
Prepayments and advances	4,778	4,049
Input VAT and other taxes recoverable	3,758	3,413
Other current assets	137	127
Total prepayments and other current assets	8,673	7,589
	December 31, 2018	December 31, 2017
Other non-current assets		
Deferred assets from sale and lease back	241	273
Other non-current assets	389	485
Total other non-current assets	630	758

Generally in Russia, VAT related to sales is payable to the tax authorities on an accrual basis based upon invoices issued to the customer. VAT incurred on purchases may be reclaimed, subject to certain restrictions, against VAT related to sales.

Provision for advances issued of RUB 89 million, reversal of provision of RUB 11 million and provision of RUB 185 million were included in Administrative and other operating expenses in the consolidated statement of profit (loss) and other comprehensive income for the year ended December 31, 2018, 2017 and 2016.

15. Cash and cash equivalents

	December 31, 2018	December 31, 2017
Cash on hand	8	7
Cash at banks, including		
— in Russian rubles	360	617
— in U.S. dollars	766	1,377
— in euro	596	305
— in other currencies	164	146
Total cash and cash equivalents	1,894	2,452
Less allowance for expected credit losses	(91)	—
Total cash and cash equivalents, net	1,803	2,452

For the purpose of the consolidated statement of cash flows, bank overdrafts are deducted from cash and cash equivalents in the amount of RUB 1,423 million and RUB 1,229 million as of December 31, 2018 and 2017, respectively. As of December 31, 2018 and 2017, the Group had short-term deposits included in cash at banks of RUB 494 million and 1,062, respectively. As of December 31, 2018 and 2017, the Group had available RUB 573 million and RUB 475 million, respectively, of undrawn committed borrowing facilities.

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Reconciliation between the changes in liabilities arising from financing activities including both changes arising from cash flows and non-cash changes:

	Loans and borrowings	Finance lease liabilities	Deferred payments for acquisition of assets	Put option of Gazprombank	Other current financial liabilities	Deferred consideration paid for the acquisition of subsidiaries in prior periods
At December 31, 2015	495,982	13,988	—	—	—	14,799
Cash flows	(70,084)	(5,217)	—	34,300	—	(4,732)
Foreign exchange movement	(25,303)	(351)	—	—	—	(2,035)
Other changes, including interest	45,214	2,176	1,052	1,898	—	—
At December 31, 2016	445,809	10,596	1,052	36,198	—	8,032
Cash flows	(42,480)	(4,801)	(455)	—	—	(3,652)
Foreign exchange movement	(3,942)	(67)	—	—	—	(370)
Changes in fair value	—	—	—	—	(81)	—
Other changes, including interest	40,506	3,626	1,083	4,062	815	—
At December 31, 2017	439,893	9,354	1,680	40,260	734	4,010
Cash flows	(52,951)	(3,892)	(629)	—	(442)	(3,968)
Foreign exchange movement	24,167	83	—	—	—	339
Changes in fair value	—	—	—	—	(292)	—
Other changes, including interest	7,723	2,748	379	3,796	—	—
At December 31, 2018	418,832	8,293	1,430	44,056	—	381

The table above does not include dividends paid of RUB 1,394 million, RUB 978 million and RUB 7 million, acquisition of non-controlling interests in subsidiaries of RUB nil million, RUB 3,358 million and RUB nil million and fines and penalties on overdue finance leases of RUB 10 million, RUB 13 million and RUB 129 million for the year ended December 31, 2018, 2017 and 2016, respectively. The amounts presented in other changes are primarily attributable to interest accrued of RUB 36,660 million, RUB 41,528 million and RUB 45,664 million for the year ended December 31, 2018, 2017 and 2016, respectively (Note 25.5), and effect of restructuring of loans and finance leases of RUB 33,514 million, RUB 264 million and RUB 992 million for the year ended December 31, 2018, 2017 and 2016, respectively (Note 25.4).

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16. Property, plant and equipment

	<u>Land</u>	<u>Buildings and constructions</u>	<u>Operating machinery and equipment</u>	<u>Transportation vehicles</u>	<u>Other equipment</u>	<u>Construction- in-progress</u>	<u>Mining plant and equipment</u>	<u>Railway Ulak-Elga</u>	<u>Total</u>
Cost									
At December 31,									
2015	3,313	78,265	114,231	30,399	1,236	26,836	14,918	71,804	341,002
Additions	—	504	1,428	549	25	5,027	542	—	8,075
Change in rehabilitation provision	—	346	—	—	—	—	(212)	—	134
Transfers	1	2,435	2,610	180	(209)	(8,393)	389	2,987	—
Disposals	(75)	(3,050)	(3,266)	(1,717)	(169)	(2,330)	(536)	—	(11,143)
Exchange differences	(190)	(841)	(675)	(120)	(61)	(6)	(1)	—	(1,894)
At December 31,									
2016	3,049	77,659	114,328	29,291	822	21,134	15,100	74,791	336,174
Additions	6	363	1,531	3,124	45	5,767	1,576	—	12,412
Change in rehabilitation provision	—	141	—	—	—	—	(58)	—	83
Transfers	—	2,934	3,360	190	148	(7,011)	362	17	—
Disposals	(12)	(432)	(1,713)	(1,795)	(28)	(245)	(3)	—	(4,228)
Exchange differences	52	148	132	21	9	—	—	—	362
At December 31,									
2017	3,095	80,813	117,638	30,831	996	19,645	16,977	74,808	344,803
Additions	9	10	2,423	2,048	83	6,851	50	—	11,474
Change in rehabilitation provision	—	(187)	—	—	—	—	(102)	—	(289)
Transfers	1	487	2,750	251	97	(4,099)	119	394	—
Disposals	(255)	(649)	(1,734)	(1,410)	(32)	(509)	(136)	—	(4,725)
Exchange differences	91	277	251	40	28	—	—	—	687
At December 31,									
2018	2,941	80,751	121,328	31,760	1,172	21,888	16,908	75,202	351,950

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	<u>Land</u>	<u>Buildings and constructions</u>	<u>Operating machinery and equipment</u>	<u>Transportation vehicles</u>	<u>Other equipment</u>	<u>Construction- in-progress</u>	<u>Mining plant and equipment</u>	<u>Railway Ulak-Elga</u>	<u>Total</u>
Depreciation and impairment At December 31,									
2015	(59)	(35,577)	(68,519)	(15,416)	(933)	(932)	(3,388)	(334)	(125,158)
Depreciation									
charge	—	(3,774)	(7,760)	(2,613)	(50)	—	(133)	(247)	(14,577)
Disposals	—	3,160	3,045	1,272	198	238	437	—	8,350
Reversal of impairment/ (impairment) ..	(224)	(260)	(215)	(98)	—	(887)	(16)	—	(1,700)
Exchange differences	<u>32</u>	<u>546</u>	<u>550</u>	<u>86</u>	<u>52</u>	<u>(1)</u>	<u>(1)</u>	<u>—</u>	1,264
At December 31,									
2016	(251)	(35,905)	(72,899)	(16,769)	(733)	(1,582)	(3,101)	(581)	(131,821)
Depreciation									
charge	—	(3,747)	(7,315)	(2,222)	(72)	—	(245)	(235)	(13,836)
Disposals	—	302	1,611	1,720	22	127	1	7	3,790
Reversal of impairment/ (impairment) ..	(37)	(876)	(2,174)	(454)	(5)	(278)	(1,067)	—	(4,891)
Exchange differences	<u>(4)</u>	<u>(49)</u>	<u>(95)</u>	<u>(13)</u>	<u>(9)</u>	<u>—</u>	<u>—</u>	<u>—</u>	(170)
At December 31,									
2017	(292)	(40,275)	(80,872)	(17,738)	(797)	(1,733)	(4,412)	(809)	(146,928)
Depreciation									
charge	—	(3,550)	(7,273)	(2,253)	(99)	—	(180)	(279)	(13,634)
Disposals	223	287	1,593	1,317	50	47	170	—	3,687
Impairment	(43)	(319)	(1,065)	(709)	(15)	(536)	(2,153)	—	(4,840)
Exchange differences	<u>(3)</u>	<u>(110)</u>	<u>(191)</u>	<u>(28)</u>	<u>(24)</u>	<u>—</u>	<u>—</u>	<u>—</u>	(356)
At December 31,									
2018	(115)	(43,967)	(87,808)	(19,411)	(885)	(2,222)	(6,575)	(1,088)	(162,071)
Net book value									
At December 31,									
2015	<u>3,254</u>	<u>42,688</u>	<u>45,712</u>	<u>14,983</u>	<u>303</u>	<u>25,904</u>	<u>11,530</u>	<u>71,470</u>	<u>215,844</u>
At December 31,									
2016	<u>2,798</u>	<u>41,754</u>	<u>41,429</u>	<u>12,522</u>	<u>89</u>	<u>19,552</u>	<u>11,999</u>	<u>74,210</u>	<u>204,353</u>
At December 31,									
2017	<u>2,803</u>	<u>40,538</u>	<u>36,766</u>	<u>13,093</u>	<u>199</u>	<u>17,912</u>	<u>12,565</u>	<u>73,999</u>	<u>197,875</u>
At December 31,									
2018	<u>2,826</u>	<u>36,784</u>	<u>33,520</u>	<u>12,349</u>	<u>287</u>	<u>19,666</u>	<u>10,333</u>	<u>74,114</u>	<u>189,879</u>

