En+ Group
2017 Annual Report

About the Report

In this Annual Report, the terms "En+", "En+ Group", "we", the "Company" and the "Group" in various forms shall mean En+ Group plc and its subsidiaries whose results are included in the consolidated financial statements prepared in accordance with the International Financial Reporting Standards.

This is the Annual Report of En+ Group plc. The Annual Report explains the Company's strategy, business model, internal control and risk management processes currently in place. These documents, however, are being constantly reviewed and internally updated given the uncertainty, created by the imposition of certain limitations by the Office of Foreign Assets Control of the U.S. Treasury (OFAC). The Company, thus, considers that it is not in a position to provide a comprehensive performance outlook due to the magnitude of the OFAC sanctions and their potential effect on the Group's operations and business performance.

The Corporate Governance section covers the role and activities of the Board of Directors (BoD), committees of the BoD and management team in running the business. The detailed Financials, accompanied by a report from the Group's auditors, complete the Annual Report.

Unless stated otherwise, financial results included in the 2017 Annual Report are presented and calculated based on the consolidated financial statements prepared in accordance with the International Financial Reporting Standards.

Some numbers in the tables, charts and diagrams hereof may differ from the sums of addends due to rounding.

The En+ Group Annual Report was approved by the Board of Directors on 27 April 2018.

WARNING

The information presented in this Annual Report only reflects the Company's position during the review period from 1 January 2017 to 31 December 2017 (the "**Review Period**") pursuant to the requirements of the Listing Rules ("**LR**") published by the UK's Financial Conduct Authority (the "**FCA**") in its capacity as competent authority under the Financial Services and Markets Act 2000 (as amended) and the FCA's Disclosure Guidance and Transparency Rules ("**DTRs**") (the LR and the DTR together being the "**Rules**") (unless otherwise specified). Accordingly, all forward-looking statements, analyses, reviews, discussions, commentaries and risks presented in this Annual Report (save for this Warning, "Recent Development of the Company" and "Corporate Governance" sections and unless otherwise specified) are based upon the financial information of the Company covering the Review Period only and not thereafter.

Shareholders and potential investors should be aware that on 6 April 2018, the Office of Foreign Assets Control of the Department of the Treasury of the United States of America (the "**U.S. Treasury**") designated, amongst others, certain persons and certain companies which are controlled or deemed to be controlled by some of these persons to be added to its Specially Designated Nationals List (the "**OFAC Sanctions**"). The designated persons/entities include Mr. Oleg Deripaska, a non-executive director of the Company and its ultimate beneficial owner, the Company, United Company RUSAL Plc. (the **"UC RUSAL"**), JSC Eurosibenergo and two of the Company's direct major shareholders, B-Finance Ltd., a BVI company, and Basic Element Limited, a Jersey company, each controlled by Mr. Deripaska.

A press statement issued by the U.S. Treasury in respect of the OFAC Sanctions on 6 April 2018 states that: "All assets subject to U.S. jurisdiction of the designated individuals and entities, and of any other entities blocked by operation of law as a result of their ownership by a sanctioned party, are frozen, and U.S. persons are generally prohibited from dealings with them. Additionally, non-U.S. persons could face sanctions for knowingly facilitating significant transactions for or on behalf of the individuals or entities blocked today."

As stated in the announcement of the Company dated 9 April 2018, the Company's initial assessment is that it is highly likely that the impact of the OFAC Sanctions on the Group may be materially adverse to the business and prospects of the Group. The Company is currently in the process of conducting further evaluation to assess the impact of the OFAC Sanctions on the Group and is closely monitoring the development. Further announcements will be published by the Company as and when appropriate in accordance with the requirements of the Rules and applicable laws and regulations.

Shareholders and potential investors should be aware that the information presented in this Annual Report (save for this Warning, the "Recent Development of the Company" and "Corporate Governance" sections, and unless otherwise specified) does not take into account the OFAC Sanctions or any potential impact which the OFAC Sanctions may have on the Company or the Group. Accordingly, the information presented in this Annual Report (save for this "Warning", the "Recent Development of the Company" and "Corporate Governance" sections, and unless otherwise specified), including but not limited to all forward-looking statements, analyses, reviews, discussions, commentaries and risks, does not reflect the latest position (financial or otherwise) of the Group.

Given the global nature of the business of the Group, the international politico-economic dimension of the OFAC Sanctions and the potential cross-jurisdictional implications of the OFAC Sanctions, this matter is continually evolving. GDR holders, shareholders and potential investors are, therefore, strongly advised to make reference to the latest announcements (i.e. announcements issued by the Company on and after 9 April 2018) issued by the Company before dealing in the securities of the Company.

GDR holders, shareholders and potential investors should exercise extreme caution when dealing in the securities of the Company. If in doubt, they are strongly advised to consult their stockbrokers, bank managers, solicitors and/or other professional advisers before dealing in the securities of the Company.

Contents

Recent Development of the Company

On 6 April 2018, the Office of Foreign Assets Control ("OFAC") of the Department of the Treasury of the United States of America ("US Treasury") designated, amongst others, certain persons and certain companies which are controlled or deemed to be controlled by some of these persons to be added to its Specially Designated Nationals List (the "OFAC Sanctions"). These include Mr. Oleg Deripaska, a non-executive Director of the Company and its ultimate beneficial owner, the Company, UC RUSAL plc, JSC Eurosibenergo and two of the Company's direct major shareholders, B-Finance Ltd., a BVI company, and Basic Element Limited, a Jersey company, each controlled by Mr. Deripaska.

The US Treasury's press release of 6 April 2018 (the "US Treasury Release") states that: "OFAC's actions were carried out pursuant to authority provided under Executive Order (E.O.) 13661 and E.O. 13662, authorities codified by the Countering America's Adversaries Through Sanctions Act (CAATSA), as well as E.O. 13582. These actions follow the Department of the Treasury's issuance of the CAATSA Section 241 report in late January 2018." The US Treasury Release further states that: "All assets subject to U.S. jurisdiction of the designated individuals and entities, and of any other entities blocked by operation of law as a result of their ownership by a sanctioned party, are frozen, and U.S. persons are generally prohibited from dealings with them. Additionally, non-U.S. persons could face sanctions for knowingly facilitating significant transactions for or on behalf of the individuals or entities blocked today."

In addition, OFAC issued two general licences in connection with these designations authorising U.S. persons to engage in certain limited activities and transactions involving the Company or its subsidiaries.

One of the licences authorises, with certain limitations and exclusions, U.S. persons to engage in transactions and activities ordinarily incident and necessary to the maintenance or wind down of operations, contracts, or other agreements (including the importation of goods, services, or technology onto the US) involving the Group ("License 12", which was replaced by "License 12A"). The other licence authorises, with certain limitations and exclusions, U.S. persons to engage in transactions and activities ordinarily incident and necessary to divest or transfer to a non-U.S. person, or to facilitate the transfer by a non-U.S. person to another non-U.S. person, of debt, equity, or other holdings in three entities, including the Company and UC RUSAL ("Licence 13").

The Company assesses that it is highly likely that the impact may be materially adverse to the business and prospects of the Group. The Company's primary focus remains on the maintenance of its operations and the protection of the interests of all of its investors, GDR holders and partners. The Company will continue to seek to ensure it abides by all applicable laws and regulations. The Company intends to continue to fulfill its existing commitments whilst seeking solutions (which may involve adjustments to its existing agreements and arrangements in accordance with legal and regulatory requirements) to address the impact of the OFAC Sanctions.

The Company is currently in the process of conducting further evaluation to assess the impact of the OFAC Sanctions on the Group and is closely monitoring the development. Further announcements will be published by the Company as and when appropriate in accordance with the requirements of the Rules and applicable regulations.

Key figures

Operating results

2016 2017

Total electricity production (GWh), including 69,102 68,449

HPPs[1], GWh 56,318 54,877

CHP and others 12,784 13,572

Heat production, th. Gcal 27,363 26,707

Aluminium and alloys sales, th tonnes 3,818 3,955

Share of VAP sales, th tonnes 44% 47%

Aluminium and alloys average released prices (USD /t) 1,732 2,105

Financial results

Group financial results

USD million **2016 2017**

Revenue 9,776 12,094

Adjusted EBITDA 2,311 3,223

Net profit 1,361 1,403

Energy segment

USD million **2016 2017**

Revenue 2,482 3,235

Adjusted EBITDA 822 1,147

Net profit 302 367

Metals segment

USD million **2016 2017**

Revenue 7,983 9,969

Adjusted EBITDA 1,489 2,120

Net profit 1,179 1,222

[1] Excluding Ondskaya HPP

Business model and strategy

Business model

The Group benefits from its unique base of tightly integrated assets located in close proximity to each other.

The Group is the world's largest privately-held hydro power generator and the largest aluminium producer
outside of China. The Group's long-term average hydro power production exceeds the medium annual power consumption of the Group's Siberian aluminium smelters. The Company operationally manages
assets in the Energy segment, the operating activities of which primarily include:

- power and heat generation;
- power trading and supply, and engineering services;
- power transmission and distribution.

The Group owns a 48.13% stake in UC RUSAL (the Metals segment for the purpose of this report).

Strategy

Given the uncertainty, created by the imposition of certain limitations by OFAC, the Company is currently
in the process of conducting an evaluation to assess the impact of the OFAC Sanctions on the Group's business and strategy.

The Company's strategy, as announced during the IPO in 2017, is available in the IPO Prospectus:
http://www.enplus.ru/content/dam/enplus/corporate/Investors/regulatory-news/enplus-group-prospectus.pdf

Chairman's statement
Dear shareholders,

2017 was a momentous year for En+.

In November, the Group listed its GDRs on both the London Stock Exchange and Moscow Stock Exchange following our successful initial public offering.

We welcomed a truly global array of new shareholders to the Group, in line with the international nature of the business, and who have invested in the Group's robust business model and its operational efficiency. In coming to the public markets, we set out our ambition to be a global industrial leader in the fight against man made climate change and stepped up our efforts to be an active participant in the move to a sustainable, world-wide low carbon economy.

Our focus on strict capital discipline helped En+ Group deliver an impressive set of maiden full year results, with strong growth in revenues (+23.7% YoY to USD 12,094 million), profits (+3.1% YoY to USD 1,403 million) and free cash flow (USD 1,258 million).

In June 2017, the Group adopted a new dividend policy and we made our first payment under this policy in December 2017. Total dividend payments for 2017 amounted to USD 394 million, with the overall dividend payments since IPO being USD 193 million.

However, 2018, although still in the making, is far from being the year that we anticipated. On 6 April, the OFAC of the US Treasury put the Company, (a Jersey PLC listed on the London Stock Exchange), plus its major shareholders and key subsidiaries on the SDN list. This means the Group now faces a period of potentially drastic structural changes. Following the OFAC sanctions, Mr. Dominique Fraisse resigned as an Independent Director with effect from 6 April 2018, and two Non-Executive Directors, Mr. Guang Ming Zhao and Mr. Riccardo Orcel, resigned as Directors with effect from 9 April 2018 and 11 April 2018, respectively. Although at the time of this report going to print, the full impact of the sanctions and the severe limitations that they impose, are still being analysed and, thus, are far from being fully quantified, we envisage that they may have a materially adverse impact on the business and prospects of the Group.

The Company will be undertaking further assessments and will be making further announcements, if and when appropriate, in accordance with its listing obligations and applicable laws and regulations.

It is, however, important to state that the Company, and myself as its Independent Chairman, remain very focused on safeguarding the interests of all shareholders and we are using all legal means to preserve your rights and protect the long-term value of your holdings.

Lord Barker of Battle
Chairman of the Board of Directors
Independent Director

Operational Performance
Metals segment
Market overview
Highlights for the full year 2017

• Global aluminium demand rose by 6% in 2017 to 64 million tonnes, amid coordinated economic growth in major regions of the world, including China, Europe and North America. In 2018, global demand is expected to build on the positive foundations of the past year and to increase by 5% to 67.3 million tonnes. Robust demand growth left the global aluminium market balance in a deficit of around one million tonnes in 2017 and this is expected to rise to above two million tonnes in 2018.

• Global aluminium supply is expected to grow by 2.8% in 2018 compared to 5.7% growth in 2017. In China there is strong evidence of the implementation of supply side reform in the Chinese aluminium industry in 2017 with more than 10 million illegal operating capacity and projects having been cut.

• As estimated significant part of aluminium smelters closed during current winter cuts season will not return to the market due to severe environmental regulation for smelters emissions in 26+2 cities, high restarting costs and current low profitability.

• Chinese semis exports remain under significant pressure from international anti-dumping initiatives and the introduction of new tariffs, including those for Chinese aluminium exports to the US under section 232, which will potentially increase from the current 20-23 cents to 25-28 cents.[2]

• Reported aluminium inventories in the world, excluding China, fell further to circa 2.9 million tonnes as at the end of 2017, down approximately 1.0 million tonnes from the level at the end of 2016 to historical low level for the stock to consumption ratio, which was of 36 days compared to 115 days peak in mid of 2015.

Global aluminium prices

The LME aluminium price rose 22.7% YoY in 2017 to reach USD 2,256/t on January 2, 2018, nearly a sixyear high, and consolidating later at a new level of USD 2,200/t following widespread capacity cuts in China and a steady reduction in LME stocks, which provided further evidence of a global market deficit.

Rising cost inflation in China made a significant share of operating Chinese aluminium capacity barely breakeven by the end of 2017.

Aluminium demand

Global aluminium demand rose by 6% to 64 million tonnes in 2017. In 2017 world demand, excluding China, grew by 3.7% to 29.2 million tonnes, while Chinese demand increased by 7.8% to 34.9 million tonnes during the same period.

Despite higher aluminium prices, there has been a slow process of restarting capacity capability outside of China due to the lack of comparative power tariffs and high restarting costs.

China continued to lead global economic growth in 2017, with its economy confounding expectations of a slowdown. Full year GDP increased by 6.9%, an upturn from 6.7% in 2016 and well above the official

[2] In March 2018, the U.S. government announced the introduction of 10% import tariff on aluminium

target of 6.5%. The key driver of aluminium demand, industrial production, mirrored the improvement in the broader economy, accelerating to 6.6% growth in 2017, from 6% the prior year. There was broad based strength across the major aluminium consuming industrial sectors, with construction, manufacturing and transportation all remaining robust. Floor space under construction for projects starting in 2017, rose by 10.5%, while overall automotive production rose by 2.1%, but growth in the production of commercial vehicles was much sharper, up by 13.8%. Strong investment in the power sector, especially in green energy, also provided further impetus to aluminium demand.

In North America, underlying demand for aluminium showed a cautious start in 2017 before strengthening during the year. There was a welcome return to positive growth in industrial production in 2017, which rose by 1.8% in the United States, following a contraction the prior year. Despite a 3.9% decline in North American automotive production, aluminium demand from the sector grew strongly, amid rising intensity of use, especially in the rolled products sector. Construction activity remained solid, with housing starts rising by 2.4% to 1.1 million units, and points to a robust outlook for extrusions demand given the lag between starts and aluminium consumption in the build. In 2017 as a whole, primary aluminium demand rose by an estimated 2.6% to 6.8 million tonnes.

The recovery in the Eurozone economy in 2017 was particularly impressive, with industrial activity improving throughout the year. Manufacturing Purchasing Managers Indices (PMI's) were illustrative of this trend, hitting multi-year highs in regional heavyweights Germany, France and Italy, and even the UK shrugged off Brexit fears to increase through the year. The Eurozone manufacturing PMI ended the year at 60.6, its highest level since the currency zone was formed. In a similar vein, the construction market built on strong growth in 2016, with further gains last year, which resulted in the Production in Construction Index for the Euro 28 countries also hitting multi-period highs. The pace of automotive market growth slowed slightly but vehicle output still rose by an estimated 1.4% across the region, although, as in the US, intensity of use gains meant that sectoral aluminium demand ran well ahead of car production. This confluence of positive factors led to aluminium demand growth of 3.2% to reach 9.4 million tonnes in Europe (including Turkey but excluding Russia).

Japan's economy carried on the strong momentum from the end of the previous year to accelerate in 2017, driven by a recovery in the industrial sector. This led to industrial production growth estimated at 4.4%, after a minor contraction in 2016. A key component of this growth was the automotive sector, with vehicle production accelerating by an estimated 5.6% for the full year, bouncing back from a decline in 2016. The construction market fared less well, with housing starts contracting by a modest 0.1%, although sectoral aluminium demand still increased, benefiting from follow through from buildings that had begun construction the prior year. In addition to the strength of underlying domestic demand, Japan was boosted by a strong global economy, which supported export growth. This was evident in the aluminium sector as well as the broader manufacturing sector.

Economic activity remained strong in the ASEAN region, as GDP in major countries such as Thailand,

Vietnam and Indonesia, grew at a rate of between 4 and 7%. The region as a whole continued to benefit
from major macro drivers such as industrialisation and urbanisation, in addition to investment in downstream industries, including aluminium. This resulted in primary aluminium demand increasing to
6.5 million tonnes, or 3.5%, in the Asian region (excluding China and India) in 2017.
The other major growth driver in the rest of Asia was India and, although its economy slowed in 2017 amid
economic reforms, the rate of increase in GDP would still be the envy of most developed countries. GDP
is expected to have grown by 6.2% over the year as a whole, picking up speed in the final two quarters in
particular. Industrial production followed a similarly positive trend, pointing to an acceleration in growth

in 2018. Even with a slowdown in the economy, primary aluminium demand still rose by an impressive
5.6% to 2.1 million tonnes in 2017.
In Russia, following two years of negative economic growth, GDP rose by an estimated 1.9% in 2017. A
recovery in oil prices supported government revenues and this fed through into increased government spending on infrastructure, which boosted demand across a range of end uses, especially in the electrical
sector. A change in regulations to allow aluminium wiring in buildings during 2017 provides a bullish backdrop for further consumption growth. Primary aluminium demand in Russia grew by 10.9% to 0.8
million tonnes in 2017 and is expected to rise to between 0.9 to 0.95 million tonnes in 2018.

Global supply

Global aluminium supply rose by 5.7% to 63.5 million tonnes in 2017. World supply, excluding China,
grew by 1% to 27.2 million tonnes, while Chinese supply increased by 9.5% to 36.4 million tonnes.
In 2017 there was strong evidence of the implementation of supply side reforms in the Chinese aluminum
industry, with more than 10 million illegal operating capacity and projects cuts. As a result, according to
Aladdiny data, annualised Chinese aluminum production for the twelve months to November 2017 dropped
to 35.4 million tonnes from its peak of 38.6 million tonnes for the twelve months to July 2017.
The winter capacity cuts, announced by the Chinese regulator in 2017, and which have now been implemented, are expected to result in annualised production falls of approximately 1 million tonnes of
aluminium and 4.4 million tonnes of alumina, according to UC RUSAL estimates. It is expected that a significant proportion of the aluminium smelters closed during the recent winter cuts season will not return
to the market due to severe environmental regulations for smelter emissons in 26+2 cities, high restarting
costs and the current low level of profitability.
Larger losses may take place in carbon materials, supply including anodes and coking coal that would be
expected to exert an upward pressure on the costs bases for aluminium producers due to squeezes in raw
materials supply chain.
Strong antipollution controls and environmental measures will continue to be focused on China's energy

intensive industries in 2018, with the intention to further cap and reduce CO2 emissions. Several heavily aluminium producing provinces plan to curb CO2 emissions by 20 23% on average by 2020 from 2015 levels. From 2018 Chinese aluminum smelters must start paying an environmental tax, potentially increasing production costs by 70-100 RMB/tonne for large producers.

In addition to China's domestic regulatory measures, Chinese semis exports remain under significant pressure from international anti-dumping initiatives, with the possible introduction of new duties on Chinese semis exported to the US. This may result in the continued fall in exports of Chinese FRP and other aluminium semis products to United States, the second largest Chinese semis consuming market.

Business overview

Aluminium

The Metals segment comprises ten aluminium smelters[3], which are predominantly located in Russia as well as one in Sweden. The Company's core asset base is located in Siberia, Russia, accounting for some 94% of the Company's aluminium output in 2017, and includes the Bratsk and Krasnoyarsk aluminium smelters, which together account for more than half of the Group's aluminium production.

3 10 aluminium smelters in operation

During 2017, the Group continued to implement a comprehensive programme designed to control costs and optimise the production process, in order to strengthen the Company's position as one of the world's most cost-efficient aluminium producers.

Aluminium Production, th. tonnes

Primary aluminium production for the year ended 31 December 2017 was practically flat, compared to the previous year, and totalled 3,707 thousand tonnes (+0.6% YoY).

Production of Value Added Products (VAP) rose from 1.713 million tonnes in 2016 to 1.852 million tonnes in 2017, with the VAP share of total production increasing from 46.5% in 2016 to 50.8% in 2017.

Alumina

The Group owned nine alumina refineries as at end of 2017, located in six countries: Ireland (one plant), Jamaica (one plant), Ukraine (one plant), Italy (one plant), Russia (four plants) and Guinea (one plant). In addition, the Company holds a 20% equity stake in Queensland Alumina Limited (QAL), an alumina refinery located in Australia. Most of the Group's refineries have ISO 9001 certified quality control systems. Four refineries and QAL have been ISO 14001 certified for their environmental management while three refineries have received OHSAS 18001 certification for their health and safety management systems.

The Company's long position in alumina capacity helps to secure sufficient supply for the prospective expansion of the Company's aluminium production capacity and allows the Company to take advantage of favorable market conditions through third-party alumina sales.

78 81 97
116 124 123
-
500
1,000
1,500

2,000
2,500
3,000
3,500
4,000
2015 2016 2017
Russia (Siberia) Russia (other than Siberia) Other countries

Alumina production, th. tonnes[4]

The Group's total attributable alumina output[5] was 7,773 thousand tonnes in 2017 compared to 7,528 thousand tonnes in 2016. The 245 thousand tonnes (+3.3%) increase in 2017 was due to the implementation of a production capacity upgrade programme at both the Urals Aluminium Smelter (UAZ) and the Nikolaev Alumina Refinery (NGZ) as well as being the result of the more stable operation of the Achinsk Alumina Refinery (AGK) and the Bogoslovsky aluminium smelter (BAZ).

Bauxites and nephelines

Bauxites and nephelines are key raw materials for alumina production. In 2017, the Group was approximately 70% self-sufficient in bauxites and nephelines.

Bauxites

The Group operates six bauxite mines and has one bauxite project underway, located in four countries: Russia (two mines), Jamaica (one mine), Guyana (one mine) and Guinea (two mines and one project). The Company's long position in bauxite capacity helps to secure sufficient supply for the prospective expansion of the Company's alumina production capacity and allows the Company to take advantage of favorable market conditions through third-party bauxite sales.

[4] Pro-rata share of production attributable to the Group.
[5] Pro-rata share of production attributable to the Group.

596 609 582
749 760 755
-
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
9,000
2015 2016 2017
Ireland Jamaica Russia Australia (JV) Ukraine

Bauxite production, th. tonnes[6]

Total attributable bauxite output[7] was 11,645 thousand tonnes in 2017, compared to 12,187 thousand tonnes in 2016. The decrease in bauxite production was primarily due to unfavourable climatic conditions, namely off-season rainfall, at the Company's Windalco. During the year, 43 new wagons were shipped to the Group's Compagnie des Bauxites de Kindia (CBK) with immediate commissioning, and haulage equipment renovation project began at the Group's Bauxite Company of Guyana (BCGI).

Nephelines

The group's nepheline syenite production was 4,332 thousand tonnes in 2017, compared to 4,432 thousand tonnes in 2016.

The decrease of the production volume of nepheline mine in 2017 by 100 thousand tonnes compared to 2016 or 2.3% is largely explained by the mining works schedule.

Nepheline mines (Achinsk)

(Kt Wet)	**Interest**	**2015**	**2016**	**2017**
Kiya Shaltyr Nepheline Syenite	100%	4,111	4,432	4,332
Total production		**4,111**	**4,432**	**4,332**

Foil and packaging

Aggregate aluminium foil and packaging material production by the Company's foil mills increased by 19% to 101.06 thousand tonnes in 2017 from 84.72 thousand tonnes in 2016.

Domestic market sales increased by 21% in 2017 compared to 2016 volumes, while export sales rose by 18% during the same period, following the launch of an antidumping investigation against Chinese foil producers by US authorities. There was also a 37% increase in sales volumes of SRC (container) foil in 2017 compared to 2016, to reach 5,995 tonnes.

6 Pro-rata share of production attributable to the Group.

7 Bauxite output data was:

- calculated based on the pro-rata share of the Company's ownership in corresponding bauxite mines and mining complexes. The total production of the Company's fully consolidated subsidiary, Bauxite Company of Guyana Inc., is included in the production figures, notwithstanding that minority interests in each of these subsidiaries are held by third parties.
- reported as wet weight (including moisture).

2,039 2,123 1,954
1,176 1,094
1,044
0
2,000
4,000
6,000
8,000
10,000
12,000
14,000
2015 2016 2017
Jamaica Russia Guinea Guyana

Foil production, tonnes

Other business

Silicon production:

In 2017, silicon production decreased by 5.5% to 56 thousand tonnes mainly due to the planned maintenance of key equipment at two plants, including : capital repairs to two furnaces at the JSC Kremny plant and two capital repairs and one maintenance repair of furnaces at the OOO SUAL-Kremny-Ural plant.

In 2017, measures were taken to improve the quality of the Group's silicon production, in line with the Company's policy of ensuring that its aluminium smelters are 100% supplied with own-produced silicon.

To this end refining volumes were increased and the quality standards for incoming raw materials were raised, which included the additional processing of quartzite mined at the Company's mines.

Secondary alloys:

In 2017, production of secondary alloys increased by 13% to 28 thousand tonnes. The increase in production volumes was due to the inclusion of 3XXX and 6XXX bars from aluminium smelters located in the Siberian region, and required an additional melting furnace to be temporarily demothballed.

Mining Assets

The Metals segment's mining assets comprise 15 mines and mine complexes, including bauxite mines (the resources of which are described above), two quartzite mines, one fluorite mine, two coal mines, one nepheline syenite mine and two limestone mines.

The Company jointly operates the two coal mines with Samruk-Energo, the energy division of Samruk-Kazyna under a 50/50 joint venture, Bogatyr Coal LLP. The long position in alumina capacity is supported by the Company's bauxite and nepheline syenite resource base.

Bogatyr Coal LLP

Bogatyr Coal LLP, which is located in Kazakhstan, is a 50/50 joint venture between the Company and Samruk-Energo.

Bogatyr Coal LLP, which produced approximately 40.41 mt of coal in 2017, had approximately 1.79 billion tonnes of JORC Proved and Probable Ore Reserves and had Measured Mineral Resources and Indicated Mineral Resources in aggregate of approximately 2.14 billion tonnes as at 31 December 2017.

0
20
40
60
80
100
120
2015 2016 2017
Domestic market (RF и CIS) Export

Bogatyr Coal LLP generated sales of approximately USD 185 million in 2016 and USD 250 million in 2017. Sales are divided approximately as to one third and two thirds, respectively, between Russian and Kazakh customers based on the quantities sold.

Investment in Norilsk Nickel

Norilsk Nickel is the world's largest palladium producer, the second nickel producer and one of the leading producers of platinum and copper. UC RUSAL held 27.82% shareholding in Norilsk Nickel as at the Latest Practicable Date.

UC RUSAL's shareholding in Norilsk Nickel allows for significant diversification of earnings, through Norilsk Nickel's exposure to PGMs[8] and bulk materials, as well as broadening UC RUSAL's strategic opportunities. The Company's objective is to maximise the value of this investment for all shareholders.

On 23 February 2018, UC RUSAL in its announcement proposed to seek the approval of Shareholders, at the EGM by way of poll, of a Mandate, which would authorise the Board to effect the Potential Shoot Out Transaction as and when appropriate.

Following the inclusion of UC RUSAL into the SDN list of the OFAC of the US Treasury, the Company believes that it would not be in the best interests of the Company and its Shareholders as a whole to seek a Mandate in respect of a Potential Shoot Out Transaction at the current time.

Projects

BEMO Project

The BEMO Project involves the construction of the 3,000 MW Boguchanskaya Hydropower Plant (BEMO HPP) and the BEMO aluminium smelter in the Krasnoyarsk region in Siberia (with a planned production capacity of 600 kt of aluminium per annum).

The construction of the BEMO aluminium smelter is divided into two stages (each one accounting for 298 kt of aluminium per annum). The start-up complex for the first stage (149 kt of aluminium per annum, 168 pots) was launched in 2015, while the second stage (c.300ktpa), will be considered in conjunction with our strategic partner, RusHydro, after the completion of the first stage and will be subject to market conditions and the availability of project financing.

Capital expenditure for the BEMO aluminium smelter project in 2017 was USD 129.48 million (of which the Metals segment's share amounted to USD 64.74 million).

BEMO HPP is the fourth step in the Angara hydroelectric power chain. Construction of the power plant was suspended in Soviet times due to the lack of financing and was resumed in May 2006 by UC RUSAL and RusHydro following the signing of their agreement to jointly implement the BEMO project.

The project's 79 metres high, 2,587 metres long composite gravity and rock-fill dam was completed at the end of 2011 and nine 333 MW hydropower units of the BEMO HPP were put into operation during 2012-2014. The total installed capacity of all nine hydro-units in operation amounts to 2,997 MW.

Taishet Project

The construction of the Taishet aluminium smelter originally commenced in 2006. Due to unfavorable market conditions, the Group decided to suspend the project in 2009. Following the evidence of economic recovery and improved market conditions in 2016, UC RUSAL's Board of Directors decided to resume the construction, and approved financing in the amount of USD 72.5 million, for top-priority works at PC-1 (the first line) in the amount of approximately USD 39 million for 2017. The project contemplates the

[8] PGMs - platinum group metals.

construction of an aluminium smelter with a designed production capacity of approximately 983,600 tonnes of aluminium per annum in the Irkutsk region in Siberia. The smelter is divided into two lines: PC-1 (the first line) with a capacity of 428,500 tonnes of aluminium per annum with 352 pots (RA 400) installed and PC-2 (the second line) with a capacity of 555,100 tonnes of aluminium per annum with 352 pots (RA 550)

installed. PC-1 (the first line) is expected to consume 6.4 TWh of electricity per annum while the smelter
operating at full capacity is designed to consume 14.2 TWh of electricity per annum.
As at 31 December 2017, RUSAL invested USD 829 million (excluding VAT) in both lines and, as at 31
December 2017, it was expected that further capital expenditure of USD 756 million (excluding VAT) would be required to launch production at the first line. RUSAL plans to construct the Taishet aluminium
smelter on either a wholly-owned or a joint venture basis with funding through a project finance facility.
RusHydro (RUSAL's joint venture partner under the BEMO Project), has preliminarily resolved, subject
to certain commercial conditions and considerations, to participate in the construction of Taishet aluminium
smelter. As at 31 December 2017 it was anticipated that the structure of the joint venture arrangement would
be finalised in the middle of 2018.
Given the uncertainty, created by the imposition of certain limitations by OFAC, the viability of further
development of these projects (BEMO and Taishet) might be evaluated.

Assets overview

Bauxite production sites[9]:

Total capacity 15.5 mtpa
Production level, 2017 11.6 mt

Alumina refineries[10]:

Total capacity 10.8 mtpa[11]
Production level, 2017 7.8 mt

Aluminium smelters[12]:

Total capacity 3.9 mtpa
Production level[13], 2017 3.7 mt

The Group also operates dowstream assets, namely the Casting and Mechanical Plant SKAD (which produced 842 thousand wheels in 2017), the Krasnoyarsk Metallurgical Plant (which processed 83.6 thousand tonnes of aluminium in 2017) and the SAYANAL (which produced 38.2 thousand tonnes of foil
in 2017).

[9] Compagnie des Bauxites de Kindia, North Urals Bauxite Mine, Bauxite Company of Guyana, Timan Bauxite
[10] Aughinish Alumina Refinery, Nikolaev Alumina Refinery, WINDALCO, Achinsk Alumina Refinery, Bogoslovsk Aluminium Smelter, Urals
Aluminum Smelter, Friguia Bauxite and Alumina Complex, Queensland Alumina Ltd
[11] Capacity of the Queensland Alumina refinery is taken into account via a 20% shareholding of the Group. The full capacity of the facility is 3,950
ktpa of alumina
[12] Krasnoyarsk Aluminium Smelter, Bratsk Aluminium Smelter, Sayanogorsk Aluminium Smelter, Khakass Aluminum Smelter, Irkutsk Aluminium Smelter (IrkAZ), Boguchansk Aluminium Smelter, Novokuznetsk Aluminium Smelter, KUBIKENBORG ALUMINIUM AB, Kandalaksha Aluminium SmelterUrals aluminium smelter, Volgograd aluminium smelter, Nadvoitsy aluminium smelter.
[13] Including remelting

Energy segment

Market overview

Overview of the Russian power sector

The Russian Federation's power sector is among the largest in the world and in 2017 ranked fifth in terms
of installed electricity capacity (239.8 GW) and fourth in terms of electricity output (1,053.9 TWh). The
majority of Russia's electricity demand is met by thermal power plants that use natural gas and thermal

coal as their primary fuel. In Siberia, the fuel mix is primarily dominated by hydropower, which accounts
for almost half of the installed regional capacity, followed by coal and gas, which represents 45% and 7%
of the total respectively.

The Unified Energy System (UES) of Russia covers most of the Russian territory. Grid interconnections
between different power systems are limited, therefore, the Russian wholesale power and capacity market
is split into two pricing zones. The first pricing zone includes the territory of the European part of Russia
(including the Urals), while the second pricing zone overlays Siberia. Difference in capacity structure and
fuel mix defines the electricity price drivers in each of the price zones in Russia.

Geographically, the Siberian Integrated Power System (IPS) covers the Siberian federal district, an area of
5,115,000 square km with a population of approximately 20 million people. The Siberian federal district is
one of the main industrial regions in Russia with a focus on oil and gas, metallurgy and engineering, and
contributes to approximately 10% of Russia's total GDP. The Siberian IPS comprises of 109 power plants
with a total installed capacity of 51.97 GW, 2,189 electrical substations of 110-500 kV and 1,548 of 110-
1150 kV transmission lines with a total length of 96,030 km.

A unique feature of the Siberian IPS is the significant role of HPPs in both the structure of installed
electricity capacity and electricity output - 49% and 46%, respectively, according to the System Operator.

Thermal power in the Siberian IPS is generated mostly through coal-fired power plants which are primarily
located in proximity to regions where the coal is mined.

Electricity demand

Electricity consumption within the Siberian IPS was down by 0.6% to 205.9 TWh in 2017 compared to
2016. The decline was due to warmer weather and a higher base as 2016 was a leap year. Monthly average
air temperature in 2017 compared to 2016 was 6.6°C higher in January, 2.0°C higher in May, 4.4°C higher
in October and 4.8°C higher in November.

Electricity consumption in the first price zone grew by 1.8% to 800.8 TWh.

Electricity supply

In 2017, electricity output in the UES of Russia was virtually flat year-on-year at 1,053.9 TWh (up
0.5% YoY), while electricity consumption grew by 1.3% to 1,039.9 TWh.

Electricity output in the first price[14] zone grew by 1.2% in 2017 compared to 2016 to 814 TWh.

Electricity output within the Siberian IPS in 2017 was 202.7 TWh (down 2.0% YoY). HPPs in Siberia
decreased output by 5.9% year-on-year to 93.9 TWh in 2017,the Group's share of Siberian IPS's electricity
output for 2017 grew by 2% to 58.4%, while output from thermal power plants (TPPs) and captive power
plants (CPPs) increased by 1.6% year-on-year to 108.7 TWh.

[14] Comprises the Centre, Northwest, Volga, Urals, and South IPSs.