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According to the results of the impairment analysis of non-current assets, impairment losses of RUB 4,840 million, RUB 4,891 million and RUB 1,700 million were recognised by the Group for the years ended December 31, 2018, 2017 and 2016, respectively (Note 18).

Assets under construction

As of December 31, 2018 and 2017, construction-in-progress included advances issued for acquisition of property, plant and equipment in the amounts of RUB 547 million and RUB 342 million, respectively.

Property pledged to the banks as security

Certain property, plant and equipment assets have been pledged to secure bank loans and borrowings granted to the Group:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Net book value	117,370	121,926

Finance leases

The Group leases operating machinery and equipment and transportation vehicles under a number of finance lease agreements. At the end of the term of the lease, the Group obtains ownership of the assets or has an option to purchase leased assets at a bargain price.

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Net book value — operating machinery and equipment	644	1,516
Net book value — transportation vehicles	9,469	9,690

Additions of operating machinery and equipment and transportation vehicles under finance lease during the year ended December 31, 2018 amounted to RUB 1,675 million (2017: RUB 2,295 million).

Capitalised borrowing costs

The amount of borrowing costs capitalised during the year ended December 31, 2018 was RUB 492 million (2017: RUB 621 million, 2016: RUB 1,015 million). The rate used to determine the amount of borrowing costs eligible for capitalisation was 8.55% (2017: 9.70%, 2016: 10.28 %), which is the average rate of the eligible borrowings.

Contractual commitments

As of December 31, 2018 and 2017, the total Group's contractual commitments to acquire property, plant and equipment excluding VAT amounted to RUB 11,801 million and RUB 16,435 million, respectively.

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17. Intangible assets

	<u>Goodwill</u>	<u>Mineral licenses</u>	<u>Other intangible assets</u>
Cost			
At December 31, 2015	<u>32,995</u>	<u>55,783</u>	<u>—</u>
Exchange differences	(93)	—	—
At December 31, 2016	<u>32,902</u>	<u>55,783</u>	<u>—</u>
Additions	—	—	880
Disposal	—	(165)	—
Exchange differences	(24)	—	—
At December 31, 2017	<u>32,878</u>	<u>55,618</u>	<u>880</u>
Additions	—	—	—
Disposal	—	—	—
Exchange differences	90	—	—
At December 31, 2018	<u>32,968</u>	<u>55,618</u>	<u>880</u>
Amortisation and impairment			
At December 31, 2015	<u>(11,617)</u>	<u>(17,266)</u>	<u>—</u>
Impairment	(2,930)	(572)	—
Amortisation	—	(1,846)	—
At December 31, 2016	<u>(14,547)</u>	<u>(19,684)</u>	<u>—</u>
Impairment	—	(1,190)	—
Amortisation	—	(1,504)	—
At December 31, 2017	<u>(14,547)</u>	<u>(22,378)</u>	<u>—</u>
Impairment	(2,382)	—	—
Amortisation	—	(1,172)	(36)
Disposal	—	—	—
Exchange differences	—	—	—
At December 31, 2018	<u>(16,929)</u>	<u>(23,550)</u>	<u>(36)</u>
Net book value			
At December 31, 2015	<u>21,378</u>	<u>38,517</u>	<u>—</u>
At December 31, 2016	<u>18,355</u>	<u>36,099</u>	<u>—</u>
At December 31, 2017	<u>18,331</u>	<u>33,240</u>	<u>880</u>
At December 31, 2018	<u>16,039</u>	<u>32,068</u>	<u>844</u>

In December 2017, the Group acquired the rights to connect to the power grid for providing the SKCC's power receiving equipment with an additional power capacity. These rights are recorded as other intangible assets of mining segment with a useful life of 25 years.

As of December 31, 2018 and 2017, the Group performed an impairment analysis of goodwill (Note 18).

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As of December 31, 2018 and 2017, the total Group's contractual commitments to acquire intangible assets excluding VAT amounted to RUB 110 million and RUB 134 million, respectively.

18. Impairment of goodwill and other non-current assets

As of December 31, 2018 and 2017, the Group performed an impairment analysis of goodwill and other non-current assets at the level of cash generating units (CGU). The Group considers the relationship between market capitalization and its book value, among other factors, when reviewing for indicators of impairment. Goodwill acquired through business combinations has been allocated to CGUs for impairment testing as follows (before impairment write-downs):

Cash generating units	Segment	Goodwill	
		December 31, 2018	December 31, 2017
Yakutugol	Mining	13,399	13,399
Southern Kuzbass Power Plant	Power	2,382	2,382
Kuzbass Power Sales Company	Power	1,026	1,026
Port Posiet	Mining	756	756
Chelyabinsk Metallurgical Plant	Steel	646	556
Southern Kuzbass Coal Company	Mining	143	143
Port Temryuk	Mining	69	69
Total		18,421	18,331

As of December 31, 2018 and 2017, the recoverable amount of CGUs was determined based on value in use. The material assumptions that drive the value in use are represented by projected prices, sales volumes, operating costs, terminal growth rates and discount rates. Some of these assumptions materially deviate from the Group's historical results primarily due to the market downturns and economic slowdowns in the recent years in Russia. All these material assumptions are based on the Group's projections and are subject to risk and uncertainty.

The forecasted period for non-mining subsidiaries of the Group was assumed to be five years to reach stabilized cash flows. As of December 31, 2018, the value beyond the forecasted period was based on the terminal growth rates of 2%-4%. For mining subsidiaries of the Group the forecasted period was based on the remaining life of the mines.

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Discount rates used in the impairment test for goodwill and non-current assets were estimated in nominal terms on the weighted average cost of capital basis. Inflation and discount rates, range of discount rates, estimated for each year for the forecasted period, were as follows:

For the year ended December 31, 2017	Forecast period, years				
	2018	2019	2020	2021	2022
Inflation rate in Russia	4.0%	4.0%	4.0%	4.0%	4.0%
Inflation rate in European countries	2.9%	2.9%	2.9%	2.8%	2.8%
Pre-tax discount rate, %	9.19%-17.72%	9.19%-17.72%	9.19%-17.72%	9.19%-17.72%	9.19%-17.72%
For the year ended December 31, 2018	2019	2020	2021	2022	2023
Inflation rate in Russia	5.0%	4.3%	3.8%	4.0%	4.0%
Inflation rate in European countries	3.3%	3.3%	3.1%	3.1%	3.0%
Pre-tax discount rate, %	11.10%-23.60%	11.10%-23.60%	11.10%-23.60%	11.10%-23.60%	11.10%-23.60%

As of December 31, 2018, the Group performed the impairment testing for the following number of CGUs by segments: Steel – 3, Mining – 6 and Power – 2.