In 2017 Combined Heat and Power (CHP) plants accounted for 54% of full-year electricity output within the Siberian IPS, while HPPs accounted for 46%. Year-on-year, the HPPs' share declined by 2% in favour of CHPs, primarily due to unfavourable hydrology in the reservoirs of the Angara cascade and the resulting lower output by the Irkutsk Region HPPs.

Electricity and capacity prices

In the Siberian IPS zone, electricity spot prices are effectively determined by the production costs of the least efficient coal-fired generation plant (mostly CHPs and condensing power plants), with HPPs (and some CHPs operating in must-run mode) acting as price takers. Over the long term, electricity prices tend to move with prices of thermal coal. A significant proportion of the power generated by Siberian CHP's is produced using locally sourced brown coal, the prices for which are driven primarily by inflation.

Due to seasonality in demand and the variable availability of hydropower, the price of electricity can exhibit significant fluctuations over the year.

One of the major factors that exerts significant influence in the medium term is the water inflow to Siberian HPPs, which determines the availability of low-cost hydro power for the wholesale market. There is currently a low water environment, which consequently means that the availability of hydropower is reduced.

Spot prices for the European-Ural price zone (the first price zone) grew by 0.2% in 2017 year-on-year and averaged RUB 1,204 per MWh, while the spot prices for the Siberian price zone (the second price zone) in 2017 were 0.4% lower year-on-year and averaged RUB 864 MWh.

While electricity prices generally reflect short-term variations in the supply-demand balance and cover generators' variable costs, capacity prices cover fixed costs and sustain capex requirements. As a result, capacity prices to a large extent inform a company's decision-making with respect to which capacity to run, launch, put on hold, or decommission.

Reflecting the long-term nature of these decisions, the capacity market functions rather differently from the electricity market, with annual auctions carried out to determine the price and availability of capacity in four years' time. Currently capacity prices are thus determined through to 2021 and, from 2018, are indexed annually at the previous year's Consumer Price Index (CPI) minus 0.1% (previously they were indexed at CPI minus1%).

Capacity prices[15]

th. RUB/MW/month	2016	2017	2018	2019	2020	2021
2nd price zone	189	182	186	190	191	225

The capacity price for the first price zone grew by 4.9% year-on-year in 2017, mostly due to the CPI minus 1% adjustment. Excluding the adjustment, the key competitive bidding parameters and Competitive Capacity Outtake (CCO) price were almost flat year-on-year (+0.5%).

The capacity price for the second price zone grew by 0.3% year-on-year. Excluding the adjustment, the price declined by 3.9% year-on-year.

15 Capacity prices are defined by supply-demand balances and are set in real terms, which until the end of 2017 were linked to CPI-1%, and

which, since the beginning of 2018, have been linked to CPI-0.1%.

Power

The Group's power generation assets are located in the east Siberia and Volga regions, and the Company is engaged in all of the major areas of the power industry in Russia: electricity and heat generation; electricity, capacity and heat sales; heat distribution; retail energy trading and supply; engineering services; and electricity distribution and transmission.

As at 31 December 2017, the total installed electricity capacity of the Group's power assets amounted to 19.7 GW, while its total installed heat capacity amounted to 17.1 Gcal/h. As at 31 December 2017, 77% of the installed electricity capacity was represented by HPPs, with the remaining 23% accounted for by CHPs (which are predominantly coal-fired) and one solar plant.

The Company produced 68.4 TWh[16] of electricity in 2017, which represented 6.5% of Russia's total electricity generation and 34% of the Siberian IPS's total electricity generation for the period.

Hydro power generation is a key area of the Group's Energy segment. The Group operates five HPPs, including three of the five largest HPPs in Russia and of the twenty largest HPPs globally, in each case in terms of installed electricity capacity. In 2017, the Energy segment's HPPs produced 54.9 TWh of electricity, which accounted for 80.2% of the total electricity generated by the Group.

Production

		2017	**2016**	**2015**
Total Electricity Production [17]	GWh	68,449	69,102	65,210
HPPs, incl.	GWh	54,877	56,318	52,124
Angara cascade [18]	GWh	34,789	37,036	35,592
Yenisey cascade[19]	GWh	20,088	19,283	16,532
CHPs	GWh	13,566	12,778	13,086
Abakan SPP	GWh	6.1	6.1	0.4
Heat	th. Gcal	26,707	27,363	26,409

Total electricity output by the Angara cascade HPPs for 2017 decreased by 2.2 TWh year-on-year (down 6.1%) to 34.8 TWh due to persisting unfavourable hydrology in the reservoirs of the Angara cascade, along with a shorter navigation season on the Angara River.

In 2017, the Krasnoyarsk HPP's output grew by 4.2% to 20.1 TWh due to improved hydrology (particularly in the first half of 2017; the head race water level in early 2017 was 2.5 metres higher year-on-year).

The Group's CHPs increased electricity output in 2017 by 6.2% (YoY) to 13.6 TWh. Heat supplies were 26.7 million Gcal (down 2.4% year-on-year).

Abakan Solar Power Plant (SPP) generated 6 million kWh in 2017 (flat year-on-year).

[16] Excluding Ondskaya HPP (installed capacity 0.08 GW), located in the European part of the Russian Federation, leased to RUSAL since October 2014

[17] Excluding Ondskaya HPP (installed capacity 0.08 GW), located in the European part of the Russian Federation, leased to RUSAL since October 2014
[18] Includes Irkutsk, Bratsk, Ust-Ilimsk HPPs
[19] Krasnoyarskaya HPP

The Company, through its subsidiaries, Irkutskenergosbyt, Volgaenergosbyt and LLC MAREM+, purchases electricity on the wholesale market (from both the generating facilities of the Group and third parties) and then resells it on the retail market to both industrial consumers that do not have access to the wholesale market and residential consumers. The Group is involved in heat and electricity sales directly to end-users.

In 2007, the Group's subsidiaries in the Irkutsk and Nizhny Novgorod regions were granted the status of guaranteeing suppliers within these regions. In accordance with this status, the Group is under an obligation to conclude an electricity supply contract with any consumer that is located within the boundaries of these operational areas and which applies for such a contract.

The Group's Energy segment also includes other supplementary businesses such as electricity transmission and distribution, coal production and its transportation to the Company's CHPs.

As at 31 December 2017, the Group operated a transmission and distribution system of approximately 41,000 km of high and low voltage lines with an annual transmission capacity of approximately 45 TWh.

Through this system the Group transmits electricity generated at the Angara cascade HPPs to wholesale and retail consumers, including RUSAL's aluminium smelters. Other generation facilities of the Group, such as the Krasnoyarsk HPP and the Avtozavodskaya CHP, do not use this transmission network, as they are not located within close geographical proximity.

The Coal segment provides the Group's CHPs with a self-sufficient coal resource base and covers the En+ Group's internal coal demand. A portion of the coal production is sold to third parties both in Russia and abroad.

Total brown and fossil thermal coals mining for 2017 was 14.5 million tonnes, a 4.5% increase year-onyear.

The En+ Logistics business provides transportation services both for Group companies and to third parties.

The assets of En+ Logistics include a subsidiary, which owns railway lines with a total length of approximately 126 km, railcars and locomotives in Khakassia, and a Russian forwarder company.

During 2017, En+ Logistics operated an average of 4,614 railcars, a year-on-year increase of 41%. Fullyear cargo traffic increased to 22.3 million tonnes, or 11%, year-on-year. En+ Logistics covered 88% of the Energy segment's and 6% of RUSAL's gondolas demand in 2017.

Other

The Group's other businesses include its non-core assets and operations, namely SMR's operations (principally the production and processing of molybdenum and ferromolybdenum at plants located in eastern Russia) and KRAMZ's aluminium processing operations.

SMR is Russia's ferromolybdenum and copper concentrate manufacturer with a full ferromolybdenum production cycle. Its operations start with ore mining and also include the processing of ore into molybdenum concentrate, molybdenum concentrate calcination, concentrate melting and ultimately

ferromolybdenum production.
During the year ended 31 December 2017 SMR produced 4,726 tonnes of ferromolybdenum and 6,972 tons of copper concentrate.
KRAMZ's operations include the processing of aluminium into alloys, which are then used in the construction and transportation industries. Primary aluminium is the main material used in KRAMZ's production processes and is supplied to KRAMZ by RUSAL. In 2017, KRAMZ produced 83.7 thousand tonnes of alloys, which was almost flat year-on-year.

Assets overview

Hydropower plants[20]
Total installed capacity 15.1 GW
Production level, 2017 54.9 TWh

Combined heat and power plants[21]
Total installed capacity 4.6 GW
Production level, 2017 13.6 TWh

Solar power plant
Abakan solar power plant
Installed power capacity 5,2 MW
Power generation level in 2017 6 mln kWh

[20] Irkutsk HPP, Bratsk HPP, Ust-Ilimsk HPP, Krasnoyarsk HPP Ondskaya HPP
[21] CHP-10, CHP-9, Novo-Irkutsk CHP, Ust-Ilimsk CHP, CHP-11, CHP-6, Novo-Ziminskaya CHP, Avtozavodskaya CHP, CHP-12, CHP-16, Segment #1 of CHP-9, Shelehov segment of the Novo-Irkutsk CHP, EnSer CHP, Baikalenergo CHP, Segment of the heat sources and grids CHP-6.

Management Discussion and Analysis

Key Highlights

The following table sets forth selected data from the Group's key financial information:

As at or year ended 31 December (USD millions)	2017	2016	2015
Revenues	12,094	9,776	10,529
Gross profit	**4,124**	**2,966**	**3,345**
Gross profit margin	*34.1%*	*30.3%*	*31.8%*
Results from operating activities (EBIT)	**2,370**	**1,673**	**1,970**
Operating Profit Margin	*19.6%*	*17.1%*	*18.7%*
Pre-tax Profit	**1,618**	**1,665**	**840**
Profit for the year	**1,403**	**1,361**	**580**
Net Profit Margin(1)	*11.6%*	*13.9%*	*5.5%*
Adjusted EBITDA(2)	**3,223**	**2,311**	**2,732**
Adjusted EBITDA margin (3)	*26.6%*	*23.6%*	*25.9%*
Net Debt(4)	12,164	13,939	11,826
Net Working Capital(5)	1,737	1,678	1,597
Free Cash Flow(6)	1,258	298	1,081
Basic Earnings per share(7)	1.425	1.378	0.332
Equity Attributable to Shareholders of the company	1,991	400	(1,870)

Notes:
(1) Net Profit Margin for any period represents net profit or loss for the relevant period divided by total revenues for the relevant period and expressed as a percentage, in each case attributable to the Group, ENERGY or RUSAL, as the case may be.
(2) Adjusted EBITDA for any period represents the results from operating activities adjusted for amortisation and depreciation, impairment of non-current assets and gain/loss on disposal of property, plant and equipment for the relevant period, in each case attributable to the Group, ENERGY or RUSAL, as the case may be.
(3) Adjusted EBITDA Margin for any period represents Adjusted EBITDA for the relevant period divided by total revenues for the relevant period and expressed as a percentage, in each case attributable to the Group, ENERGY or RUSAL, as the case may be.
(4) Net Debt represents the sum of secured and unsecured long-term and short-term debt (including borrowings, bonds, accrued interest and, for

calculations in respect of the ENERGY segment and the Group, respectively, deferred liability for the acquisition of shares in Irkutskenergo and provision for guarantees for related parties) less total cash and cash equivalents as at the end of the relevant period, in each case attributable to the Group, the ENERGY segment or RUSAL, as the case may be.

(5) Net Working Capital represents inventories plus short-term trade and other receivables (excluding dividend receivables from related parties) less trade and other payables (excluding short-term part of deferred liability for acquisition of shares in Irkutskenergo) as at the end of the relevant period, in each case attributable to the Group, the ENERGY segment or RUSAL, as the case may be.

(6) Free Cash Flow means, for any period, the cash flows generated from operating activities less net interest paid, capital expenditures and restructuring fees, adjusted for payments from settlement of derivative instruments and one-off acquisitions plus dividends from associates and joint ventures.

(7) The earnings per share calculation is based on a 500 million weighted average number of shares in 2017, 2016 and 2015.

Financial Overview

The results of the Group's operations are divided into the ENERGY and METALS segments. ENERGY predominantly consists of the Power Segment, and also includes the Coal Segment and the Logistics Segment, both of which support the operations of the Power Segment, and the Other Segment, which includes the Other Segment includes KRAMZ (an aluminium processing plant) and SMR (a molybdenum and ferromolybdenum producer). The Group's other (unallocated) operations that are not reportable separately due to their immateriality are included in ENERGY. METALS consists of RUSAL, which includes RUSAL's equity investment in Norilsk Nickel.

RUSAL is the second largest aluminium producer globally with a high degree of vertical integration and operations throughout all the major stages of aluminium production, from the mining of raw materials to the sale of value-added products to end users. With its competitive mining and refinery operations covering the major material consumption needs of RUSAL's production facilities, and the historically low energy and low-cost smelting operations located in Siberia, RUSAL has one of the lowest costs of production in the industry globally, according to CRU.

The Company's management believes that the division of the results of the Group's operations into ENERGY and METALS enables investors and analysts to assess the part the Group's business (primarily power operations supported by coal and logistics businesses) which is under the Company's direct day-to-day operational management.

In its comparison of period-to-period results of operations, the Group presents its results of operations on a consolidated basis after intersegmental eliminations, in order to analyse changes, developments and trends by reference to the individual segment's results of operations (ENERGY and METALS). Amounts attributable to ENERGY and METALS are presented prior to intersegmental eliminations between the two segments. All operations between entities within ENERGY are eliminated.

Revenues

The following table sets forth the Group's revenues from sales, broken down by each product sold by the Group, for the years indicated:

	Year ended 31 December		
	2017	**2016**	**2015**
	(USD millions)		
Sales of primary aluminium and alloys	8,169	6,487	7,163
Sales of electricity	1,319	1,200	1,170
Sales of alumina and bauxite	778	655	617

Sales of semi-finished products and foil	536	417	450
Sales of heat	462	345	344
Sales of ferromolybdenum	66	51	51
Other revenues	764	621	734
Total revenues	**12,094**	**9,776**	**10,529**

The following table sets forth the Group's revenue by business segments for the years indicated:

	Year ended 31 December		
	2017	**2016**	**2015**
	(USD millions)		
METALS (RUSAL)	9,969	7,983	8,680
ENERGY	3,235	2,482	2,459
Business segment revenues	**13,204**	**10,465**	**11,139**
Elimination of intersegmental revenues	(1,110)	(689)	(610)
Total revenues	**12,094**	**9,776**	**10,529**

The Group's revenues are mainly attributable to RUSAL's operations. In 2017 and 2016 RUSAL's revenues (before intersegmental elimination) accounted for 75.5% and 76.3% of the Group's revenues, respectively. In 2017 and 2016, ENERGY's revenues (before intersegmental elimination) accounted for 24.5% and 23.7% of the Group's revenues, respectively.

The Group's revenues increased by USD 2,318 million, or 23.7%, from USD 9,776 million for 2016 to USD 12,094 million for 2017. The growth was primarily due to the increase in RUSAL's revenues following a 22.7% increase in the average LME aluminium price, from USD 1,604 per tonne in 2016 to USD 1,968 per tonne in 2017, together with an increase in volumes of primary aluminium and alloys sold by 3.6% between the same periods as well as the growth in the share of value added products ("VAP") in total aluminium sales to 47.3% in 2017 in comparison with 44.0% in 2016. The Group's revenues also grew due to the increase in ENERGY's revenues following the price liberalisation of the HPP capacity market in the second pricing zone of the wholesale electricity market.

Cost of sales

The following table sets forth the Group's cost of sales by business segments for the years indicated:

	Year ended 31 December		
	2017	**2016**	**2015**
	(USD millions)		
METALS (RUSAL)	7,183	6,030	6,215
ENERGY	1,827	1,469	1,578
Business segment cost of sales	**9,010**	**7,499**	**7,793**
Elimination of intersegmental cost of sales	(1,040)	(689)	(609)
Total cost of sales	**7,970**	**6,810**	**7,184**

Cost of sales of ENERGY and RUSAL are those costs incurred directly by the sale and production of the principal products and services of both groups of companies. For ENERGY, cost of sales primarily includes costs for electricity and capacity purchased for resale, the cost of raw materials, fuel, personnel expenses, depreciation and amortisation. For RUSAL, the cost of sales mainly consists of the cost of energy, alumina, bauxite, other raw materials, personnel expenses, depreciation and amortisation.

The Group's cost of sales increased by USD 1,160 million, or 17.0%, from USD 6,810 million for 2016 to USD 7,970 million for 2017. The growth was primarily attributable to the increase in the cost of sales of RUSAL in U.S. dollar terms, primarily as a result of increases in the volumes of primary aluminium and alloys sold, as well as significant increases in rouble-denominated electricity prices, railway transportation tariffs and other raw material costs in 2017.

Gross profit

For the reasons described above, the Group's gross profit increased by USD 1,158 million, or 39.0%, to USD 4,124 million for 2017 from USD 2,966 million for 2016.

The Group's gross profit margin increased from 30.3% in 2016 to 34.1% in 2017.

Distribution, general and administrative expenses

The Group's distribution expenses increased by USD 98 million, or 17.3%, from USD 568 million for 2016 to USD 666 million for 2017 due to an increase in the transportation tariff and sales volumes as well as the appreciation of the average ruble rate against the U.S. dollar between the periods.

The Group's general and administrative expenses increased by USD 154 million, or 21.7%, from USD 709 million for 2016 to USD 863 million for 2017 due (i) to the appreciation of the ruble to the U.S. dollar within the comparable periods (the increase in rouble terms was 6.0%) and (ii) the increase in property tax due to the purchase of dams in the end of 2016.

Adjusted EBITDA, Adjusted EBITDA Margin and Results from operating activities

The following table sets forth a reconciliation of the Group's Adjusted EBITDA to the Group's results from operating activities for the periods indicated:

	Year ended 31 December		
	2017	**2016**	**2015**
	(USD millions)		
Reconciliation of Adjusted EBITDA			
Results from operating activities	2,370	1,673	1,970
Add:			
Amortisation and depreciation	736	641	593
Loss on disposal of property, plant and equipment	28	15	26
Impairment/ (Reversal) of non-current assets	89	(18)	143
Adjusted EBITDA	**3,223**	**2,311**	**2,732**

The Group's results from operating activities increased by USD 697 million, or 41.7%, to USD 2,370 million for 2017 from USD 1,673 million for 2016.

Results from operating activities attributable to ENERGY increased by USD 286 million, or 47.3%, from USD 605 million for 2016 to USD 891 million for 2017; results from operating activities attributable to

RUSAL increased by USD 455 million, or 42.6%, from USD 1,068 million for 2016 to USD 1,523 million for 2017.

The Group's operating profit margin increased from 17.1% in 2016 to 19.6% in 2017.

For 2017, the Group had impairment of non-current assets of USD 89 million as a result of RUSAL's impairment charge on its property, plant and equipment of USD 84 million.

For 2016, the reversal of impairment of non-current assets comprised the net results of: (i) a reversal by RUSAL of an impairment charge on its property, plant and equipment of USD 113 million; (ii) the impairment by RUSAL of certain non-current assets, valued at USD 69 million; (iii) an impairment by ENERGY of certain non-core assets of USD 20 million; and (iv) an impairment by ENERGY on its hydro assets of USD 6 million.

The following table sets forth the Group's Adjusted EBITDA and Adjusted EBITDA Margin broken down by segments (before inter-segment elimination) for the years indicated:

	Year ended 31 December		
	2017	**2016**	**2015**
	(USD millions, except %)		
Adjusted EBITDA RUSAL	2,120	1,489	2,015
Adjusted EBITDA ENERGY	1,147	822	717
Consolidation adjustment	(44)	-	-
Adjusted EBITDA	**3,223**	**2,311**	**2,732**
Adjusted EBITDA Margin RUSAL	21.3%	18.7%	23.2%
Adjusted EBITDA Margin ENERGY	35.5%	33.1%	29.2%
Adjusted EBITDA Margin Group	**26.6%**	**23.6%**	**25.9%**

In 2017, the Group's Adjusted EBITDA increased by USD 912 million, or 39.5%, to USD 3,223 million for 2017 from USD 2,311 million for 2016. The increase in 2017 as compared to 2016 was mainly due to the factors which influenced the operating results of the Group.

Share of profits of associates and joint ventures

	Year ended 31 December		
	2017	**2016**	**2015**
	(USD millions, %)		
Share of profit in Norilsk Nickel, with	528	688	486
Effective shareholding of	*13.39%*	*13.39%*	*13.50%*
Share of profit in BEMO project, with	58	138	176
Effective shareholding of	*24.07%*	*24.07%*	*24.07%*
Share of profit/(loss) in Other associates/joint ventures	35	21	(294)
Share of profits of associates and joint ventures	**621**	**847**	**368**

The Group has a number of associates and joint ventures which are accounted for in the Financial Statements under the equity method (see Note 14 to the Annual Financial Statements). The principal associates and joint ventures include Norilsk Nickel, Queensland Alumina Limited and the BEMO Project.

The Group's share of the profits of the associates and joint ventures decreased by USD 226 million, or 26.7%, to USD 621 million for 2017 from USD 847 million for 2016.

The deviation in the share of the profits of the associates and joint ventures in 2017 as compared to 2016 can primarily be attributed to: (i) the decrease of profit from the Group's investment in Norilsk Nickel; (ii) and the 2016 reversal of a provision for a guarantee relating to the BEMO Project (which has been reflected in the Group's reported share of profits arising from the BEMO Project in the amount of USD 100 million in 2016).

The market value of the investment in Norilsk Nickel, based on the MOEX price, was USD 8,294 million as at 31 December 2017 and USD 7,348 million as at 31 December 2016.

Finance income and costs

The Group's finance income primarily consists of interest income on interest-bearing assets and the net foreign exchange gain. The Group's finance costs primarily consist of interest expense on interest-bearing liabilities and change in the fair value of derivative financial instruments.

	Year ended 31 December		
	2017	**2016**	**2015**
(USD millions)			
Finance income			
Net foreign exchange gain	29	41	-
Interest income	21	39	30
Dividend income	1	2	1
Other finance income	8	6	5
Total Finance income	**59**	**88**	**36**
Interest expense - *third parties*	(1,115)	(1,053)	(970)
Interest expenses on company loans from related parties - *companies capable of exerting significant influence*	(2)	(7)	(22)
Change in fair value of derivative financial instruments	(287)	(157)	(352)
Net foreign exchange loss	-	-	(285)
Other finance costs	(28)	(24)	-
Total Finance costs	**(1,432)**	**(1,241)**	**(1,629)**

The Group's finance income decreased by USD 29 million, or 33.0%, to USD 59 million for 2017 from USD 88 million for 2016 as a result of the deviation in the net foreign exchange gain (USD 29 million in 2017 as compared to USD 41 million in 2016) and interest income (USD 21 million in 2017 as compared to USD 39 million in 2016).

The Group's finance costs increased by USD 191 million, or 15.4%, from USD 1,241 million for 2016 to USD 1,432 million for 2017 as a result of: (i) a change in the fair value of derivative financial instruments (which recorded a loss of USD 287 million in 2017 as compared to a loss of USD 157 million in 2016); and (ii) higher interest expenses (USD 1,115 million in 2017 as compared to a loss of USD 1,053 million

in 2016) due to entering into the syndicate loan agreement with Sberbank and VTB in June 2016 to finance the acquisition of a non-controlling interest in Irkutskenergo and receiving of four tranches in 2017.

Profit before taxation

For the reasons described above, the Group had profit before taxation of USD 1,618 million for 2017 as compared to profit before taxation of USD 1,665 million for 2016. For 2017, ENERGY generated profit before taxation of USD 518 million compared to profit before taxation of USD 431 million for 2016. The improved results of the operations of ENERGY are mainly explained by the enhanced results from the operating activities partially offset by increased interest expenses. For 2017, RUSAL generated profit

before taxation of USD 1,288 million as compared to profit before taxation of USD 1,354 million in 2016.
The higher results of operations in 2016 are mainly due to the sale by RUSAL of its 100% shareholding in Aluminia Partners of Jamaica ("Alpart").

Income tax expense

The Group's income tax expense decreased by USD 89 million, or 29.3%, to USD 215 million for 2017 from USD 304 million for 2016 as a result of the lower profit before taxation in 2017 as compared to 2016.
The current tax expense increased by USD 67 million during this period or 26.6%, primarily due to the increase in operating profit in 2017 as compared to 2016. Deferred tax changed by USD 156 million from a USD 52 million tax expense in 2016 to a USD 104 million tax benefit in 2017, primarily due to the reversal of certain tax provisions, the change in the fair value of derivative financial instruments and the effect of the reversal of impairment of non-current assets at several subsidiaries in different periods

Profit for the year

For the reasons described above, the Group's profit for the year was USD 1,403 million for 2017 as compared to profit for the year of USD 1,361 million for 2016.

METALS

In 2017 and 2016, RUSAL accounted for 75.5% and 76.3% of the business segments' revenues (before adjustments), respectively. As at 31 December 2017 and 31 December 2016 the assets of RUSAL accounted for 59.5% and 58.0%, of the Group's total assets (before adjustments), respectively.

Selected financial data

The following table sets forth selected data of RUSAL (before intersegmental elimination) for the periods indicated:

As at or year ended 31 December (USD millions)	**2017**	**2016(1)**	**2015**
Revenues	9,969	7,983	8,680
Gross profit	**2,786**	**1,953**	**2,465**
Gross profit margin	*27.9%*	*24.5%*	*28.4%*
Results from operating activities (EBIT)	**1,523**	**1,068**	**1,409**
Operating profit margin	*15.3%*	*13.4%*	*16.2%*
Pre-tax profit	**1,288**	**1,354**	**763**
Profit for the period	**1,222**	**1,179**	**558**
Net profit margin	*12.3%*	*14.8%*	*6.4%*
Adjusted EBITDA	**2,120**	**1,489**	**2,015**
Adjusted EBITDA margin	*21.3%*	*18.7%*	*23.2%*
Adjusted Net Profit(2)	1,077	292	671
Recurring Net Profit(3)	1,573	959	1,097
Recurring Net Profit Margin(4)	*15.8%*	*12.0%*	*12.6%*

(1) Management reassessed classification of expenses in comparative data to comply with current year presentation.
(2) Adjusted Net Profit for any period represents net profit for the relevant period adjusted for the net effect from the share in the results of Norilsk Nickel, the net effect of embedded derivative financial instruments and the net effect of non-current assets impairment.
(3) Recurring Net Profit represents Adjusted Net Profit for the relevant period plus RUSAL's effective share of Norilsk Nickel's profits, net of tax.
(4) Recurring Net Profit Margin represents Recurring Net Profit for the relevant period divided by total revenues and expressed as a percentage for the relevant period attributable to RUSAL.

Revenues

The following table sets forth components of RUSAL's sales data (before intersegmental elimination) for the years indicated:

	Year ended 31 December		
	2017	**2016**	**2015**
Sales of primary aluminium and alloys			
Revenue, USD millions	8,324	6,614	7,279
Sales volumes, thousands of tonnes	3,955	3,818	3,638
Average sales price (*USD per tonne*)	2,105	1,732	2,001
Sales of primary alumina			
Revenue, USD millions	769	622	595
Sales volumes, thousands of tonnes	2,018	2,267	1,722
Average sales price (*USD per tonne*)	381	274	346
Sales of foil and other aluminium products, USD millions	323	240	270
Other revenue, USD millions	553	507	536
Total revenues	**9,969**	**7,983**	**8,680**

RUSAL's revenue increased by USD 1,986 million or by 24.9% to USD 9,969 million in 2017 compared to USD 7,983 million in 2016. The increase in total revenue in 2017 was mainly due to the growth of sales of primary aluminium and alloys, which accounted for 83.5% and 82.9% of RUSAL's revenues for 2017 and 2016, respectively.

Revenue from sales of primary aluminium and alloys increased by USD 1,710 million, or 25.9% to USD 8,324 million in 2017, as compared to USD 6,614 in 2016, primarily due to a 21.5% increase in the weighted-average realised aluminium price per tonne driven by an increase in the LME aluminium price (to an average of USD 1,968 per tonne in 2017 from USD 1,604 per tonne in 2016), as well as a 3.6% increase in sales volumes and a slight improvement in premiums above the LME prices in the different geographical segments (to an average of USD 163 per tonne from USD 159 per tonne in 2017 and 2016, respectively).

Revenue from sales of alumina increased by 23.6% to USD 769 million for the year ended 31 December 2017 as compared to USD 622 million for the previous year, primarily due to a 39.1% increase in the average sales price, which was partially offset by an 11.0% decrease in sales volumes.

Revenue from sales of foil and other aluminium products increased by USD 83 million, or by 34.6%, to USD 323 million in 2017, as compared to USD 240 million in 2016 primarily due to a 20.1% increase in sales volumes of foil. RUSAL notes the growth in sales of other aluminium products (such as wheels) from SKAD operations, consolidated starting from April 2017.

Revenue from other sales, including sales of other products, bauxite and energy services increased by 9.1% to USD 553 million for the year ended 31 December 2017 as compared to USD 507 million for the previous year, due to a 6.5% increase in sales of other materials (such as anode blocks by 28.3%, aluminium powder by 12.4% and corundum by 20.0%).

Cost of sales

The following table sets forth components of RUSAL's cost of sales (before intersegmental elimination) for the years indicated:

	Year ended 31 December			
	2017(1)	2016 rst(1)	2016	2015
	(USD millions)			
Cost of alumina	728	751	716	733
Cost of bauxite	462	372	427	538
Cost of other raw materials	2,621	2,143	2,131	2,189
Purchases of primary aluminium from joint ventures	279	229	229	58
Energy costs	2,149	1,630	1,568	1,680
Depreciation and amortisation	472	434	434	434
Personnel expenses	582	491	520	505
Repair and maintenance	72	60	56	58
Net change in provisions for inventories	2	(11)	(11)	20
Change in finished goods	(184)	(69)	NA	NA
Total cost of sales	**7,183**	**6,030**	**6,070**	**6,215**

Notes:
(1) Management reassessed the classification of expenses in 2016 data to comply with the presentation of 2017.

RUSAL's cost of sales increased by USD 1,153 million, or 19.1%, to USD 7,183 in 2017, as compared to USD 6,030 million in 2016. The increase was driven by an increase in volumes of primary aluminium and alloys sold as well as a significant increase in electricity prices, railway transportation tariffs and other raw material costs, all of which were rouble-denominated.

The cost of alumina was almost flat in 2017 compared to 2016.

The cost of bauxite increased by 24.2% in 2017 compared to the previous year, primarily as a result of an increase in purchase volume and a slight increase in purchase prices.

The cost of raw materials (other than alumina and bauxite) and other costs increased by 22.3% in 2017 compared to the previous year, due to a rising raw materials purchase price (prices for raw pitch coke increased by 74.5%, raw petroleum coke by 18.1%, pitch by 46.7% and caustic soda by 47.8%).

Energy costs increased by 31.8% in 2017 compared to 2016, primarily due to the 13.0% appreciation of the rouble against the US dollar between the comparable periods.

Adjusted EBITDA, Adjusted EBITDA Margin and Results from operating activities

In 2017, RUSAL's Adjusted EBITDA (before intersegmental elimination) increased by USD 631 million, or 42.4%, to USD 2,120 million for 2017 from USD 1,489 million for 2016. The increase in RUSAL's Adjusted EBITDA in 2017 as compared to 2016 can be attributed to the same factors which influenced RUSAL's operating results and its impairment of non-current assets in 2017 instead of the reversal of impairment in 2016. During the periods under review, the share of RUSAL's Adjusted EBITDA increased from 64.4% of the Group's Adjusted EBITDA in 2016 to 65.8% of the Group's Adjusted EBITDA in 2017.

The following table sets forth a reconciliation of RUSAL's Adjusted EBITDA to RUSAL's results from operating activities for the periods indicated:

Year ended 31 December	2017	2016	2015
(USD millions)			
Reconciliation of Adjusted EBITDA			
Results from operating activities	1,523	1,068	1,409
Add:			
Amortisation and depreciation	488	453	457
Loss on disposal of property, plant and equipment	25	12	17
Impairment/(reversal) of non-current assets	84	(44)	132
Adjusted EBITDA	**2,120**	**1,489**	**2,015**

The following table sets forth a reconciliation of RUSAL's Adjusted Net Profit and RUSAL's Recurring Net Profit to RUSAL's net profit for the periods indicated:

Year ended 31 December	2017	2016	2015
(USD millions)			
Reconciliation of Adjusted Net Profit			
Net profit for the period	1,222	1,179	558
Adjusted for:			
Share of profits and other gains and losses attributable to Norilsk Nickel, net of tax effect	(496)	(667)	(426)
Change in derivative financial instruments, net of tax (20.0%)	267	122	342
Results from disposal and deconsolidation of subsidiaries including items recycled from other comprehensive income	-	(298)	(95)
Impairment/(reversal) of non-current assets, net of tax	84	(44)	132
Net impairment of underlying net assets of joint ventures and associates	-	-	160
Adjusted Net Profit	**1,077**	**292**	**671**
Add back:			
Share of profits of Norilsk Nickel, net of tax	496	667	426
Recurring Net Profit	**1,573**	**959**	**1,097**

Adjusted Net Profit for any period is defined as the net profit adjusted for the net effect of the Company's investment in Norilsk Nickel, the net effect of derivative financial instruments and the net effect of noncurrent assets impairment. Recurring Net Profit for any period is defined as Adjusted Net Profit plus the Company's net effective share in Norilsk Nickel results.

ENERGY

ENERGY includes assets and operations involved in the production and supply of electricity and heat, as well as supporting the coal and operations of the logistics segments. For reporting purposes, ENERGY also includes the less significant operations of KRAMZ and SMR.

In 2017 and 2016, ENERGY accounted for 24.5% and 23.7% of the business segments' revenues (before adjustments), respectively. As at 31 December 2017 and 31 December 2016 the assets of ENERGY accounted for 40.5% and 42.0%, of the Group's total assets (before adjustments), respectively.

Selected financial data

The following table sets forth selected data of ENERGY (before intersegmental elimination) for the periods indicated:

As at or year ended

31 December (USD millions)	2017	2016	2015
Revenues	3,235	2,482	2,459
Gross profit	**1,408**	**1,013**	**881**
Gross profit margin	*43.5%*	*40.8%*	*35.8%*
Results from operating activities (EBIT)	**891**	**605**	**561**
Operating profit margin	*27.5%*	*24.4%*	*22.8%*
Pre-tax profit	**518**	**431**	**197**
Profit for the period	**367**	**302**	**142**
Net profit margin	*11.3%*	*12.2%*	*5.8%*
Adjusted EBITDA	**1,147**	**822**	**717**
Adjusted EBITDA margin	*35.5%*	*33.1%*	*29.2%*

Revenues

The following table sets forth components of ENERGY's sales data (before intersegmental elimination) for the years indicated:

Year ended 31 December	2017	2016	2015
Average rate Rub/USD	***58,35***	***67,03***	***60,96***
(USD millions)			
Sales of electricity			
Revenue, USD millions	1,431	1,087	1,125
Sales volumes, GWh	84,932	83,732	80,239
Average sales price (Rub per MWh)	983	870	855
Sales of capacity			
Revenue, USD millions	498	344	303
Sales volumes, MW/year	169,678	171,395	169,965
Average sales price (th Rub per MW)	171	134	109
Sales of heat			
Revenue, USD millions	422	352	350
Sales volumes, Gcal	23,578,939	23,928,657	23,326,265
Average sales price (Rub per Gcal)	1,045	985	915
Sales of semi-finished products, USD millions	226	187	201
Sales of ferromolybdenum, USD millions	66	51	51
Other revenues, USD millions	592	461	429
Total, USD millions	**3,235**	**2,482**	**2,459**

ENERGY's revenues increased by USD 753 million, or 30.3%, to USD 3,235 million for 2017 from USD 2,482 million for 2016. ENERGY's revenues in rouble terms increased by 13.5% in 2017, as compared to 2016.