Impairment of goodwill

According to the results of the impairment analysis of goodwill, an impairment loss as of December 31, 2018 was recognized in the following CGU:

Cash generating units	Impairment loss on goodwill at December 31, 2018
Southern Kuzbass Power Plant (SKPP)	2,382
Total	2,382

Goodwill at SKPP was written down to nil as of December 31, 2018 due to the breakdown of generating equipment and increased raw materials cost, that led to the increased idle and maintenance costs and reduced generating capacity forecasts.

According to the results of the impairment analysis of goodwill, no impairment loss as of December 31, 2017 was recognised.

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Impairment of non-current assets

According to the results of the impairment analysis, impairment of non-current assets was identified for the following CGUs as of December 31, 2018:

<u>Cash generating units</u>	<u>Impairment loss on non-current assets identified as a result of impairment tests at December 31, 2018</u>
Korshunov Mining Plant (KMP)	1,151
Izhstal	781
Southern Kuzbass Power Plant (SKPP)	337
Total	<u>2,269</u>

The carrying value of property, plant and equipment at KMP was written down to nil as of December 31, 2017. However, during 2018, new non-current assets were acquired for the purpose to maintain production volumes in accordance with the license agreement obligations. As of December 31, 2018, estimated future cash flows remain negative due to high transportation cost per tonne and significant costs of large-scale stripping works in order to fulfil required level of extraction. Therefore, an additional impairment of property, plant and equipment at KMP of RUB 1,151 million was recognised as of December 31, 2018.

Impairment of property, plant and equipment at Izhstal of RUB 781 million was caused by the shift of production technology to casting own steel instead of acquiring billets, increased projected cost of purchased scrap metal and continued growth in long-term production costs. The remaining carrying value of the property, plant and equipment of Izhstal was RUB 1,799 million.

Impairment of non-current assets at SKPP of RUB 337 million represents the remaining loss allocated after the reduction of carrying value of goodwill at SKPP as described above. The remaining carrying value of the property, plant and equipment of SKPP was RUB 1,889 million.

According to the results of the impairment analysis, impairment of non-current assets was identified for the following CGUs as of December 31, 2017:

<u>Cash generating units</u>	<u>Impairment loss on non-current assets identified as a result of impairment tests at December 31, 2017</u>
Korshunov Mining Plant (KMP)	2,271
Izhstal	2,130
Bratsk Ferroalloy Plant (BFP)	151
Total	<u>4,552</u>

Carrying value of property, plant and equipment and the mineral licenses at KMP of RUB 1,631 million and RUB 640 million, respectively, was written down to nil as of December 31, 2017 due to the decline in long-term

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forecast for iron ore prices, increase in transportation cost per tonne and growth of stripping costs required for removal of landslide deformations. Impairment of non-current assets at Izhstal of RUB 2,130 million was caused by significant increase in production costs for raw materials, specifically by increase in purchase price for electrodes expected to be maintained for a long-term period. The remaining carrying value of the property, plant and equipment of Izhstal was 2,871 RUB million. Impairment of property, plant and equipment at BFP of RUB 151 million was recognised due to the extension of planned period of furnace shutdown for compulsory repair works. The remaining carrying value of the property, plant and equipment and mineral licenses of BFP was RUB 1,258 million.

Carrying value of individual items of the non-current assets for the respective entities including the underground mining workings at SKCC was impaired due to changes in the Group's management plans to invest funds into the ongoing construction projects and, as a result, the inability of these assets to generate future economic benefits in the current market conditions:

<u>Subsidiaries</u>	Impairment loss on non-current assets identified for individual items of assets at December 31, 2018
Southern Kuzbass Coal Company (SKCC)	2,533
Other	38
Total	<u>2,571</u>

The carrying value of individual items of the non-current assets for the respective entity was impaired due to the refusal by the regulatory authorities to extend the term of mineral license for exploration and extraction as of December 31, 2017:

<u>Subsidiaries</u>	Impairment loss on non-current assets identified for individual items of assets at December 31, 2017
Southern Kuzbass Coal Company (SKCC)	1,529
Total	<u>1,529</u>

Sensitivity analysis

Reasonably possible change in key assumptions used in calculations of value in use could impact recoverable amount which was most sensitive to the growth of discount rate, cash flows growth rates after the forecasted period and change in operating profit due to changes in sales and extraction volumes, sales prices and costs.

Based on the sensitivity analysis carried out as of December 31, 2018, a 5% decrease in future planned revenues would trigger impairment of goodwill, property, plant and equipment and mineral licenses of

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RUB 10,016 million at SKCC, impairment of goodwill of RUB 4,715 million at Yakutugol, additional impairment of property, plant and equipment of RUB 1,889 million at SKPP, impairment of property, plant and equipment and mineral licenses at BFP of RUB 1,216 million.

For the cash-generating units, which were not impaired in the reporting period and for which the reasonably possible changes could lead to impairment, the recoverable amounts would become equal to their carrying amounts if the assumptions used to measure the recoverable amounts changed by the following percentages: increase in discount rate by 1.85% at Elga coal deposit or decrease in sales prices by 4.9%, 2.8% and 2.4% at Elga coal deposit, SKCC and Yakutugol, respectively. The recoverable amounts of Elga coal deposit, SKCC and Yakutugol based on initial key assumptions exceed the carrying amounts by RUB 62,103 million, RUB 12,895 million and RUB 4,415 million, respectively. The recoverable amount approximates the carrying amount of BFP and a reasonable possible change in sales prices could lead to impairment.

Reasonably possible changes in other key assumptions used in assessing recoverable amount of CGUs as of December 31, 2018 do not lead to excess of carrying value over recoverable amount.

Based on the sensitivity analysis carried out as of December 31, 2017, a 5% decrease in future planned revenues would trigger impairment of goodwill of RUB 2,279 million at SKPP, additional impairment of property, plant and equipment and mineral licenses at BFP of RUB 1,258 million, impairment of property, plant and equipment of RUB 2,651 million at Izhtal.

19. Trade and other payables

	December 31, 2018	December 31, 2017
Trade payables	24,288	18,999
Other payables	10,512	14,470
Total trade and other payables	<u>34,800</u>	<u>33,469</u>

Other payables include accruals for breach of contracts, payables for property, plant and equipment acquired, salaries payable, dividends payable and other.

	December 31, 2018	December 31, 2017
Other payables		
Accounts payable for property, plant and equipment	2,600	2,774
Wages and salaries payable	1,581	1,504
Accruals for breach of contract terms	456	176
Dividends payable, common shares	146	152
Dividends payable, preferred shares	86	86
Other	5,643	9,778
Total	<u>10,512</u>	<u>14,470</u>

The balance of other payables includes payables for the acquisition of DEMP of RUB 381 million and RUB 4,010 million as of December 31, 2018 and 2017, respectively (Note 6).

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20. Income tax

The major components of income tax expense for the years ended December 31, 2018, 2017 and 2016 are:

<u>Recognised in profit or loss</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Current income tax			
Current income tax charge	(2,315)	(3,397)	(555)
Adjustments in respect of income tax, including income tax penalties and changes in uncertain income tax position	(2,962)	(3,154)	766
Deferred tax			
Relating to origination and reversal of temporary differences	2,596	3,401	(5,104)
Income tax expense reported in the consolidated statement of profit (loss) and other comprehensive income	<u>(2,681)</u>	<u>(3,150)</u>	<u>(4,893)</u>

In January 2013, the Group created the consolidated group of taxpayers in accordance with the Tax code of the Russian Federation, under the Federal law of the Russian Federation of November 16, 2011 No. 321-FZ. The existence of the consolidated group of taxpayers is subject to compliance with several conditions stated in the Tax code of the Russian Federation. The Group believes that these conditions were met as of December 31, 2018 and 2017. In 2016-2018, the consolidated group of taxpayers consisted of 20 subsidiaries of the Group, together with Mechel PAO, which is the responsible taxpayer under the agreement. Under the Federal law of the Russian Federation of August 3, 2018 No. 302-FZ, the Russian legislation introduced a limitation for registration by the tax authorities of agreements on the establishment of consolidated group of taxpayers, changes to contracts related to the accession of new members of such groups, withdrawal of participants, the extension of the agreement on the established consolidated group of taxpayers and termination of the consolidated group of taxpayers by January 1, 2023.

For subsidiaries which are not included in the consolidated group of taxpayers, income taxes are calculated on an individual subsidiary basis. Deferred income tax assets and liabilities are recognised in the accompanying consolidated financial statements in the amount determined by the Group in accordance with IAS 12.

During 2016-2018, income tax was calculated at 20% of taxable profit in Russia, at 10.5%-11% in Switzerland, at 15% in Lithuania, at 20% in Kazakhstan and at 18% in Ukraine. The Group's subsidiaries incorporated in British Virgin Islands are exempt from profit tax. Amendments in the tax legislation of the United Kingdom resulted in the decrease in tax rate from 20% since April 1, 2015 to 19% since April 1, 2017.

Starting 2018, Elgaugol used a privilege and applied a 0% income tax rate due to fulfillment of conditions of the Regional investment project (RIP) resulting in an income tax benefit for 2018.

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The reconciliation between the income tax expense computed by applying the Russian enacted statutory tax rates to the income from continuing operations before tax and non-controlling interest, to the income tax expense reported in the consolidated financial statements is as follows:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Profit before tax from continuing operations	16,217	15,720	14,151
Income tax expense at statutory income tax rate of 20%	(3,243)	(3,144)	(2,830)
<i>Adjustments:</i>			
Adjustments in respect of income tax, including income tax penalties and changes in uncertain income tax position	(2,962)	(3,154)	766
Unrecognised current year tax losses and write-off of previously recognised asset on tax losses	4,008	4,783	513
Non-deductible expenses for tax purposes	(3,625)	(1,755)	(1,317)
Non-deductible interest expense	(363)	(254)	(1,055)
Effect of restructuring and expense related to fines and penalties on breach of covenants in credit agreements	3,460	112	(1,152)
Effect of different tax rates	(12)	262	182
Change in tax rate	56	—	—
At the effective income tax rate of 16.5% (20.0% in 2017, 34.6% in 2016) income tax expense reported in the consolidated statement of profit (loss) and other comprehensive income	(2,681)	(3,150)	(4,893)

The deferred tax balances were calculated by applying the currently enacted statutory income tax rate in each jurisdiction applicable to the period in which the temporary differences between the carrying amounts and tax base (both in respective local currencies) of assets and liabilities are expected to reverse.

On January 9, 2014, the Group failed to sustain its position in the court with respect to the income tax claims in the amount of RUB 3,977 million, including penalties and fines. The schedule of payments was agreed with the tax authorities for the period till May 2017. During 2016, the Group did not meet this schedule of payments and a new payment schedule agreed with the tax authorities was signed in December 2016. As of December 31, 2017, the outstanding amount payable was RUB 540 million (not overdue). As of December 31, 2018, there was no outstanding amount payable.

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The amounts reported in the accompanying consolidated financial statements consisted of the following:

	January 1, 2016	Tax (expense) benefit during the period recognised in profit or loss	Foreign currency translation effect	December 31, 2016
Deferred tax assets				
Property, plant and equipment	1,055	(378)	—	677
Rehabilitation provision	510	184	—	694
Inventory	73	134	(14)	193
Trade and other receivables	1,112	(253)	(28)	831
Loans and borrowings	224	(106)	—	118
Finance lease liabilities	1,508	(389)	2	1,121
Trade and other payables and other liabilities	763	(70)	7	700
Net operating loss carry-forwards	10,611	(5,807)	(89)	4,715
Other	324	(264)	(1)	59
Deferred tax liabilities				
Property, plant and equipment	(16,199)	497	37	(15,665)
Mineral licenses	(7,701)	485	—	(7,216)
Inventory	(604)	(83)	3	(684)
Trade and other receivables	(224)	100	—	(124)
Loans and borrowings	(454)	350	1	(103)
Trade and other payables and other liabilities	(596)	496	4	(96)
Deferred tax assets (liabilities), net	<u>(9,598)</u>	<u>(5,104)</u>	<u>(78)</u>	<u>(14,780)</u>

	January 1, 2017	Tax benefit (expense) during the period recognised in profit or loss	Foreign currency translation effect	December 31, 2017
Deferred tax assets				
Property, plant and equipment	677	81	1	759
Rehabilitation provision	694	108	—	802
Inventory	193	(9)	(5)	179
Trade and other receivables	831	(92)	(4)	735
Loans and borrowings	118	195	—	313
Finance lease liabilities	1,121	(138)	—	983
Trade and other payables and other liabilities	700	(31)	(13)	656
Net operating loss carry-forwards	4,715	3,248	9	7,972
Other	59	26	1	86
Deferred tax liabilities				
Property, plant and equipment	(15,665)	(193)	(11)	(15,869)
Mineral licenses	(7,216)	564	—	(6,652)
Inventory	(684)	(117)	—	(801)
Trade and other receivables	(124)	(207)	1	(330)
Loans and borrowings	(103)	(9)	—	(112)
Trade and other payables and other liabilities	(96)	(25)	2	(119)
Deferred tax assets (liabilities), net	<u>(14,780)</u>	<u>3,401</u>	<u>(19)</u>	<u>(11,398)</u>

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	January 1, 2018	Adjustment on initial application of IFRS 9	As of January 1, 2018 adjusted for the effect of IFRS 9	Tax (expense) benefit during the period recognised in profit or loss	Foreign currency translation effect	December 31, 2018
Deferred tax assets						
Property, plant and						
equipment	759	—	759	(373)	—	386
Rehabilitation provision	802	—	802	(29)	—	773
Inventory	179	—	179	1,537	—	1,716
Trade and other receivables . . .	735	—	735	52	3	790
Loans and borrowings	313	822	1,135	(815)	—	320
Finance lease liabilities	983	—	983	(141)	1	843
Trade and other payables and						
other liabilities	656	—	656	213	—	869
Net operating loss carry-						
forwards	7,972	—	7,972	5,646	5	13,623
Other	86	—	86	(15)	3	74
Deferred tax liabilities						
Property, plant and						
equipment	(15,869)	—	(15,869)	429	(28)	(15,468)
Mineral licenses	(6,652)	—	(6,652)	276	—	(6,376)
Inventory	(801)	—	(801)	(28)	(5)	(834)
Trade and other receivables . . .	(330)	—	(330)	(160)	(9)	(499)
Loans and borrowings	(112)	50	(62)	(3,835)	(1)	(3,898)
Trade and other payables and						
other liabilities	(119)	—	(119)	(161)	(57)	(337)
Deferred tax assets						
(liabilities), net	(11,398)	872	(10,526)	2,596	(88)	(8,018)

Recognised in the consolidated statement of financial position:

	December 31, 2018	December 31, 2017
Deferred tax assets	5,488	96
Deferred tax liabilities	(13,506)	(11,494)
Deferred tax liabilities, net	(8,018)	(11,398)

The Group offsets tax assets and liabilities if and only if it has a legally enforceable right to set off current tax assets and current tax liabilities and deferred tax assets and deferred tax liabilities relate to income taxes levied by the same tax authority.

For financial reporting purposes, the Group has not recognised deferred tax assets in the amount of RUB 33,216 million (2017: RUB 35,161 million) on losses in the amount of RUB 177,639 million (2017: RUB 194,659 million) that are available to carry forward against future taxable income of the subsidiaries in

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which the losses arose. Deferred tax assets have not been recognised in respect of these losses as it is not probable that future taxable profit will be available for utilization of such assets. Deferred tax assets on net operating loss carry forwards which are considered to be realisable in the future, are mostly related to the Russian subsidiaries.

A deferred tax liability of approximately RUB 302 million and RUB 210 million as of December 31, 2018 and 2017, respectively, has not been recognised for temporary differences related to the Group's investment in foreign subsidiaries primarily as a result of unremitted earnings of consolidated subsidiaries, as it is the Group's intention, generally, to reinvest such earnings permanently.