Compared to 2016, ENERGY's revenues in 2017, in rouble terms, increased primarily as a result of an increase in the proportion of electricity sold at unregulated prices and capacity sold at CCO, as well as an increase in the weighted average prices for electricity and capacity, and the increase in heat tariffs.

ENERGY's electricity generation decreased from 69.5 TWh in 2016 to 68.9 TWh in 2017. The HPPs generated 56.7 TWh of electricity or 81.6% of total electricity generated by ENERGY in 2016, 55.3 TWh of electricity or 80.3% of total electricity generated by ENERGY in 2017. The decreased share of HPPs in generation can be primarily explained by lower water inflows in 2017 at the reservoirs of the HPPs on Angara cascade[22]. The decreased hydro power generation by the Siberian HPPs resulted in increased prices for electricity in the Siberian IPS. While ENERGY was able to partially offset the decrease in electricity production from its HPPs through an increase in electricity production from its CHPs, electricity production from CHPs is less cost-efficient than from HPPs.

Cost of sales

The following table sets forth components of ENERGY's cost of sales (before intersegmental elimination) for the years indicated:

Year ended 31 December (USD millions)	**2017**	**2016**	**2015**
Electricity and capacity purchased for resale	429	344	366
Personnel expenses	349	296	309
Depreciation, depletion and amortisation	239	183	134
Cost of raw materials and fuel	172	140	152
Aluminium	150	124	145
Electricity transportation costs	173	115	114
Gas	80	67	68
Other	235	200	290
Total cost of sales	**1,827**	**1,469**	**1,578**

For 2017, ENERGY's cost of sales was USD 1,827 million, an increase of USD 358 million, or 24.4%, as compared to USD 1,469 million for 2016. In rouble terms, ENERGY's cost of sales actually increased by only 8.3% as compared to 2016, due to the growth in main components: a) electricity and capacity purchased for resale due to higher volumes of purchased electricity and capacity; b) electricity transportation costs due to both an increase in volumes and tariffs growth; and c) personnel costs increase (effected by collective agreement terms in the Power and Coal segments).

22 Irkutsk, Bratsk and Ust-Ilimsk HPPs

Adjusted EBITDA and Adjusted EBITDA Margin

The following table sets forth the ENERGY's Adjusted EBITDA and Adjusted EBITDA Margin for the years indicated:

Year ended 31 December (USD millions, except %)	**2017**	**2016**	**2015**
Adjusted EBITDA (Power), including	1,108	794	719
- *Adjusted EBITDA (HPP's)*	*953*	*638*	*576*
- *Adjusted EBITDA (CHP's)*	*41*	*44*	*52*
Adjusted EBITDA (Coal)	37	26	12
Adjusted EBITDA (Logistics)	41	29	27
Adjusted EBITDA (Other)	6	11	(4)
Unallocated	(45)	(38)	(37)
Adjusted EBITDA (ENERGY**)**	**1,147**	**822**	**717**
Adjusted EBITDA Margin (ENERGY)	35.5%	33.1%	29.2%
Adjusted EBITDA Margin (Power), including	40.6%	38.2%	34.7%
- *Adjusted EBITDA Margin (HPP's)*	82.8%	81.0%	74.5%
- *Adjusted EBITDA Margin (CHP's)*	5.4%	6.9%	7.9%
Adjusted EBITDA Margin (Power Segment), adjusted for purchase and sale of electricity on the wholesale market as part of retail operations			

49.4% 49.9% 45.4%
Adjusted EBITDA Margin (Coal) 10.8% 10.0% 4.9%
Adjusted EBITDA Margin (Logistics) 26.3% 21.8% 25.5%
Adjusted EBITDA Margin (Other) .... 2.0% 4.5% N/A

In 2017, ENERGY's Adjusted EBITDA (before intersegmental elimination) increased by USD 325 million, or 39.5%, to USD 1,147 million for 2017 from USD 822 million for 2016. The increase in the Adjusted EBITDA of ENERGY in 2017 from the preceding year was mainly attributable to the increase in results from operating activities. The increase in results from operating activities was due to increased revenues in rouble terms, caused by larger portions of electricity being sold at unregulated prices and capacity sold at CCO, the higher average weighted prices for electricity and capacity and higher heat tariffs; this increase was partially offset by the increase in operating costs denominated in roubles. During 2017 and 2016, the share of ENERGY's Adjusted EBITDA remained at the same level of 35.6% of the Group's Adjusted EBITDA.

As the power operations account for substantially part of the revenues, assets and liabilities attributable to ENERGY and are, therefore, a predominant contributor to the Adjusted EBITDA of ENERGY, the lowcost operations of HPPs positively affect the overall Adjusted EBITDA of ENERGY. In particular, the proportion of HPPs' contribution to the Adjusted EBITDA of ENERGY was 83.1% in 2017 and 77.6% in 2016.

The Power Segment's Adjusted EBITDA Margin is impacted by its operations on the retail electricity market. Due to market mechanics, the Power Segment's retail companies are required to purchase

electricity on the wholesale market on market terms. These purchases are not recognised as intercompany operations for the Group, which results in an increase in the Group's reported revenue and a decrease in the Group's reported Adjusted EBITDA Margin. If these intercompany operations were eliminated, the Power Segment's Adjusted EBITDA Margin would have been 49.4% for 2017 and 49.9% for 2016.

The following table sets forth a reconciliation of ENERGY's Adjusted EBITDA to ENERGY's results from operating activities for the periods indicated:

	Year ended 31 December		
	2017	**2016**	**2015**
	(USD millions)		
Reconciliation of Adjusted EBITDA			
Results from operating activities	891	605	561
Add:			
Amortisation and depreciation	248	188	136
Loss on disposal of property, plant and equipment	3	3	9
Impairment of non-current assets	5	26	11
Adjusted EBITDA	**1,147**	**822**	**717**

Net assets

Year ended 31 December
2017 2016 2015

(USD millions)	2017	2016	2015
Group			
Non-current assets	16,987	16,151	10,671
Current assets	4,833	4,179	3,812
Non-current liabilities	13,133	14,287	10,934
Current liabilities	4,302	3,858	4,546
Net assets	**4,385**	**2,185**	**(997)**
RUSAL			
Non-current assets	11,492	10,836	9,515
Current assets	4,282	3,616	3,294
Non-current liabilities	8,858	8,594	8,606
Current liabilities	2,472	2,559	2,812
Net assets	**4,444**	**3,299**	**1,391**

ENERGY			
Non-current assets	10,061	9,878	5,716
Current assets	663	599	539
Non-current liabilities	4,277	5,693	2,328
Current liabilities	1,943	1,376	1,794
Net assets	**4,504**	**3,408**	**2,133**

In 2017, the Group's net assets increased by USD 2,200 million to USD 4,385 million as at 31 December 2017 from USD 2,185 million as at 31 December 2016.

In 2017, RUSAL's net assets increased by USD 1,145 million or by 35%, to USD 4,444 million as at 31 December 2017 from USD 3,299 million as at 31 December 2016, caused by the following factors: a) an increase in total assets - mainly due to the increase in the carrying value of the investment in Norilsk Nickel, inventories and property, plant and equipment; and b) an increase in total liabilities - mainly due to the increase in RUSAL's trade and other payables and bonds outstanding, which was partially offset by a reduction in loans and borrowings following the successful restructuring of RUSAL's loan portfolio.

In 2017, ENERGY's net assets increased by USD 1,096 million or by 32.0%, to USD 4,504 million as at 31 December 2017 from USD 3,408 million as at 31 December 2016, caused by the following factors: a) an increase in total assets, mainly due to the translation difference of hydroassets; and b) a decrease in total liabilities mainly due to the repayment of a loan under the VTB loan agreement

Net Working Capital

Net Working Capital is defined as inventories plus short-term trade and other receivables (excluding dividend receivables from related parties) less trade and other payables (excluding the short-term part of the deferred liability for the acquisition of shares in Irkutskenergo).

The following table sets forth the calculation of the Net Working Capital of the Group, ENERGY and RUSAL as at the dates indicated:

	As at 31 December		
	2017	**2016**	**2015**
(USD millions)			
Group			
Inventories	2,495	2,034	1,922
Short-term trade and other receivables	1,279	1,401	1,157
Dividends receivable from related parties	(3)	(311)	(189)
Trade and other payables	(2,143)	(1,652)	(1,293)
Short-term part of the deferred liability for the acquisition of shares in			

Irkutskenergo ....
109 206 -
Net Working Capital **1,737 1,678 1,597**
ENERGY
Inventories 125 108 85
Short-term trade and other receivables 384 348 323

Dividends receivable from related parties... - - -
Trade and other payables .... (598) (675) (402)
Short-term part of the deferred liability for the acquisition of shares in
Irkutskenergo ....
109 206 -
Net Working Capital **20 (13) 6**
RUSAL
Inventories 2,414 1,926 1,837
Short-term trade and other receivables 1,008 1,130 899
Dividends receivable from related parties... (3) (311) (189)
Trade and other payables .... (1,658) (1,054) (951)
Net Working Capital **1,761 1,691 1,596**

As at 31 December 2017, the Group's Net Working Capital amounted to USD 1,737 million, compared to USD 1,678 million as at 31 December 2016. The increase in inventories (by USD 461 million from USD 2,034 million as at 31 December 2016 to USD 2,495 million as at 31 December 2017) and trade and other receivables, net of dividends receivable (by USD 186 million from USD 1,090 million as at 31 December 2016 to USD 1,276 million as at 31 December 2017) was partially offset by the growth in trade and other payables, net of the short-term part of the deferred liability for the acquisition of shares in Irkutskenergo (by USD 588 million from USD 1,446 million as at 31 December 2016 to USD 2,034 million as at 31 December 2017). The Group's Net Working Capital in U.S. dollar terms increased by 3.5%.

Liquidity and Capital Resources

General

In 2017, the Group's liquidity requirements primarily related to funding working capital, capital expenditures and debt service. The Group used a variety of internal and external sources to finance operations. During the periods under review, short- and long-term funding sources included primarily the rouble- and foreign currency-denominated secured and unsecured loans from Russian and international banks, as well as debt instruments issued in both the Russian and international capital markets.
The liquidity was managed separately in both ENERGY and RUSAL. There were no cross-segment obligations other than those in the ordinary course of business.

Dividends

The Board of Directors of the Company approved dividends in the aggregate amount of USD 394 million for the financial year ending 31 December 2017, including USD 144 million of dividends received from RUSAL and USD 68 million declared in March 2018. In 2017 the Group distributed total cash dividends of USD 373 million.

Cash flows

The following table sets forth the Group's selected cash flow data for the periods indicated:

	Year ended 31 December		
	2017	**2016**	**2015**
	(USD millions)		
Cash flows from operating activities	2,654	1,950	2,163
Cash flows used in investing activities	(124)	(180)	97
Cash flows used in financing activities	(2,232)	(1,704)	(2,258)
Net change in cash and cash equivalents	**298**	**66**	**2**
Cash and cash equivalents at the beginning of the period, excluding restricted cash	656	577	697
Effect of exchange rate changes on cash and cash equivalents	3	13	(122)
Cash and cash equivalents at the end of the period, excluding restricted cash(1)	**957**	**656**	**577**
Free Cash Flow	1,258	298	1,081

(1) Restricted cash pledged under a Swiss Law Pledged Agreement with BNP Paribas (Suisse) SA and Allied Irish Bank amounted to USD 17 million as at 31 December 2017, USD 13 million as at 31 December 2016 and USD 14 million as at 31 December 2015.

Cash flows from operating activities

The Group's cash flows from operating activities for 2017 were USD 2,654 million, an increase ofUSD 704 million, or 36.1%, compared to USD 1,950 million for 2016. The increase was primarily due to a higher Operating profit before changes in Net Working Capital of USD 3,243 million for 2017 compared to USD 2,307 million for 2016, which was partly offset by cash-negative changes in income tax paid and changes in Working Capital.

The following table sets forth the Group's cash flows from operating activities for the periods indicated:

	Year ended 31 December		
	2017	**2016**	**2015**
	(USD millions)		
Operating profit before changes in Net Working Capital and provisions	**3,243**	**2,307**	**2,775**
(Increase)/decrease in inventories	(431)	(85)	197
(Increase)/decrease in trade and other receivables	(163)	(37)	3
Decrease in trade and other payables and provisions	(294)	(80)	(486)
Cash flows from operations before income tax	**2,943**	**2,105**	**2,489**
Income taxes paid	(289)	(155)	(326)
Cash flows from operating activities	**2,654**	**1,950**	**2,163**

Cash flows generated from/ (used in) investing activities

The Group's cash flows used in investing activities for 2017 were USD 124 million and were primarily attributable to capital expenditures on the acquisition of property, plant and equipment of USD 970 million,

partially offset by dividends received from associates and joint ventures of USD 806 million (mainly Norilsk Nickel).

The Group's cash flows used in investing activities for 2016 were USD 180 million and were primarily attributable to cash used for capital expenditure on the acquisition of property, plant and equipment of USD 834 million in 2016, partially offset by: (i) proceeds from the disposal of a subsidiary (Alpart) of USD 298 million; and (ii) USD 336 million in dividends received from associates and joint ventures (mainly Norilsk Nickel) in 2016.

Cash flows used in financing activities

The Group's cash flows used in financing activities for 2017 were USD 2,232 million, representing a growth of USD 528 million, compared to USD 1,704 million for 2016. This change was primarily due to:

a net cash outflow of USD 1,222 million from the repayment of borrowings of in 2017 compared to a USD 1,177 million net cash inflow from the proceeds from borrowings in 2016, partially offset by: (i) proceeds from the offering in 2017 of USD 1,000 million; (ii) the decrease in the payment for the acquisition of non-controlling interests from USD 827 million for 2016 (Irkutskenergo and Krasnoyarsk HPPs) to USD 241 million for 2017 (outstanding instalments under the acquisition of shares in Irkutskenergo); and (iii) lower payments from settlements of derivatives, USD 182 million in 2017 as compared to USD 446 million in 2016.

Free Cash flow

The following table sets forth a reconciliation of the Free Cash Flow to the cash flows from operating activities for the periods indicated:

	Year ended 31 December		
	2017	**2016**	**2015**
	(USD millions)		
Reconciliation of Free Cash Flow			
GROUP			
Cash flows generated from operating activities	2,654	1,950	2,163
Adjusted for:			
Capital expenditures (acquisition of property, plant and equipment and acquisition of intangible assets)	(990)	(851)	(691)
Payment for dams (including VAT)	-	163	-
Dividends from associates and joint ventures	806	336	755
Interest received	14	27	31
Interest paid	(980)	(867)	(855)
Restructuring fees and expenses related to offering	(64)	(14)	(2)
Settlement of derivative financial instruments	(182)	(446)	(320)
Free Cash Flow	**1,258**	**298**	**1,081**

Reconciliation of Free Cash Flow			
METALS (RUSAL)			
Cash flows generated from operating activities	1,702	1,245	1,567
Adjusted for:			
Capital expenditures (acquisition of property, plant and equipment and acquisition of intangible assets)	(842)	(575)	(522)
Dividends from associates and joint ventures	806	336	755
Interest received	8	17	21
Interest paid	(493)	(452)	(516)
Restructuring fees	(36)	(14)	-
Settlement of derivative financial instruments	(182)	(446)	(320)
Free Cash Flow	**963**	**111**	**985**
Reconciliation of Free Cash Flow			
ENERGY			
Cash flows generated from operating activities	952	705	596
Adjusted for:			
Capital expenditures (acquisition of property, plant and equipment and acquisition of intangible assets)			

(148) (276) (169)
Payment for dams (including VAT) .... - 163 -
Interest received.. 6 10 10
Interest paid .... (487) (415) (339)
Restructuring fees and expenses related to offering .... (28) - (2)
Free Cash Flow **295 187 96**

Capital expenditures

In 2017 and 2016, the Group's capital expenditures (comprising the acquisition of property, plant and equipment, as well as the acquisition of intangible assets) were USD 990 million and USD 851 million,
respectively. The Group's subsidiaries financed their cash requirements through a combination of operating
cash flows and borrowings. The table below sets forth the capital expenditures of RUSAL and ENERGY
for the periods indicated:

Year ended 31 December (USD millions)	2017	2016	2015
RUSAL	842	575	522
ENERGY	148	276	169

RUSAL recorded a total capital expenditure of USD 842 million for the year ended 31 December 2017. UC
RUSAL's capital expenditure in 2017 focused on maintaining existing production facilities: re-equipment
in the amount of USD 377 million, pot rebuild costs USD 109 million and development CAPEX of USD
356 million.

ENERGY invested in the operational efficiency of its assets in accordance with the adopted schedule, including HPP equipment modernisation (replacement of runners and generating units) and grid infrastructure development in the Irkutsk and Krasnoyarsk regions.

In 2016, the capital expenditure of ENERGY comprised the acquisition of dams from RusHydro in the
amount USD 138 million (USD 163 million including VAT).

Cash

As at 31 December 2017 and 31 December 2016, the Group's cash and cash equivalents excluding restricted
cash were USD 957 million and USD 656 million respectively. As at 31 December 2017 and 31 December
2016, ENERGY's cash and cash equivalents were USD 143 million and USD 125 million, respectively.

Loans and borrowings

The nominal value of the Group's loans and borrowings was USD 11,572 million as at 31
December 2017, not including bonds, which amounted to an additional USD 1,421 million and USD 109
million of future disbursements to finance repayments of deferred liabilities.