Similarly, as of December 31, 2018 and 2017, no deferred tax liability has been recognised for temporary difference related to unremitted earnings of consolidated domestic subsidiaries as management believes the Group is able to control the timing of the reversal of these temporary differences and does not intend to reverse them in the foreseeable future.

Probable income tax risks of RUB 6,314 million and RUB 3,139 million as of December 31, 2018 and 2017, respectively, have been recorded in the Group's consolidated financial statements. Due to changes in the Russian tax legislation effective January 1, 2017, calculation of the consolidated tax base of the consolidated group of taxpayers and the way to offset current losses and losses received in the previous tax periods (before January 2017) were changed. Due to the absence of official explanations of the regulatory authorities concerning changes, there is an uncertainty in the interpretation. The Group does not believe that any other material income tax matters exist relating to the Group, including current pending or future governmental claims and demands, which would require adjustment to the accompanying consolidated financial statements in order for those statements not to be materially misstated or misleading as of December 31, 2018.

Possible income tax risks of RUB 2,745 million and RUB 794 million as of December 31, 2018 and 2017, respectively, have not been recognised in the Group's consolidated financial statements.

21. Taxes and similar charges payable other than income tax

	December 31, 2018	December 31, 2017
Payroll taxes	2,424	2,010
VAT payable	2,233	3,313
Property tax	511	504
Land lease	471	433
Mineral extraction tax	226	189
Land tax	125	153
Other	116	94
Total	<u>6,106</u>	<u>6,696</u>

22. Pensions and other post-employment benefit plans

In addition to the state pension and social insurance required by the Russian legislation, the Group has a number of defined benefit pension plans that cover the majority of production employees and some other postretirement benefit plans.

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A number of the Group's companies provide their former employees with non-state retirement pensions, which are conditional on the member qualifying for the state old age pension. Some employees are also eligible for an early retirement in accordance with the state pension regulations. Specific coal industry rules also provide for certain benefits upon reaching retirement age. Additionally, the Group voluntarily provides financial support, of a defined benefit nature, to its old age and disabled pensioners, who did not acquire any pension under the non-state pension plans.

The Group provides several types of long-term employee benefits such as death-in-service benefit and invalidity pension of a defined benefit nature. The Group also provides former employees with reimbursement of fuel and energy resources, coal used for heating purposes. In addition, one-time lump sum benefits are paid to employees of a number of the Group's companies upon retirement depending on the employment service with the Group and the salary level of an individual employee. All pension plans are unfunded until the qualifying event occurs.

As of December 31, 2018, there were 48,531 active participants under the defined benefit pension plans and other long-term benefit plans and 38,751 pensioners receiving monthly pensions or other regular financial support from these plans. As of December 31, 2017 and January 1, 2017, the related figures were 48,920 and 50,369 of active participants under the defined benefit pension plans and other long-term benefits and 39,427 and 39,551 pensioners receiving monthly pensions or other regular financial support from these plans, respectively. The majority of employees at the Group's major subsidiaries belong to the trade unions.

Actuarial valuation of pensions and other long-term benefits for the major subsidiaries was performed in January 2019, with the measurement date of December 31, 2018. Members' census data as of that date was collected for all relevant business units of the Group.

Pension obligations and expenses determined by the Group are supported by an independent qualified actuary in accordance with the "Projected Unit Credit method" of calculation of actuarial present value of future liabilities.

The state retirement age is one of the factors affecting the retirement of employees from the Group. In October 2018, the state gradually changed the previously established national retirement age; the Group took this circumstance into account in the actuarial valuation of the obligations as of December 31, 2018. The effect of the revaluation of the retirement benefit obligation due to the amended pension legislation of the Russian Federation was reflected as the cost of past services.

As of December 31, 2018, defined benefit obligations, including pension obligations in the amount of RUB 3,806 million and other long-term benefit obligations in the amount of RUB 785 million (RUB 4,052 million and 309 million as of December 31, 2017, respectively), were presented within Pension obligations in the consolidated statement of financial position.

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Changes in the present value of the pension obligations and other long-term benefits and fair value of plan assets for 2016 were as follows:

	<u>Pension obligation</u>	<u>Fair value of plan assets</u>	<u>Benefit liability</u>
December 31, 2015	(5,184)	318	(4,866)
Current service cost	(149)	—	(149)
Net interest expense	(381)	13	(368)
Curtailment / settlement gain	272	—	272
Remeasurement of pension obligations	53	—	53
Past service cost	(5)	—	(5)
Sub-total included in profit or loss	(210)	13	(197)
Benefit paid	357	(16)	341
Exchange difference	363	(63)	300
Actuarial changes arising from changes in demographic assumptions	80	—	80
Actuarial changes arising from changes in financial assumptions	(397)	—	(397)
Experience adjustments	294	—	294
Sub-total included in OCI	340	(63)	277
December 31, 2016	(4,697)	252	(4,445)

Changes in the present value of the pension obligations and other long-term benefits and fair value of plan assets for 2017 were as follows:

	<u>Pension obligation</u>	<u>Fair value of plan assets</u>	<u>Benefit liability</u>
December 31, 2016	(4,697)	252	(4,445)
Current service cost	(142)	—	(142)
Net interest expense	(331)	17	(314)
Curtailment / settlement gain	1	—	1
Remeasurement of pension obligations	174	—	174
Past service cost	—	—	—
Sub-total included in profit or loss	(298)	17	(281)
Benefit paid	313	(17)	296
Exchange difference	(95)	19	(76)
Actuarial changes arising from changes in demographic assumptions	51	—	51
Actuarial changes arising from changes in financial assumptions	(69)	—	(69)
Experience adjustments	163	—	163
Sub-total included in OCI	50	19	69
December 31, 2017	(4,632)	271	(4,361)

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Changes in the present value of the pension obligations and other long-term benefits and fair value of plan assets for 2018 were as follows:

	<u>Pension obligation</u>	<u>Fair value of plan assets</u>	<u>Benefit liability</u>
December 31, 2017	(4,632)	271	(4,361)
Current service cost	(130)	—	(130)
Net interest expense	(266)	(13)	(279)
Curtailment / settlement gain	4	—	4
Remeasurement of pension obligations	(492)	—	(492)
Past service cost	70	—	70
Sub-total included in profit or loss	(814)	(13)	(827)
Benefit paid	299	(17)	282
Exchange difference	(213)	41	(172)
Actuarial changes arising from changes in demographic assumptions	(38)	—	(38)
Actuarial changes arising from changes in financial assumptions	354	—	354
Experience adjustments	171	—	171
Sub-total included in OCI	274	41	315
December 31, 2018	(4,873)	282	(4,591)

Amounts of the pension obligations recognised in the consolidated statement of the financial position were as follows:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Current liabilities	(772)	(849)
Non-current liabilities	(3,819)	(3,512)
Total net pension obligations	(4,591)	(4,361)

The plan asset allocation of the investment portfolio was as follows as of December 31, 2018 and 2017:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Debt instruments	161	147
Equity instruments	74	78
Cash and cash equivalents	19	25
Property	15	11
Other assets	13	10
Total plan assets	282	271

The investment strategy employed includes an overall goal to attain a maximum investment return with a strong focus on limiting the amount of risk taken. The strategy is to invest with a medium- to long-term

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perspective while maintaining a level of liquidity through proper allocation of investment assets. Investment policies include rules to avoid concentrations of investments. The vast majority of plan assets are measured using quoted prices in active markets for identical assets (Level 1 assets). The investment portfolio is primarily comprised of debt and equity instruments. Real estate and other alternative investments asset can be included when these have favorable return and risk characteristics. Debt instruments include investment grade and high yield corporate and government bonds with fixed yield and mostly short- to medium maturities. Equity instruments include selected investments in equity securities listed on active exchange market. The valuation of debt and equity securities is determined using a market approach, and is based on an unadjusted quoted prices.