Set out below is an overview of certain key terms of selected facilities in the Group's loan portfolio as at
31 December 2017:

Facility
/Lender
Principal amount
outstanding as at

31 December
2017
Tenor / Repayment
Schedule
Pricing
RUSAL
Syndicated Facilities
PXF Facility
USD 1.7 billion
up to USD 1.7 billion
syndicated aluminium preexport
finance term facility -
until 31 May 2022
equal quarterly repayments
starting from July 2019
3-month LIBOR plus
2.5% p.a.
Bilateral loans
Sberbank loan
USD 4.2 billion
December 2024, quarterly
repayments starting from
March 2021
3-month LIBOR plus
3.75% p.a.
VTB Capital
plc loans
USD 95 million
December 2018, equal
quarterly repayments
starting from December
2015
3-month LIBOR plus
4.8% p.a.
Gazprombank
loans*
USD 384 million
EUR58 million
August 2022, equal quarterly
repayments starting from
December 2017
3-month LIBOR plus
3.5% p.a.
Gazprombank
(project
finance)
RUB2.5 billion
December 2021, equal
quarterly repayments
starting from December
2018
8.75% p.a.
MCB (Credit
Bank of
Moscow)*
USD 100 million
September 2019, bullet
repayment at final maturity
date
3-month LIBOR plus

3.0% p.a.
MCC (REPO
transactions)
EUR 100 million
June 2018, bullet repayment
at final maturity date
2.6% p.a. (after crosscurrency
swap)
Taishet/ VEB USD 31 million
December 2018, bullet
repayment at final maturity
date
4% p.a.
Bonds
Ruble bonds
series 07*
RUB1.3 billion February 2018 12.0% p.a.
Ruble bonds
series 08
RUB52 million
April 2021, bullet repayment
at final redemption date,
subject to a bondholders' put
9.0% p.a.

option exercisable in April
2019
Ruble bonds
series BO-01
RUB4.2 billion
April 2026, bullet repayment
at final redemption date,
subject to a bondholders' put
option exercisable in April
2019
12.85% p.a.
Eurobond
USD 600 million
February 2022, repayment at
final redemption date
5.125% p.a.
Eurobond
USD 500 million
May 2023, repayment at
final redemption date
5.3% p.a.
Panda bond
CNY1.0 billion
March 2020, repayment at
final redemption date,
subject to a bondholders' put
option exercisable in March
2019
5.5% p.a.
Panda bond
CNY500 million
September 2020, repayment
at final redemption date,
subject to a bondholders' put

option exercisable in
September 2019
5.5% p.a.
ENERGY
Sberbank and
VTB
RUB87billion
June 2023, quarterly
repayments starting from
September, 2019
The key rate of the
Bank of Russia + 2%
p.a.
Sberbank
RUB65.7billion
June 2020, quarterly
repayments starting from
June, 2016
The key rate of the
Bank of Russia + 1.5%
p.a.
Sberbank
USD 494
million
June 2020, quarterly
repayments starting from
June, 2019
6.0% p.a.

**As of the date of this Annual report repaid in full*

Security

As of 31 December 2017, RUSAL's debt (save for unsecured loans from Gazprombank (project finance), and Bonds) is secured, among others, by the assignment of receivables under specified contracts, pledges of shares and interests in certain operating and non-operating companies, goods, designated accounts, shares in MMC Norilsk Nickel (representing a 25% +1 share of MMC Norilsk Nickel's total nominal issued share capital).

As of 31 December 2017, Energy's debt (save for unsecured working capital loans of certain operating companies from Gazprombank, VTB and Sberbank) is secured, among others, by pledges of shares and interests in certain operating and non-operating companies, goods, designated accounts.

Key Events

- On 24 May 2017, RUSAL entered into a new syndicated Pre-Export Finance Term Facility Agreement ("PXF") with the following key terms and conditions: amount of USD 1.7 billion, interest rate 3M LIBOR+3% per annum and maturity of 5 years (repayment starting in 2 years). The proceeds of the facility were used for the purpose of refinancing RUSAL's debt. The Company agreed with the lenders a new approach to the calculation of certain covenants. Specifically, a Total Net Debt/EBITDA covenant

is calculated with the exclusion of debt secured by MMC Norilsk Nickel shares and dividends from MMC Norilsk Nickel shares. In December 2017, the margin was reduced to 2.5% per annum.
- In June 2017 RUSAL executed amendments to existing facilities with VTB Capital plc reducing the

interest margin from 5.05% to 4.8%, releasing pledges of fixed assets and adjusting the covenant package in line with the PXF.

- In August 2017 RUSAL executed amendments to its Gazprombank facilities, reducing the interest margin from 4.5% to 3.5%, extending final maturity and adjusting covenants in line with the PXF.
- In August RUSAL and Sberbank agreed to amend the existing facilities secured by Norilsk Nickel shares, extending the final maturity to 2024, reducing the interest margin from 4.75% to 3.75% and bringing the covenant package generally in line with the PXF.
- In November 2017 the outstanding amount under the VTB facility with En+ Group of USD 942 million was fully repaid from the IPO proceeds
- In January 2018 RUSAL entered into a bilateral facility agreement with Nordea Bank AB (publ) with the following key terms: USD 200 million, 3 year maturity, unsecured, with an interest rate - 1M LIBOR + 2.4% p.a., bullet repayment. The proceeds were applied to the partial prepayment of existing debt.
- In March 2018, JSC Eurosibenergo (the 100% subsidiary of EN+) amended its existing RUB65.7 billion and USD 494 million facilities with Sberbank by way of rescheduling a RUB 6.6 billion principal repayment from 27 March to 27 June 2018.

Debt capital markets

Russian Bonds

- On 3 April 2017 RUSAL Bratsk announced a new coupon rate in respect to the series 08 bonds at the level of 9% per annum. On 12 April 2017 the Company exercised a put option on the outstanding RUBdenominated bonds series 08.
- In February 2018 RUSAL fully redeemed RUB bonds series 07 with the principal amount of USD 23 million.

Eurobonds

- In February 2017 RUSAL completed a debut offering of Eurobonds with the following key terms: principal amount of USD 600 million, five year maturity and a coupon rate of 5.125% per annum. The bond proceeds, excluding related expenses, in the amount of USD 597 million were applied to the partial refinancing of RUSAL's pre-export finance facility.
- In May 2017 RUSAL completed a second offering of Eurobonds fora principal amount of USD 500 million, 6 year maturity and a coupon rate of 5.3% per annum. The bond proceeds were applied to the partial refinancing of RUSAL's pre-export finance facility and other debt.
- In February 2018 RUSAL completed its third offering of Eurobonds with the following key terms: a principal amount of USD 500 million, 5 year maturity and a coupon rate of 4.85% per annum, which is the lowest rate for unsecured US dollar-denominated debt in RUSAL's portfolio. The bond proceeds were applied to the partial prepayment of the Group's existing debt.
- In March 2018 RUSAL successfully executed a consent solicitation on all three series of its outstanding Eurobonds, obtaining bondholder approval for the harmonisation of leverage covenants, in line with the

majority of RUSAL's existing loans, and ensuring better flexibility with respect to its debt portfolio management.

Panda Bonds

- In February 2017 RUSAL registered a Panda Bond Offering Circular for the total amount of RMB10 billion (c.USD 1.5 billion) with the Shanghai Stock Exchange with the right to make the placement in tranches with different maturities, albeit for not higher than 7 years.

- In March 2017 the first tranche of RMB1 billion was placed with a 3 year maturity and a coupon of 5.5% per annum.
- In September 2017 the second tranche of RMB500 million was placed with a 3 year maturity and at coupon of 5.5% per annum. The tranches are subject to a put option after 2 years. The funds were used
for working capital needs and the refinancing of existing debt.

Contingencies

The summary of the Group's principal contingencies is set out below. For a detailed discussion of the Group's contingencies, including environmental contingencies, risks and considerations as of 2017 see Notes 23 of the Annual Financial Statements.

Taxation

Russian tax, currency and customs legislation is subject to varying interpretations and changes, which can
occur frequently. Management's interpretation of such legislation as applied to the transactions and activities of the Group may be challenged by the relevant local, regional and federal authorities. Notably
recent developments in the Russian taxation environment suggest that the authorities are becoming more
active in seeking to enforce, through the Russian court system, interpretations of the tax legislation, in particular in relation to the use of certain commercial trading structures, which may be selective for particular tax payers and different to the authorities' previous interpretations or practices. Different and
selective interpretations of tax regulations by various government authorities and inconsistent enforcement
create further uncertainties in the taxation environment in the Russian Federation.

Tax risks attributable to the Group, together with an estimate of the maximum possible additional amounts
which may reasonably become payable in respect of such risks, are disclosed in the Note 23(a) of the Annual Financial Statements.

Legal Contingencies

The Group's business activities expose it to a variety of lawsuits and claims which are monitored, assessed
and contested on an ongoing basis. Where management believes that a lawsuit or another claim could result
in payments from the Group, a best estimate of such payments is included in Provisions in the consolidated
financial statements (note 19 (e) of the Annual Financial Statements). As at 31 December 2017 the amount
of claims, where management assessed possible payments totalled approximately USD 36 million (31 December 2016: USD 60 million).

In January 2013, the Company received a writ of summons and statement of claim filed in the High Court
of Justice of the Federal Capital Territory of Nigeria (Abuja) by plaintiff BFIG Group Divino Corporation
("BFIG") against certain subsidiaries of the Company. It is a claim for damages arising out of the defendants' alleged tortious interference in the bid process for the sale of the Nigerian government's majority stake in the Aluminium Smelter Company of Nigeria ("ALSCON") and alleged loss of BFIG's
earnings resulting from its failed bid for the said stake in ALSCON. BFIG seeks compensatory damages in
the amount of USD 2.8 billion plus interest. In January 2014 the court granted the Company's motion to

join the Federal Republic of Nigeria and Attorney General of Nigeria to the case as co-defendants. On the latest hearing held on 8 November 2017 the Court has not upheld the claim and the claim was struck out.

In January 2018 one of the Company's subsidiaries, ALSCON and the Bureau of Public Enterprises of Nigeria entered into an addendum to the original sale and purchase contract regarding ALSCON.

Financial Ratios

Gearing

The Group's gearing ratio, which is the ratio of total debts (including both long-term and short-term borrowings and bonds outstanding) to total assets, as at 31 December 2017 and 31 December 2016, was 59.7% and 69.9%, respectively.

Return on Equity

The Group's return on equity, which is the amount of net profit as a percentage of total equity, was 32.0% and 62.3% as at 31 December 2017 and 31 December 2016, respectively.

Interest Coverage Ratio

The Group's interest coverage ratio, which is the ratio of earnings before interest and taxes to net interest, for the years ended 31 December 2017 and 31 December 2016, was 2.5x and 2.6x, respectively.

In accordance with provision C.1.3 of the Code, the directors have made an assessment of the group's ability to continue as a going concern and consider it appropriate to adopt the going concern basis of accounting in preparing the financial statements.

Report on Payments to Governments

Production fees
Taxes or levies on corporate sales, production or profits
Royalties Dividends
Signing-on, discovery and production bonuses
Licence fees, rental charges, entry fees and other consideration for licences and/or concessions
Infrastructure improvement payments
TOTAL
Russia 40,811 3,720 1,063 45,595
Kazakhstan 28,030 1,433 29,463
Ukraine 261 88 349
Guinea 7,510 0 7,510
Guyana 36 611 136 783
Jamaica 1,046 789 51 1,886
GRAND TOTAL - 77,694 1,400 - - 5,428 1,063 85,586
Type of payment 2017 (USD, thousands)

Corporate Social Responsibility

Sustainable development

Sustainable development is a key priority for En+ Group and one of the most important components of the
Group's everyday activities.
En+ Group is aware of the high degree of its responsibility to society and future generations, taking maximum effort to reduce its potential negative impact on the environment and to promotesocial development in the regions where the Company operates.
During the reporting period, En+ Group focused on furthering its responsible production and sustainable
operations. En+ also worked on engaging its clients and society in this process to foster cooperation for the
joint promotion of the principles of sustainable development at the global level.
Our sustainable development priorities are defined in accordance with the UN's Sustainable Development
Goals, and are based on the following key principles consistent with the Group's activities in this regard:

• Economic development

– The development of small and medium-sized enterprises in the regions where the Company operates

– The introduction of environmentally friendly technologies into production cycles to save resources and reduce costs

• Environmental protection

– The conservation of biological diversity in the regions of the Company's operations and participation in programmes for the protection of rare plant and animal species

– The adoption of unique programmes to protect the cultural and natural heritage of Lake Baikal

– The management of projects aimed at environmental enhancement near the Company's production facilities

• Corporate responsibility with a focus on health and safety

– The assurance of industrial safety: occupational health and safety has always been a first priority for the Company. This is supported by our performance indicators, exceeding the average market performance indicators in this sector

• Social responsibility

– Enhancing the prestige of engineering specialties among Russian school students, their parents and society as a whole

– The promotion of environmental volunteering through corporate and ecological marathons and initiatives aimed at cleaning the shores of Lake Baikal

– The encouragement of a careful attitude to the preservation of natural resources on the part of the local population

Sustainable economic development

In 2017, En+ Group showed stable financial and operational results for both the Energy and Metals segments due to the positive trends in global aluminium markets, production efficiency growth and changes
in the Russian electricity market.

Quality management system

The companies of En+ Group have quality management systems certified for ensuring compliance with
international standards which are integrated into existing management systems. Several group companies
comply with the latest ISO standards: PLC UC RUSAL and LLC KraMZ both employ ISO 9001:2015 and

ISO 14001:2015; LLC "Irkutskenergo" ISO 14001:2015 and JSC "KGES" is certified according to ISO 14001:2004.

Responsible supply chains

En+ Group conducted a review of our procurement activities and took certain measures to improve them.

During the reporting period, En+ Group interacted with suppliers in accordance with the Russian Federation legislation and under the adopted regulations. The key principles of the Group's procurement activity were to create equal competitive opportunities for all potential suppliers including the establishment of uniform requirements for goods to be purchased, the objective assessment of incoming commercial proposals and ensuring the transparency of procurement procedures.

Moreover, in 2016 UC RUSAL created and implemented a list of trustworthy partners and suppliers for the further cooperation and development of professional activities, called the Business Partner Code.

Code of ethics

In 2013, the En+ Group's Board of Directors approved the Code of Corporate Ethics and the Code of Ethical Standards in the Russian and English languages. Similar documents were approved on a group wide level.

The following documents and regulations were developed, approved and implemented:

– Methodical recommendations on the organisation of the corporate ethics system
– A policy regarding conflicts of interests
– A policy regarding the identification of conflicts of interests
– Methodical recommendations on the identification and investigation of fraud

The Code of Corporate Ethics strives to ensure that business is conducted in compliance with the highest legislative and ethical standards. The Code covers every aspect of the Group's activities, including what is expected from all employees, as well as individuals related to En+ Group's activities.

Below is the list of the key ethical values to which all employees of the En+ Group's companies are committed:

– Respect of the personal rights and interests of all employees,
– Responsibility,
– Trust in employees,
– Honesty and transparency
– Efficiency in order to achieve maximum results in all that we act and do,
– Fairness and impartiality,
– Care,
– Commitment to ongoing development.

Environmental protection

During the reporting period, the Company strove to reduce its potential negative impact on the environment, avoid environmental incidents and comply with all legal obligations related to obtaining an environmental permit for its operations.

In order to comply with the Group's environmental policy, a review of economic planning in certain manufacturing companies was carried out taking into account environmental measures.

Compliance with legal requirements

The activities of the En+ Group's facilities are governed by laws, provisions and other regulations relating to environmental protection, including (but not limited to) greenhouse gases emissions, discharges of pollutants into water bodies, disposal of hazardous substances and wastes, contaminated soil remediation, and protection of flora, fauna and wildlife.

Until 2014, certain companies of the Group paid insignificant fines for minor violations of environmental law. To address the inconsistencies, the Group implemented an environmental strategy aimed at decreasing emissions to the atmosphere, which included replacing and modernising filtration units, in order to ensure that the Group complies with the existing emission standards. Over the last two years to 31 December 2017the En+ Group's facilities did not receive any significant fines for non-compliance with applicable environmental laws.

Modernisation of facilities and equipment

During the reporting period, the Company focused its investment activities on the replacement and repair of existing equipment, which increased productivity, environmental efficiency and, ultimately, the Company's revenues. En+ Group managed to significantly reduce the environmental impact of its operations through the use of such innovative gas cleaning technologies as Ecological Soderbergh, recirculating systems, energy efficiency improvement schemes, environmental management systems and waste management programmes.

The Metals segment actively modernised equipment within the process of development and implementation of new technologies. The Company invested in the development of its own engineering and technology base, innovative technologies and products, as well as the modernisation of its facilities. This investment contributed to increasing the share of products with added value, improving the quality of products, reducing the energy intensity of production and improving environmental safety.

The Group also invested in the modernisation of its hydroelectric power plants. Thus, as part of the installation of new equipment at the Krasnoyarsk hydropower station, En+ has continued to replace hydro generators and the electrical equipment of switchyards and began replacing impellers in 2017.

Energy consumption

In accordance with Russian legislation, energy saving measures and the rational use of energy resources are mandatory requirements for all consumers. In order to comply with these requirements, the Group focused on saving fuel, electric and thermal power at all its production facilities. Additionally, increased electric power generation at hydropower stations based on the same amount of water usage was also considered as energy saving.

Protection of water resources

During the reporting period, the Company implemented a set of measures aimed at the prevention of water bodies' pollution and the rational use of water resources at thermal power stations. In particular, the Group conducted environmental monitoring in order to assess the current water condition in the zones effected by the Company's production facilities, including analysing the dynamics and possible reasons for any changes.

The Group also introduced recirculating systems at its production facilities. This approach allows the Group to reduce the need for new water resources and decrease the volume of sewage discharge.

Protection of the atmospheric air

The Company regularly monitors the amount of emissions to the atmosphere and responds appropriately to reduce them.

The Group's approach to control our greenhouse gas emissions was adapted to meet both national and international standards. The Russian law on control over carbon emissions is constantly changing; the main legislative acts have already been adopted by the government and are awaiting formal approval. Accordingly, the Group has taken measures to ensure its compliance with all new legal requirements after their formal approval.

Direct and indirect greenhouse gas emission (mil. tonnes)[23]

Land rehabilitation

During the reporting period, the Group performed land rehabilitation activities in accordance with the provisions of the Land Code and joint Order of the Ministry of Natural Resources and Environment of the Russian Federation No. 525 and Roskomzem No. 67 dated 22 December 1995 On the Approval of the Basic Provisions on Land Rehabilitation, Removal, Preservation and Rational Use of the Fertile Layer of Soil.

The Group believes that it complied with all the relevant environmental standards during the reporting period. The Group did not receive any specific instructions from the regulators to develop a plan to close or establish a liquidation fund.

Rehabilitation of disturbed lands is a significant environmental consideration for the Group's mining facilities, which regularly implement projects of land rehabilitation after mining operations.

[23] PJSC "Irkutskenergo" and UC RUSAL plc. and JSC "Krasnoyarskaya GES"

19.56 20.38
0
5
10
15
20
25
2016 2017

Human Resources management

En+ implemented a unified corporate approach to human resources management, which applies to all companies within the Group. However, such standards were adapted to the specifics of each business and were approved at the level of Boards of Directors of the Group's subsidiaries. Occupational and industrial safety activities were also carried out in accordance with the new unified corporate approach.

Average number of employees

Occupational safety and health

En+ Group is committed to ensuring a high level of safety for its employees and contractors at all stages of operational activities. The Group developed and introduced a range of corresponding standards and procedures in the area of industrial safety and has increased employees' awareness of these through an

intensive employee training programme implemented across all its facilities.
Ensuring the health and safety of employees is an ongoing process that requires constant improvements in
response to changing legislation and business demands.
The Group holds training sessions on occupational health and safety issues on a regular basis which are in
addition to introductory health and safety training, which is mandatory for all new employees. This is particularly important given that due to the nature of the Group's business, most of its operational activities
are conducted on large manufacturing sites which employ significant numbers of employees.

Training and development of personnel

The main objective of En+ in the sphere of personnel training has been to develop the range of professional
competencies necessary for the effective operation of the Group. The Corporate University JSC EuroSibEnergo and industry institutes of advanced training are the Group's key partners for personnel training and development.
Along with mandatory training programmes on occupational health and safety, industrial, fire and environmental safety, the Group has implemented additional training programs aimed at personal development. In 2017, vocational training and additional vocational training programmes were conducted,
including webinars and training sessions which were held on a regular basis. To increase their knowledge
and development, employees can also access an electronic library. Training sessions were provided to all
En+ Group employees.
Given the wide scope of activities and diverse functionality of the Groups' operations, the assessment of
employees was conducted using different methods depending on the region and service line.
98 248 98 397
2016 2017

Social protection programs

The Group implemented a wide range of social programmes aimed at maintaining both the health and performance efficiency of employees and improving the quality of life for employees and their families.
Social policy issues are regulated by the relevant collective agreements concluded with each company of
the Group. In addition, the Group's social policy initiatives were stipulated in the relevant sections of the
Group's business plans, as well as by model regulations (for example, On Benefits for Retirees, On Provision of Housing Benefits, On Provision of VHI, On Allocation and Issue of Vouchers) adopted by
En+.
Key initiatives implemented by the Group under social protection programmes:
• En+ Group's companies arrange health care services for their employees, including voluntary health insurance programmes;
• Life and health insurance;
• Compensation for meal expenses;
• Corporate transport;
• Sanatorium and resort treatment for employees;
• Recreation camp vouchers for the children of employees;
• One-time material aid (on the occasion of the birth of a child, difficult life situations);
• Holiday and anniversary bonuses;
• Arrangement of activities for children such as the rent of sports halls and swimming pools;

• Housing benefits for young professionals;
• Support of retirees.

Social responsibility

During the reporting period, the Company implemented a number of projects aimed at improving the quality of living for the local population and employees in the regions of its operation. The Group supported a wide range of environmental awareness-raising programmes, educational projects, programmes of socioeconomic development and volunteer initiatives.

A comprehensive protection system for Lake Baikal

En+ developed a unique protection system related to the cultural and natural legacy of Lake Baikal, the largest natural reservoir of fresh water in the world, located in Eastern Siberia. The system includes a number of initiatives aimed at increasing environmental awareness and the promotion of volunteering. Among its initiatives, the Group supports scientific research and the implementation of business technologies focused on the preservation of the environment. Today the comprehensive programme comprises some 22 independent projects.

In 2017, the major nationwide volunteering environmental marathon **"360 Minutes"** took place as part of the national programme "A Year of the Environment" and the 100-year anniversary of the Russian conservation system of the Ministry of Natural Resources and Environment of the Russian Federation.

To create conditions for the development of sustainable tourism, a number of voluntary projects aimed at the creation and reconstruction of trails around Baikal in partnership with the **"Great Baikal Trail"** interregional non-profit organisation were implemented.

In partnership with the **"Reemergence of Siberian Land"** youth charitable foundation, the Group implemented the **"Baikal Expedition - 2016"** project aimed at solving the problem of organic enrichment in the creeks and shallow waters of Lake Baikal and the mass outspread of filamentous algae of spirogyra type and others, which are non-typical for Baikal.

The **"School of Environmental Entrepreneurship"** project aims to develop entrepreneurship based on environmental priorities and promotes the exposure of local youth to entrepreneurship.

Cooperation with educational institutions

During the reporting period, the Group developed partnerships with state universities and nonprofit organisations - experts in the area of education and science, environment, economics and law. In partnership with the **"Volnoe Delo"** foundation, a new methodology for educating and developing children was implemented in schools in Eastern Siberia, as well as the promotion of an engineering culture and spread of a brand new educational culture.

The **"Energy of the Future"** educational project was carried out by En+ in partnership with the Corporate University EuroSibEnergo for students of special purpose universities in Siberia since 2016. A number of lectures were held by distinguished science and business representatives on topical issues in the perspective of the future or practice.

The **"School of Urban Changes"** project aims to enhance the effectiveness of all the Metals segment's

social programmes. The School helps to prepare project teams that are able to implement projects aimed at
the development of urban spaces and accessible environments in residential areas, the organisation of cultural events and much more.
"RUSAL territory" is a programme of socio-economic development of the regions, which aims for a comprehensive strategic approach to the implementation of the best infrastructure projects. The programme
is designed to allow people to live in comfortable and interesting surroundings due to the emergence of new
socio-cultural spaces, the modernisation of social infrastructure and the establishment of cultural, educational and sporting events.
The **"Helping is Easy"** programme was created to involve employees of the Group's Metals segment and
partner companies, their families and communities of active residents in volunteer activities, participation
in modern charitable events initiation and organisation of such events.
The **"Mounting the Skies Everyone!"** project was implemented with the joint efforts of the Group and the
Cross Country Ski Federation of Russia and was designed to promote a healthy lifestyle and cross country
skiing in the regions and cities of the Group's operations. Internal Control and Risk Management

Internal Control and Risk Management

Internal Control

Internal control system

The Company maintains a comprehensive framework of internal controls designed to protect the assets of
the Company, improve business processes, and ensure compliance of financial/economic and other activities with applicable laws and regulations. The Board is responsible for maintaining and reviewing the
effectiveness of the Company's internal control system and has established the Directorate for Control and
Internal Audit (the "**Directorate for Control**"), which assists the Board in overseeing and implementing
the Company's internal control measures.
The Directorate for Control ensures the Company has in place adequate risk management systems by:

- developing internal control measures for the operations of the Company's production facilities and business units;
- monitoring the performance of the business within the framework of inspections and internal audits; and
- being responsible for the independent evaluation of the efficiency of management decisions.

The Directorate for Control seeks to implement internal control measures that safeguard the Company's
assets, allow for implementation of investment projects, and ensure the Company complies with requirements of external regulators and shareholders in relation to related party transactions. In addition,
the Directorate for Control continuously monitors the Company's compliance with the policies, regulations
and procedures established internally, and recommendations that arise from inspections and audits.
The Audit Committee of the En+ Board of Directors (the "**Audit Committee**") works with the Directorate
for Control to supervise the efficiency of financial/economic activity, to organise the the internal control

system and to maintain proper accounting records.
The Directorate for Control conducts regular audits that either prevent possible violations or minimise the
consequences of violations that do occur from time to time.

Compliance

The Company prioritises compliance with adopted laws, established rules, standards and other applicable
requirements, and the compliance function focuses on the prevention of compliance violations. The key
activities of the compliance function include:

- the development, implementation and improvement of policies and procedures designed to facilitate compliance with applicable requirements;
- the implementation of procedures and other necessary measures designed to prevent violations of applicable requirements;
- providing training in compliance including training on the Company's anti-corruption and anti-fraud policies;
- assisting the Company's employees in performing their compliance duties;
- the promotion and development of a compliance culture within the Company, ensuring that employees
behave ethically and adhere to the principle of compliance with all applicable requirements.

To prevent conflicts of interest the Company operates a multi-level system of control over transactions with
related parties (in accordance with the International Financial Reporting Standards). An internal related
party policy has been developed and is regularly reviewed, and responsible employees have been trained
with regards to related party transactions.

Risk Management

Risk management system

The Company has established risk management and control systems, which are an integral part of the Company's corporate governance framework, to reduce potential threats and ensure consistent and sustainable business development. The Company undertakes risk management on an ongoing process at
all levels of the business and has put in place systems that seek to manage identified risks and ensure management and shareholders are informed of the risks.

The Board has primarily three risk management and control systems in place:

- **The Audit Committee:** the board has delegated to the Audit Committee the responsibility for reviewing
the effectiveness of the Group's risk management and control system;
- **Regulation on Risk Management:** this is an internal company document and sets out the Company's
Risk Management Process and provides the key tools (risk probability, risk impact and risk significance)
in identifying risk and performing a risk assessment; and
- **Business Risk Map:** this was introduced in 2017 and sets out the risk of each Business sector and includes an assessment of all risks and a list of activities aimed at reducing the negative impact on Business Sector goals. The risk management status in each Business Sector is monitored quarterly (and
for certain sectors monthly).

In the course of risk monitoring, the relevance of the previously identified risks is checked, the financial
assessments of the identified risks are conducted, the residual risk value is determined, new risks are

identified, and risk management activities are clarified. Further, the CEO is regularly briefed on the status of risk management within the Company and is ultimately accountable for ensuring that risk is adequately dealt with.

Monitoring, reporting and assessment of efficiency

The Directorate of Control and the Audit Committee are responsible for the monitoring and reporting of risk management to the Board of Directors. On the information provided by the Directorate of Control and Audit Committee, the Board carries out a review of the effectiveness of the Company's risk management and internal controls systems, which includes financial, operational and compliance controls.

The Audit Committee supervises management's compliance with the Regulation on Risk Management and the established risk management and control system. The Audit Committee and the Board of Directors review the risk profile and the results of the risk management programme on a quarterly basis and in accordance with the year's results. The Audit Committee also performs an independent evaluation of the effectiveness of the risk management and control system.

The Directorate for Control role in implementing internal control systems for the Company works with the Audit Committee and the Board. The Directorate of Control regularly reports to the Board of Directors and the Audit Committee on the results of inspections, including audits of the actions of the company management bodies. In the course of these audits, the mandatory stage of audit planning is the study of the risk areas for the production facilities and Business Sectors in order to focus on these areas during audits.

The study of observations identified in the course of internal audits and inspections, in turn, contributes to the evaluation of the Company's internal control system and allows for maximum coverage of possible risks arising in the implementation of goals and projects of specific production facilities and businesses.

Key Risks facing the Group

The key principal risks currently facing the Group are provided below:

1. **Sanctions.** On 6 April 2018, OFAC of the US Treasury designated certain legal and natural persons to its Specially Designated Nationals List. These include the Company, UC RUSAL, JSC Eurosibenergo and Mr Oleg Deripaska, a non-executive director of the Company and its ultimate beneficial owner, and two of the Company's direct major shareholders, Basic Element Limited and B-Finance Ltd., each controlled by Mr Oleg Deripaska.

Whilst further evaluation is being carried out by the Company to assess the impact of the OFAC Sanctions on the Group, the Company's initial assessment is that it is highly likely that the impact may be materially adverse to the business and prospects of the Group. The Company's primary focus remains on the maintenance of its operations and the protection of the interests of all of its investors, GDR holders and partners and other stakeholders.

2. **Interdependence of the Energy segment and Metals segment.** UC RUSAL is among the Energy segment's largest customers, with the Energy segment supplying electricity to RUSAL's aluminium

smelters. There is, therefore, a high level of interdependence between these two segments.
3. **Leverage.** The Group has high leverage and a substantial amount of its borrowings are secured and subject to covenants. The Group must continue to generate sufficient cash and maintain its operating performance at an adequate level in order to avoid breaching these covenants.
4. **Group dividend structure.** The Company's ability to meet its obligations depends to a large extent upon receipt of sufficient funds from its subsidiaries, and the Company is reliant on the ability of the Group's subsidiaries to distribute dividends to the Company.
5. **Foreign currency.** The Group reports its financial results in US dollars, while certain subsidiaries denominate their revenues and/or costs in roubles, euros and/or hryvnias. As such, the Group is exposed
to exchange rate fluctuations, which may affect its financial results.
6. **Interest rates.** A significant amount of the Group's total borrowings have variable interest rates, potentially leading to a large increase in interest cost.
7. **UC RUSAL credit facilities.** The terms of the credit facility agreements impose certain limits on the
Group's capital expenditure and payment of dividends. Failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its Shareholders.
8. **Key senior management personnel.** The Group depends on the services of key senior management
personnel and the strategic guidance of Mr. Oleg Deripaska.
9. **Operational hazards.** The Group's power generation, aluminium and other operations are subject to
hazards and risks that could lead to property damage or injury or death to persons.
10. **Operational assets.** The Group's assets (many of which were commissioned during the Soviet era) require regular maintenance and modernisation in order to extend their operating lives. Any failures could lead to accidents, cause disruption to the Group's business and/or lead to the incurrence of significant unplanned repair costs. Equipment failures or other difficulties may result in production curtailments or shutdowns.

11. **Environmental and health and safety regulations.** Ensuring compliance by the Group's subsidiaries
with environmental and health and safety laws and regulations requires the commitment of financial resources. Pollution risks and associated clean-up costs are often impossible to assess until audits of compliance with environmental standards have been performed and the extent of liability under environmental laws can be clearly determined. In addition, new environmental laws or regulations could
lead to further operational restrictions or obligations on the Group.
12. **Reliance on licences and permits.** The operational licences and permits that the Group's subsidiaries
require from various government entities and agencies may be invalidated, suspended or may not be issued or renewed, or may contain onerous terms and conditions that restrict the Group's ability to conduct operations or lead to substantial compliance costs or administrative penalties.
13. **Labour disruptions, shortages of skilled labour and labour cost inflation.** The Group relies on skilled labour in the operation of its assets and is, therefore, exposed to any changes in the cost and availability of such skilled labour. Further, a significant amount of the Group's employees in Russia are
members of labour unions, and the Group is exposed to disruption through workplace slowdown, stoppages or strikes.
14. **Competition.** The Group may become subject to increased competition in each of the industries in which it operates, notably in the power (due to the ongoing liberalisation of the power markets) and aluminium industries, which in turn could result in loss of market share in any Group industry and downwards pressure on prices for any of its products.
In addition, the aluminium industry itself competes with other industries for certain other materials, in particular: (i) steel (used in transport, construction, packaging and engineering); (ii) plastics (used in

packaging and construction); and (iii) copper (used in electrical applications and heat exchangers).

15. **Adverse media.** Adverse media speculation, claims and other public statements could adversely affect the Company's reputation and the value of the GDRs.

16. **Countries of Operation.** The Group is exposed to risks relating to the multi-jurisdictional regulatory, social, legal, tax and political environment in which the Group operates.

17. **Regulatory reform of the power market.** The Russian electricity and capacity markets have undergone significant regulatory change in recent years. The authorities continue to reform the rules related to, in particular: (i) capacity modernisation and decommissioning; (ii) transmission and distribution tariffs; and (iii) capacity prices for certain types of power generators, and may in the future impose unforeseen additional new rules and regulations in any area.

18. **Natural monopolies.** A number of the Group's companies, including Irkutskenergo, have natural monopoly status under Russian law. Regulations imposed on such companies include: (i) tariffs for the part(s) of their services that are considered to be monopolistic; (ii) requirements for the nondiscriminatory provision of services to all market participants; and (iii) the exercise of control over certain material transactions or investments carried out by them.

19. **Tariff regulation and price fluctuations.** The Group's power subsidiaries are currently required to sell certain amounts of their planned output of electricity (primarily to households) under regulated contracts at tariffs set by the relevant regulator. Heat generation and distribution tariffs and electricity transmission and distribution tariffs are also subject to regulation in Russia.

In addition, unregulated prices for electricity and capacity may fluctuate or be subject to limitations.

20. **Third parties.** The Group's power operations are dependent upon third parties that provide services in the wholesale electricity market, such as system operators.

21. **Power output.** The Group's hydro power generation facilities are subject to fluctuations in water flows, which could result in decreased power generation. In addition, the capacity load factor of the JSC Krasnoyarsk Hydro Power Plant in particular is relatively low and a potential state-owned construction project in Mongolia may also temporarily lower the water inflow to Lake Baikal.

22. **Fluctuations in demand for electricity and heat.** The demand for electricity and heat varies seasonally and from year to year, due to weather conditions and other factors, and the Group's results of operations rely on its ability to accurately address or forecast seasonal and yearly fluctuations in demand.

23. **Fuel supply.** A portion of the Group's power operations require gas and fuel oil in their operations, and the Group is therefore exposed to disruptions in supply or increases in prices.

24. **Technology advances.** The energy market is subject to far-reaching technological changes, both on the supply side and on the demand side, which could in turn lead to structural changes in the market. The Group risks being unable to react to such changes and/or match the technological advances of its competitors.