The Group's entities have a practice to provide lump-sum financial support to former employees as well as certain life-long benefits, so there is a risk of human longevity. This risk is controlled by using most recent life expectancy tables. The risk of a significant fluctuation in interest rates is offset by actuarial best estimate assumptions in respect of discount rates. The Group does not identify the unusual, specific business plan or risk, as well as any significant risk concentrations. The Group performs sensitivity analysis calculating the whole defined benefit obligation and other long-term benefits obligation in different actuarial assumptions and comparing the results. There are no changes from the previous period in the methods and set of assumptions used in preparing the sensitivity analyses. The weighted average duration of the defined benefit obligation and other long-term benefits obligation is around 11-12 years as of December 31, 2018 and 2017.

The key actuarial assumptions used to determine defined benefit obligations were as follows as of December 31, 2018 and 2017:

	December 31, 2018	December 31, 2017
Discount rate		
Russian entities	8.60%	7.60%
German entities	1.90%	1.80%
Ukrainian entity	11.80%	10.10%
Austrian entities	1.70%	1.50%
Inflation rates		
Russian entities	4.00%	4.40%
Ukrainian entity	6.60%	8.60%
Rate of compensation increase		
Russian entities	5.00%	5.40%
German entities	4.00%	4.00%
Ukrainian entity	9.60%	11.60%
Austrian entities	2.25%	2.25%

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The results of sensitivity analysis of defined benefit obligations for the Russian and Ukrainian entities as of December 31, 2018 and 2017 are presented below:

	<u>2018</u>	<u>2017</u>
Discount rate		
1% increase	-6.75%	-8.12%
1% decrease	7.85%	9.64%
Inflation rate		
1% increase	5.09%	6.48%
1% decrease	-4.37%	-5.42%
Rate of compensation increase		
1% increase	2.48%	2.72%
1% decrease	-2.23%	-2.28%
Turnover rate		
3% increase	-5.98%	-5.29%
3% decrease	7.87%	7.25%

The results of sensitivity analysis of defined benefit obligations for Austrian entities as of December 31, 2018 and 2017 are presented below:

	<u>2018</u>	<u>2017</u>
Discount rate		
1% increase	-10.03%	-9.70%
1% decrease	11.98%	11.70%

The results of sensitivity analysis of defined benefit obligations for German entities as of December 31, 2018 and 2017 are presented below:

	<u>2018</u>	<u>2017</u>
Discount rate		
1% increase	-12.00%	-12.00%
1% decrease	18.00%	18.00%

The sensitivity analyses above have been prepared based on a method that extrapolates the impact on the defined benefit pension obligations and other long-term benefits obligations as a result of reasonable changes in key assumptions occurring at the end of the reporting period. The sensitivity analyses are based on a change in one significant assumption, keeping all other assumptions constant. The sensitivity analysis may not be representative of an actual change in the defined benefit obligations and other long-term benefits obligations as it is unlikely that changes in assumptions would occur in isolation of one another.

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23. Provisions

	Rehabilitation provision	Provisions for legal claims	Provisions on taxes other than income tax	Other provisions	Total
At December 31, 2015	3,704	1,572	480	215	5,971
Arising during the year	—	533	413	1,678	2,624
Utilized	(52)	(885)	(14)	(118)	(1,069)
Revision in estimated cash flow and discount rate adjustment	(230)	—	—	—	(230)
Unused amounts reversed	—	(474)	(31)	—	(505)
Unwinding of discount	256	—	—	—	256
Exchange differences	—	—	(88)	(43)	(131)
At December 31, 2016	3,678	746	760	1,732	6,916
Current	258	746	760	1,732	3,496
Non-current	3,420	—	—	—	3,420
Arising during the year	—	2,175	23	7	2,205
Utilized	(79)	(451)	(1)	(905)	(1,436)
Revision in estimated cash flow and discount rate adjustment	82	—	—	—	82
Unused amounts reversed	—	(180)	(232)	(551)	(963)
Unwinding of discount	311	—	—	—	311
Exchange differences	—	—	26	32	58
At December 31, 2017	3,992	2,290	576	315	7,173
Current	178	2,290	576	315	3,359
Non-current	3,814	—	—	—	3,814
Arising during the year	—	1,516	199	905	2,620
Utilized	(77)	(273)	—	(256)	(606)
Revision in estimated cash flow and discount rate adjustment	(309)	—	—	—	(309)
Unused amounts reversed	—	(646)	(188)	(20)	(854)
Unwinding of discount	302	—	—	—	302
Exchange differences	—	215	(4)	4	215
At December 31, 2018	3,908	3,102	583	948	8,541
Current	189	3,102	583	948	4,822
Non-current	3,719	—	—	—	3,719

Rehabilitation provision

The Group has numerous site rehabilitation obligations that it is required to perform under law or contract once an asset is permanently taken out of service. The main part of these obligations is not expected to be paid in a foreseeable future, and will be funded from the general Group's resources when respective works will be performed. The Group's rehabilitation provisions primarily relate to its steel and mining production facilities with related landfills and dump areas and its mines.

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Provisions for legal claims

In the reporting period, the Group recognized unused amount reversed in respect of various cases because of risk adjustments based on new information and favorable court decisions.

As of December 31, 2017, management's estimation in respect of claims from Minmetals changed because of negative court judgment and therefore provision was recognised in the amount of \$18 million (RUB 1,045 million at the exchange rate as of December 31, 2017 and RUB 1,250 million at the exchange rate as of December 31, 2018). During 2018, a number of new claims in the amount of RUB 741 million was received from a third party and a provision for the negative court judgment of these claims was recognized based on best management's estimate.

As of December 31, 2018, management assesses the outcome of several court proceedings and claims where the Group's companies act as defendants in the aggregate amount of RUB 16,096 million (primarily associated with the metallurgical plants as defined Note 9(b)) as possible based on the management's analysis and discussions with the legal advisers. In 2018-2019, the Group successfully sustained its position in the first court instance and the Supreme Court of the Russian Federation for the amount of RUB 12,700 million.

Provisions on taxes other than income tax

Management believes that it has paid or accrued all applicable taxes. 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 these liabilities. In accordance with IAS 37 the Group recorded RUB 583 million and RUB 576 million of other tax claims that management believes are probable as of December 31, 2018 and 2017, respectively. The Group does not believe that any other material tax matters exist relating to the Group, including current pending or future governmental claims and demands, which would require adjustment to the accompanying consolidated financial statements in order for those statements not to be materially misstated or misleading as of December 31, 2018.

Possible tax liabilities on taxes other than income tax, which were identified by management as those that can be subject to different interpretations of the tax law and regulations, are not accrued in the consolidated financial statements. The amount of such liabilities was RUB 1,689 million and RUB 1,354 million as of December 31, 2018 and 2017, respectively.

Environmental

Possible liabilities, which were identified by management as those that can be subject to potential claims from environmental authorities, are not accrued in the consolidated financial statements. The amount of such liabilities was not significant.

24. Issued capital and reserves

Common shares

The capital stock of Mechel PAO consists of 416,270,745 common shares, each with a nominal value of 10 Russian rubles, all of which are issued, outstanding and fully paid for under the Russian law. The Group is authorized to issue additional 81,698,341 common shares with a nominal value of 10 Russian rubles each.

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Preferred shares

As of December 31, 2018 and 2017, the Group had 138,756,915 preferred shares with a nominal value of 10 Russian rubles each, authorized and issued under the Russian law and representing 25% of the Mechel PAO's share capital, of which 83,254,149 shares were issued, outstanding and fully paid for, and the remaining 55,502,766 shares were kept as treasury stock by one of the Group's subsidiaries. Under the Russian law and the Mechel PAO's Charter, these preferred shares are non-cumulative and have no voting rights, except for cases stipulated by the law and the Charter. The dividend yield paid per one preferred share is also fixed by the Charter and amounts to 20% of the consolidated annual net profit of the Group under IFRS divided by 138,756,915 issued preferred shares.

Distributions made and proposed

Mechel and its subsidiaries can distribute all profits as dividends or transfer them to reserves in accordance with applicable legislation and the charters. Dividends may only be declared from undistributed earnings as shown in the statutory financial statements of Russian subsidiaries. Dividends from Russian companies are generally subject to a 13% withholding tax for residents and 15% for non-residents, which could be reduced or eliminated if paid to foreign owners under certain applicable double tax treaties.

Effective January 1, 2008, intercompany dividends may be subject to a withholding tax of 0% (if at the date of dividends declaration, the dividend-recipient Russian company held a controlling (over 50%) interest in the share capital of the company (Russian or foreign) of the dividend payer for a period over one year and the residence of the dividend distribution foreign company is not included into the Ministry of Finance offshore list. Herewith 0% tax rate is not applicable to the income received by foreign entities that are recognised as Russian residents in accordance with the Russian Tax Code.

On June 29, 2018, the Group's subsidiaries declared dividends attributable to non-controlling interests of RUB 0.056 million and Mechel declared dividends of RUB 1,387 million (RUB 16.66 per preferred share) to the holders of preferred shares for 2017.

On June 30, 2017, the Group's subsidiaries declared dividends attributable to non-controlling interests of RUB 359 million and Mechel declared dividends of RUB 856 million (RUB 10.28 per preferred share) to the holders of preferred shares for 2016.

On June 30, 2016, one of the Group's subsidiaries declared dividends attributable to non-controlling interests of RUB 3 million and Mechel declared dividends of RUB 4 million (RUB 0.05 per preferred share) to the holders of preferred shares for 2015.

Additional paid-in capital

In 2017, additional paid-in capital was decreased by RUB 3,948 million due to the acquisition of non-controlling interests of 2.53% and 0.21% in certain Group's subsidiaries with the negative carrying value of RUB 590 million.

Earnings (loss) per share (EPS)

Basic EPS is calculated by dividing the profit (loss) for the year attributable to common equity holders of the parent by the weighted average number of common shares outstanding during the year.

There were no dilutive securities issued as of December 31, 2018, 2017 and 2016.

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25. Other income/expenses

25.1 Administrative and other operating expenses

General, administrative and other operating expenses are comprised of the following:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Wages, salaries and social security costs	10,482	7,769	11,654
Office expenses	1,213	1,211	1,397
Audit and consulting services	941	631	569
Provision for legal claims, net	870	1,995	59
Depreciation	756	605	716
Fines and penalties related to business contracts	391	303	487
Social expenses	387	406	452
Consumables	307	276	411
Banking charges and services	245	271	268
Rent	158	165	259
Business trips	139	132	136
Write off of trade and other receivables	2	109	113
Net result from disposal of non-current assets	—	34	57
Other	2,015	1,683	2,213
Total	<u>17,906</u>	<u>15,590</u>	<u>18,791</u>

25.2 Employee benefits expense

Employee benefits expenses are comprised of the following:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Included in cost of sales			
Wages and salaries	21,519	20,591	19,806
Social security costs	6,887	6,438	5,909
Post-employment benefits	130	142	126
Included in selling and distribution expenses			
Wages and salaries	3,784	3,686	4,029
Social security costs	999	973	1,015
Included in administrative and other operating expenses			
Wages and salaries	8,444	6,259	9,510
Social security costs	2,038	1,510	2,144
Total	<u>43,801</u>	<u>39,599</u>	<u>42,539</u>

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25.3 Other operating income

Other operating income is comprised of the following:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Gain from sales of scrap materials	378	226	190
Subsidies received from the governmental authorities as a compensation for operating activities (energy tariffs)	359	496	—
Income from fines and penalties related to business contracts . . .	248	307	248
Net result from disposal of non-current assets	128	—	—
Curtailment and result of remeasurement of pension obligations	93	175	392
Revision in estimated cash flows of rehabilitation provision	38	—	375
Insurance compensation	—	—	153
Other	467	183	495
Total	<u>1,711</u>	<u>1,387</u>	<u>1,853</u>

In 2018 and 2017, the Group recognised gain on remeasurement of pension obligations because of the changes in the actuarial assumptions, fluctuation in payment amounts from year to year, adjustment in the financial support amount per one pensioner. In 2016, the Group recognised curtailment gain on cancellation of the certain pension programs for workers of Yakutugol, Mechel-Remservice OOO.

Revision in estimated cash flows of rehabilitation provision relates primarily to changes in the discount rate, in the planned volumes of works and change in expected rehabilitation costs.

25.4 Finance income

Finance income is comprised of the following:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Effect of restructuring of loans and finance leases	33,514	264	992
Remeasurement of fair value of financial instruments (Note 11.5)	320	197	—
Interest income from investments	207	158	177
Income from the discounting of financial instruments	15	14	7
Total	<u>34,056</u>	<u>633</u>	<u>1,176</u>

Effect of restructuring of loans and finance leases in 2018 primarily relates to VTB (Note 11.1 (b)), Gazprombank (Note 11.1 (c)) and the refinancing of the pre-export credit facility (Note 11.1 (a)).

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25.5 Finance costs

Finance costs are comprised of the following:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Interest on loans and borrowings	(35,556)	(40,298)	(44,164)
Fines and penalties on overdue loans and borrowing payments and overdue interest payments	(858)	(1,086)	(5,538)
Finance charges payable under finance leases	(1,104)	(1,230)	(1,500)
Fines and penalties on overdue finance leases	(10)	(75)	(475)
Total finance costs related to loans, borrowings and finance leases	(37,528)	(42,689)	(51,677)
Interest expenses under pension liabilities	(279)	(314)	(368)
Unwinding of discounting of financial instruments	(3,916)	(4,179)	(1,956)
Remeasurement of fair value of financial instruments (Note 11.5)	(27)	(117)	—
Unwinding of discount on provisions	(302)	(311)	(239)
Total	(42,052)	(47,610)	(54,240)

Expenses related to discounting of financial instruments include changes in the measurement of the non-current obligation related to put-option granted on non-controlling interests in the amount of RUB 3,796 million (2017: RUB 4,062 million) (Note 6 and Note 11.4).

25.6 Other income and other expenses

Other income is comprised of the following:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Write-off of trade and other payables with expired legal term	425	516	115
Gain on royalty and other proceeds associated with disposal of Bluestone	3	474	121
Gain on final settlements from subsidiaries' disposal occurred in previous years	3	—	194
Gain on forgiveness and restructuring of trade and other payables . .	—	447	—
Dividends received	—	—	3
Other income	81	58	165
Total	512	1,495	598

Other expenses are comprised of the following:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Loss on sales and purchases of foreign currencies	(108)	(114)	(130)
VEB commissions write off	—	—	(1,411)
Provision on non-recoverable advances to pension funds	—	—	(408)
Other expenses	(206)	(106)	(54)
Total	(314)	(220)	(2,003)

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Gain on accounts payable with expired legal term constitutes gain on the write-off of payable amounts that were written-off due to legal liquidation of the creditors or expiration of the statute of limitation.

The commissions in the amount of RUB 1,411 million paid in 2014 to VEB for the opening of the credit line was written off in 2016 due to uncertainty in further financing.

26. Segment information

The Group's operations are presented in three business segments as follows:

- Steel segment, comprising production and sales of semi-finished steel products, carbon and specialty long products, carbon and stainless flat products, value-added downstream metal products, including forgings, stampings, hardware, rails, balks and ferrosilicon;
- Mining segment, comprising production and sales of coal (coking and steam) and middlings, coke and chemical products, and iron ore concentrate, which supplies raw materials to the Steel and Power segments and also sells substantial amounts of raw materials to third parties;
- Power segment, comprising generation and sales of electricity and heat power, which supplies electricity and heat power to the Steel and Mining segments and also sells a portion of electricity and heat power to third parties.

The above three segments meet criteria for reportable segments. No operating segments have been aggregated to form the above reportable operating segments. Subsidiaries are consolidated by the segment to which they belong based on their products and by which they are managed. The Group's management evaluates performance of the segments based on segment revenues, gross margin, operating income (loss), assets and liabilities. Transfer prices between operating segments are on an arm's-length basis in a manner similar to transactions with third parties. Income tax, deferred tax related to the consolidated group of taxpayers and certain other assets and liabilities are not allocated to those segments as they are managed on the group basis.

As of December 31, 2018 and for the year then ended	Mining	Steel	Power	Adjustments and eliminations	Consolidated
Revenues from contracts with external customers	96,882	187,918	27,774	—	312,574
Inter-segment revenues	37,549	5,865	15,471	(58,885)	—
Gross profit	77,199	44,433	12,571	615	134,818
Gross margin, %	57.4	22.9	29.1	—	43.1
Depreciation and amortisation	(7,621)	(5,738)	(500)	—	(13,859)
Loss on write-off of non-current assets	(572)	(258)	(29)	—	(859)
Impairment of goodwill and non-current assets	(3,684)	(819)	(2,719)	—	(7,222)
Operating profit (loss)	32,574	19,831	(3,240)	615	49,780
Share of profit (loss) of associates, net	10	—	—	—	10
Finance income	23,387	9,478	1,191	—	34,056
Intersegment finance income	1,071	395	41	(1,507)	—
Finance cost	(28,932)	(12,810)	(310)	—	(42,052)
Intersegment finance cost	(220)	(1,015)	(272)	1,507	—
Income tax (expense) benefit	(5,940)	531	83	2,645	(2,681)
Profit (loss) for the year	11,489	1,331	(2,544)	3,260	13,536
Segment assets	208,123	97,373	7,519	4,610	317,625
Segment liabilities	296,125	247,241	9,469	(2,015)	550,820
Investments in associates	293	—	—	—	293
Capital expenditures	(4,243)	(1,942)	(356)	—	(6,541)

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As of December 31, 2017 and for the year then ended	Mining	Steel	Power	Adjustments and eliminations	Consolidated
Revenues from contracts with external customers	100,129	172,760	26,224	—	299,113
Inter-segment revenues	42,286	7,622	16,338	(66,246)	—
Gross profit	93,464	34,013	12,724	(1,444)	138,757
Gross margin, %	65.6	18.9	29.9	—	46.4
Depreciation and amortisation	(7,979)	(5,800)	(448)	—	(14,227)
Loss on write-off of non-current assets	(135)	(145)	(41)	—	(321)
Impairment of goodwill and non-current assets	(3,800)	(2,281)	—	—	(6,081)
Operating profit	48,190	9,154	1,267	(1,444)	57,167
Share of profit (loss) of associates, net	18	—	—	—	18
Finance income	475	150	8	—	633
Intersegment finance income	1,335	567	49	(1,951)	—
Finance cost	(34,324)	(12,793)	(493)	—	(47,610)
Intersegment finance cost	(222)	(1,342)	(387)	1,951	—
Income tax expense	(3,410)	(203)	(229)	692	(3,150)
Profit (loss) for the year	17,210	(4,116)	228	(752)	12,570
Segment assets	209,630	100,543	10,417	(1,463)	319,127
Segment liabilities	371,196	184,952	9,808	(2,696)	563,260
Investments in associates	283	—	—	—	283
Capital expenditures	(5,852)	(1,329)	(321)	—	(7,502)

As of December 31, 2016 and for the year then ended	Mining	Steel	Power	Adjustments and eliminations	Consolidated
Revenues from contracts with external customers	89,647	161,639	24,723	—	276,009
Inter-segment revenues	31,907	7,254	15,903	(55,064)	—
Gross profit	76,515	42,148	11,578	(554)	129,687
Gross margin, %	62.9	25.0	28.5	—	47.0
Depreciation and amortisation	(7,912)	(5,435)	(367)	—	(13,714)
Loss on write-off of non-current assets	(863)	(1,089)	(1)	—	(1,953)
Impairment of goodwill and non-current assets	(1,336)	(3,866)	—	—	(5,202)
Operating profit	31,012	11,531	701	(554)	42,690
Share of profit (loss) of associates, net	(17)	—	—	—	(17)
Finance income	1,082	93	1	—	1,176
Intersegment finance income	1,401	2,141	53	(3,595)	—
Finance cost	(37,615)	(16,015)	(610)	—	(54,240)
Intersegment finance cost	(1,731)	(1,396)	(468)	3,595	—
Loss after tax for the year from discontinued operations, net	—	(406)	(20)	—	(426)
Income tax benefit (expense)	115	1,485	(73)	(6,420)	(4,893)
Profit (loss) for the year	7,443	8,675	(312)	(6,974)	8,832
Segment assets	209,553	104,675	10,887	350	325,465
Segment liabilities	375,944	191,242	11,057	(190)	578,053
Investments in associates	265	—	—	—	265
Capital expenditures	(3,958)	(1,206)	(360)	—	(5,524)

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The following table presents the Group's revenues from contracts with customers segregated between domestic and export sales. Domestic represents sales by a subsidiary in the country in which it is located. This category is further divided between subsidiaries located in Russia and other countries. Export represents cross-border sales by a subsidiary regardless of its location.

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Domestic			
Russia	178,880	176,906	164,361
Other	29,666	23,445	22,252
Total	208,546	200,351	186,613
Export	104,028	98,762	89,396
Total revenue	<u>312,574</u>	<u>299,113</u>	<u>276,009</u>

Allocation of total revenue from contracts with customers by country is based on the location of the customer. The Group's total revenues from external customers by geographic area were as follows:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Russia	178,997	177,005	164,412
Asia	61,840	63,182	54,114
Europe	44,263	36,605	34,126
CIS	23,877	19,346	18,630
Middle East	3,130	2,212	1,536
USA	258	286	707
Other regions	209	477	2,484
Total	<u>312,574</u>	<u>299,113</u>	<u>276,009</u>

The majority of the Group's non-current assets are located in Russia. The carrying amounts of mineral licenses and property, plant and equipment pertaining to the Group's major operations were as follows:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Russia	219,504	228,825
Germany	1,532	1,407
Austria	637	589
Czech Republic	224	216
Romania	20	41
Other	30	37
Total	<u>221,947</u>	<u>231,115</u>

Because of the significant number of customers, there are no individual external customers that generate sales greater than 10% of the Group's consolidated total revenue from contracts with customers.

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The following table presents the breakdown of the Group's revenues from contracts with external customers by major products:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Mining segment			
Coal and middlings	80,022	84,341	75,258
Coke and chemical products	14,205	13,747	11,330
Iron ore concentrate	839	220	126
Other	1,816	1,821	2,933
Total	<u>96,882</u>	<u>100,129</u>	<u>89,647</u>
Steel segment			
Long steel products	105,722	96,768	89,575
Hardware	30,040	27,578	24,580
Flat steel products	22,786	22,505	18,230
Forgings and stampings	15,848	12,247	11,652
Ferrosilicon	3,927	2,807	3,368
Steel pipes	3,230	2,733	3,286
Semi-finished steel products	54	492	3,434
Other	6,311	7,630	7,514
Total	<u>187,918</u>	<u>172,760</u>	<u>161,639</u>
Power segment			
Electricity	26,009	24,297	22,527
Other	1,765	1,927	2,196
Total	<u>27,774</u>	<u>26,224</u>	<u>24,723</u>
Total revenue	<u>312,574</u>	<u>299,113</u>	<u>276,009</u>

27. Operating lease commitments

The Group has entered into operating property and land leases with lease terms between 2019 and 2067. Property and land lease expenses amounted to RUB 1,877 million and RUB 1,875 million for the years ended December 31, 2018 and 2017, respectively. Future minimum rentals payable under non-cancellable operating leases as of December 31, 2018 are as follows:

	<u>December 31, 2018</u>
Within one year	2,049
After one year but not more than five years	7,991
More than five years	50,871
Total rentals payable	<u>60,911</u>

The Group does not sublease the property leased under operating lease agreements.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
for the year ended December 31, 2018**

(All amounts are in millions of Russian rubles, unless stated otherwise)

As of December 31, 2018 and 2017, the future minimum rentals payable includes Group's operating lease commitments related to non-cancellable land leases to explore or use of mineral deposits and other facilities of RUB 53,398 million and RUB 50,834 million, respectively.

28. Events after the reporting period

The Group evaluated subsequent events from December 31, 2018 through the date the consolidated financial statements were issued and concluded that no subsequent events have occurred that would require recognition or disclosure in the consolidated financial statements.