25. **Customer default.** If a customer is unable to pay for the power supplied to them, the Group may not be

able to terminate the contract or suspend the electricity supply unilaterally under applicable regulations.

In particular, regulations governing the retail heat and electricity market are particularly stringent and the Group must follow a number of steps before any reduction or cut-off (which may not be permitted in certain circumstances) in supply to non-paying retail customers. Certain of the Group's subsidiaries are guaranteed suppliers to the electricity market in the Irkutsk and Nizhny Novgorod Regions, respectively, and are obliged to conclude an electricity supply contract with any customer applying for such contract that is located within the operational area of the respective company, regardless of the credit standing of such customer.

26. **Aluminium industry.** The Metals segment operates in a cyclical industry that has recently experienced price and demand volatility, which has had, and may continue to have, a material adverse effect on the Group's performance and financial results.

The Group's competitive position in the global aluminium industry is highly dependent on continued access to inexpensive and uninterrupted electricity supply; in particular, long-term contracts for such electricity. Increased electricity prices, as well as interruptions in the supply of electricity, could have a material adverse effect on the Group's business, financial condition and results of operations.

27. **Transportation.** The Metals segment depends on the provision of uninterrupted transportation services and access to infrastructure, for the transportation of its materials and end products across significant distances, which is out of the Company's control, and the prices for such services (particularly rail tariffs) could increase.

28. **Supply of raw materials.** The Metals segment relies on third-party suppliers for certain materials.

29. **Anti-monopoly laws.** The Group is subject to certain requirements under Russian anti-monopoly laws.

30. **Ore Reserves and Mineral Resources.** Ore Reserves and Mineral Resources data are estimates only and are inherently uncertain, and such Ore Reserves and Mineral Resources may be depleted more rapidly than anticipated.

Corporate Governance

The Company is committed to the highest international standards of corporate governance. The Group plans to continue to improve in this area and to adhere to internationally recognised standards of corporate governance, transparency, disclosure and accountability for listed companies. While Jersey law imposes certain general duties on company directors (including the duty to act in the best interests of the company), there is no specific corporate governance code or corporate governance regime in the jurisdiction. As a company incorporated in Jersey with GDRs admitted to the Official List of the UK Financial Conduct Authority and the Main Market of the London Stock Exchange, the Company is not required to comply with the provisions of the UK Corporate Governance Code (the "**Code**"). However, the Company has chosen to comply with the Code so far as is appropriate and practicable in the Group's context.

Following the issuance of the OFAC Sanctions, Mr. Dominique Fraisse resigned as an Independent Director with effect from 6 April 2018. Two Non-Executive Directors, Mr. Guang Ming Zhao and Mr. Riccardo Orcel, also resigned as Directors with effect from 9 April 2018 and 11 April 2018, respectively. Following such resignations, the Company does not comply with the recommendation of the Code that the Board comprises a majority of independent directors. The Board does not consider that this non-compliance exposes the Company to any additional risks.

Adhering to the highest standards of corporate governance is an important element in attracting fresh investment, strengthening the Group's competitive position and enhancing shareholder value. Good governance is based on clarity of roles and responsibilities, and we aim to ensure that our governance procedures are applied to all areas of decision-making across the Group, including the Board, the management teams and individuals who contribute to our daily activities.

The Board has therefore developed and approved a set of corporate governance principles to act as guidelines for maintaining the highest standards. These principles cover the Board's relationship with shareholders and executive management and the roles and responsibilities of Board committees.

The Company's corporate governance principles outline the relationship between the Board of Directors and the Company's shareholders and management team, as well as the remit and duties of the Board committees.

We consider the following corporate governance principles to be fundamental to our operations:

- Transparency;
- Open and clear decision-making;
- Legal compliance;
- Protection of the environment and the health and safety of the Group's employees; and
- The ongoing growth of the Company's value for the benefit of all stakeholders.

Whilst the impact of the OFAC Sanctions has not at this stage been fully analysed, the Company expects that, because of the OFAC Sanctions, the corporate governance and decision-making process of the Company will become more burdensome.

Board of Directors

As of 31 December 2017, there were ten directors on the Board[24]. There are currently eight directors on the Board.

The Rt Hon Lord Barker of Battle was the independent chairman of the Board of Directors for the financial year of 2017. During 2017, Mr. Oleg Deripaska was executive director and the President of the Company and Mr. Maxim Sokov was executive director and the Chief Executive Officer ("**CEO**"). At the end of 2017, the non-executive directors were Mr. Igor Makarov, Ms. Olga Mashkovskaya, Ms. Gulzhan Moldazhanova, Mr. Riccardo Orcel, Mr. Anton Vishnevskiy and Mr. Zhao Guangming. Mr. Philippe Mailfait was the independent non-executive director.

The quality and breadth of experience of the directors, the balance of the Board's composition and the dynamics of the Board as a whole are intended to ensure the Board's effectiveness.

The Board is responsible to all of En+ Group's stakeholders for its conduct and for the performance of En+ Group. The day-to-day running of the Company is delegated by the Board to the management team, during 2017 this was under the leadership of Mr. Oleg Deripaska, the President of the Company and Mr. Maxim Sokov, the CEO. However, the Board retains responsibility for the approval of certain matters, which affect the shape and risk profile of the Company.

Attendance and number of meetings

Board meetings
(total: 9 meetings
in 2017)
Corporate Governance and

Nomination Committee meetings (total: 5 meetings in 2017)
Audit Committee meetings (total: 8 meetings in 2017)
Executive Directors
Oleg Deripaska 0 - -
Maxim Sokov 9 - -
Non-Executive Directors
Igor Makarov 9 5 -
Olga Mashkovskaya 8 - 6
Gulzhan Moldazhanova 8 - -
Riccardo Orcel 7 5 -
Anton Vishnevskiy 9 - 7
Zhao Guangming 1 (of 1 during tenure)
- -
Independent Non-Executive Directors
Philippe Mailfait 9 5 7
Lord Barker of Battle 3 (of 3 during tenure)
- -

Indemnity Provisions

In accordance with En+'s Articles of Association, each director is granted an indemnity from the company in respect of liabilities incurred as a result of their office, to the extent permitted by law. These indemnities were in force throughout 2017 and at the date of this report. In respect of those liabilities for which directors may not be indemnified, the board approved and the Company maintained directors' and officers' liability insurance throughout 2017. A copy of the policy document is available from the Company Secretary.

[24] In December 2017, Vladislav Solovyev and Mr. Dominique Fraisse were appointed to the Board of Directors with effect from 1 January 2018.
Vladislav Soloviev resigned as CEO and Executive Director of the Company effective from 30 April 2018. Mr. Dominique Fraisse resigned as an Independent Director with effect from 6 April 2018.

The Board of Directors

Rt Hon Lord Barker of Battle PC

Independent Director, Chairman of the Board of Directors

Appointed 17 October 2017

Lord Barker has served as the Chairman of the Board of Directors since October 2017. In August 2015, Gregory Barker was created a life Peer and since October 2015 he has been a member of the House of Lords of the UK Parliament. Lord Barker has extensive business experience in mergers and acquisitions, corporate finance, investor relations, the energy sector and private equity followed by a career as a prominent public official.

Oleg Deripaska

President, Executive Director

Appointed 23 December 2010; Resigned as President 15 March 2018

Oleg Deripaska has served as a member of the Board of Directors since 2010 and as President of the Company since 2011. In March 2018 Mr. Deripaska stepped down from his position of the President of the Company and continues to perform in the capacity of Non-Executive Director.

Mr. Deripaska was President of United Company RUSAL Plc ("RUSAL") from December 2014 until March 2018. Mr. Deripaska has served as a member of the board of directors of RUSAL since March 2007.

From January 2009 to December 2014, Mr. Deripaska served as the Chief Executive Officer of RUSAL.

Since 2009 Mr. Deripaska has been a Director of Basic Element Limited ("Basic Element").

Philippe Mailfait

Independent Non-executive Director

Appointed 30 September 2009

Philippe Mailfait has served as a member of the Board of Directors since September 2009 as an Independent Director. Mr. Mailfait also holds the position of Independent Director at various other companies. Prior to joining the Group, he held different executive positions at Banque Worms and Banque de Gestion Privée (Paris), Morgan Grenfell & Co. (London and Paris), Marceau Investissements and Trianon Finance (Paris).

Igor Makarov

Non-Executive Director

Appointed 27 March 2015

Igor Makarov has served as a member of the Board of Directors since March 2015. Mr. Makarov has also been serving as Deputy CEO for Legal Affairs at Basic Element since 2012. Prior to this, Mr. Makarov acted as the Chief Legal Officer at RUSAL Global Management B.V.

Olga Mashkovskaya

Non-Executive Director

Appointed 05 October 2012

Olga Mashkovskaya has served as a member of the Board of Directors since October 2012. Ms. Mashkovskaya has been the Deputy Chief Executive Officer for Finance at Basic Element since June 2012.

Ms. Mashkovskaya has served as a member of the board of directors of RUSAL since September 2013.

Gulzhan Moldazhanova

Non-Executive Director

Appointed 15 June 2012

Gulzhan Moldazhanova has served as a member of the Board of Directors since June 2012. Ms. Moldazhanova has been the Chief Executive Officer of Basic Element since July 2012. Ms. Moldazhanova has served as a member of the board of directors of RUSAL since June 2012.

Riccardo Orcel

Non-Executive Director

Appointed 19 September 2011; Resigned as Director 11 April 2018

Riccardo Orcel has served as a member of the Board of Directors between September 2011 and April 2018.

Mr. Orcel joined VTB Bank (PJSC) ("VTB") in 2011 and currently acts as Head of Global Banking, International Organisation, VTB International.

Maxim Sokov

CEO, Executive Director

Appointed 05 July 2013; Resigned as CEO 15 March 2018; Appointed as President 15 March 2018

Maxim Sokov has served as a member of the Board of Directors since 2013. Mr. Sokov joined the Company

as First Deputy Chief Executive Officer in 2013 and was the Chief Executive Officer of the Company from
28 April 2014 until 15 March 2018 when he was appointed as the Company's President.
Mr. Sokov has served as a member of the board of directors of RUSAL since 2012.
Prior to joining the Group, from 2008 to 2013 Mr. Sokov had worked at RUSAL and occupied various
managerial positions including Director for Strategy and Corporate Development, Director for Strategic
Investment Management and Advisor for Strategic Investment Management. From 2002 to 2004, Mr. Sokov worked as a lawyer for the Moscow Representative Office of Herbert Smith CIS Legal Services.
In 2000, Mr. Sokov graduated from the Russian State Tax Academy under the Russian Ministry of Taxes,
majoring in law. Mr. Sokov also graduated from the New York University School of Law in 2002.

Anton Vishnevskiy

Non-Executive Director

Appointed 31 December 2011

Anton Vishnevskiy has served as a member of the Board of Directors since December 2011. Mr. Vishnevskiy joined the Group in 1998. From 1998 to 2005, he served as Deputy CFO of Basic Element.
Since 2006, Mr. Vishnevskiy has held various management positions in the Basic Element group of companies. Currently, he also acts as a Director of B-Finance Ltd., the majority shareholder of the Company.

Guangming Zhao

Non-Executive Director

Appointed 01 December 2017; Resigned as Director 9 April 2018

Zhao Guangming has served as a member of the Board of Directors between December 2017 and April
2018. Mr. Zhao Guangming serves as Chief Executive Officer and executive director of AnAn Group (Singapore) Pte. Ltd. since 28 February 2017.

Management Team

Effective as of 1 May 2018, there have been strategic changes to the management team of the Company.
Vladislav Soloviev, who served as Executive Director of the Company from 1 January 2018 and as CEO
of the Company from 15 March 2018, resigned his positions on 30 April 2018. Vyacheslav Solomin, previously COO of the Company, was appointed as CEO with effect from 1 May 2018.
Mikhail Khardikov was appointed as Chief Financial Officer upon the resignation of Andrey Yashchenko,
effective from 1 May 2018. Mikhail Khardikov was appointed as Chief Financial Officer upon the resignation of Andrey Yashchenko, effective from 1 May 2018. Mikhail Khardikov spent the last 8 years
in various managerial positions in JSC EuroSibEnergo (100% subsidiary of En+ Group, managing its power
assets), most notably being its CFO since July 2014.
At the end of 2017, the management team was made up of three individuals, each of which has responsibility
for a certain function. The Company's management was led by Mr. Oleg Deripaska, the President of the
Company, and Mr. Maxim Sokov, the Chief Executive Officer.

Maxim Sokov

CEO

Appointed as Director 28 April 2014; Resigned as CEO 15 March 2018; Appointed as President 15 March
2018
Maxim Sokov has served as a member of the Board of Directors since 2013. Mr. Sokov joined the Company
as First Deputy Chief Executive Officer in 2013 and has been the Chief Executive Officer of the Company
from 2014 until 15 March 2018 when he was appointed as the Company's President.
See above for further information.

Andrey Yashchenko

Chief Financial Officer

Mr. Yashchenko served as Chief Financial Officer since July 2013; Resigned on 30 April 2018. Between
2006 and 2010, Mr. Yashchenko acted as Deputy Chief Financial Officer and as Corporate Finance Director
at Basic Element. Between 2000 and 2006, Mr. Yashchenko served as Head of Capital Markets at RUSAL.
Prior to joining the Group in 2013, Mr. Yashchenko was Chief Financial Officer of the Russian Platinum
Group. Before that he held various positions with TNK and served as a research analyst at both MC
Securities and Montes Auri investment companies. At the beginning of his career, Mr. Yashchenko acted
as an auditor with Deloitte.

Vyacheslav Solomin

Chief Operating Officer, Chief Executive Officer of Russian EuroSibEnergo

Vyacheslav Solomin was appointed Chief Operating Officer of the Company in October 2017. He was
appointed as CEO of the Company effective from 1 May 2018.
Previously he has served as Chief Executive Officer of Russian JSC EuroSibEnergo since May 2014.
Between 2007 and 2016, he held various director positions within the Group, and has also served as a
financial director at Russian EuroSibEnergo. Prior to joining the Group, between 2006 and 2007, Mr.
Solomin held various positions, including Chief Financial Officer, at Inter RAO.

Diversity

The Company is committed to promoting a diverse and inclusive workforce and recognises and embraces
the benefits of having a diverse Board to enhance the quality of its performance. At the end of 2017, two
out of ten members of the Board were female.
The Board recognises the desire of stakeholders to have greater diversity in senior management and on
boards. En+ does not have a formal diversity policy in place as the Corporate Governance & Nominations
Committee is mindful of diversity when considering potential candidates for appointment to the Board.

Inclusion

En+ aims to create an environment of inclusion, where everyone is treated without discrimination.
We are working to ensure equal opportunity in recruitment, promotion, training and reward for all
employees - regardless of ethnicity, national origin, religion, gender, age, sexual orientation, marital status,
disability, or any other characteristic protected by applicable laws.
Where existing employees become disabled, our ambition is to provide continued employment, training
and occupational assistance where needed.

Board responsibilities

The matters on which the Board should be engaged include, amongst other things, setting the Company's strategic aims, ensuring that the necessary financial and human resources are in place for the Company to meet its objectives and reviewing management performance. The Board is responsible for providing leadership to the Group and for the overall management of the Group. The Board also sets the Company's values and standards and ensures that its obligations to its shareholders and others are understood and met.

During 2017, the matters specifically reserved for the decision of the Board of Directors included the following:

- the review of performance against the business plan and approval of bonuses;
- review and approval of internal policies;
- approval of the annual business plan for the group;
- review of the financial position of the Company and approval of financing arrangements;
- approval of the interim dividend and make recommendations to the shareholders for declaration of the final dividend;
- approval of the alteration of share capital and make recommendations to the shareholders;
- Board and executive appointments;
- transactions with third parties (excluding intra-group transactions) exceeding USD 100 million; and
- transactions with related parties and matters subject to shareholder veto rights.
- items that require Board approval under the Company's memorandum and articles of association and in accordance with Jersey companies' legislation, the Companies (Jersey) Law 1991 (the "Law").

Other matters which do not fall within the authority of the Board or which require a shareholders' approval constitute the powers of the Company's executives (CEO and President).

During 2017, the Board held nine meetings, and passed a number of written resolutions. The key issue for 2017 has been the Company's IPO and change in tax residency of the Company. Following the Company's

IPO, the Board approved certain Board and Committee appointments and also revised the Company's dividend policy in order to comply with the regulatory requirements and best practice of a public company.

The Board oversees the Company's dividend policy, declaration of interim and recommendation of final dividends and approval of other distributions to shareholders.

During 2017 the Board approved the distribution of the 2017 interim dividend in the total amount of USD 326,200,000 which was paid to the Company's shareholders before the end of 2017.

The Board has taken steps to ensure that the members of the Board (in particular, the non-executive directors) develop an understanding of the major shareholders' views about the Company. The Directors, including the Chairman, have direct face-to-face contact with shareholders at regular investor meetings.

Committees

Overview

As at the date of this Report the Board has established three committees to assist it:

- an Audit Committee;

• a Corporate Governance & Nominations Committee; and
• a Remuneration Committee.

All of the committees perform their duties on behalf of the Board, which is responsible for constituting, assigning, co-opting and fixing the terms of service for the committee members. This function may be delegated by the Board to the Corporate Governance & Nominations Committee.

The composition of the committees has been reorganised following the Company's admission to the Main Market of the London Stock Exchange in November 2017.

Audit Committee

The Audit Committee ("AC") comprises at least three members, one of whom is an independent director, and meets at least four times a year. As at 31 December 2017 the AC was chaired by Philippe Mailfait, Olga Mashkovskaya and Anton Vishnevskiy, all members of the Board, were the other members.

The AC is responsible for considering, among other matters: (i) the integrity of the Group's consolidated financial statements, including its annual and interim accounts, and the effectiveness of the Group's internal controls and risk management systems; (ii) the terms of appointment and remuneration of the independent auditors. The AC supervises, monitors, and advises the Board of Directors on risk management and control systems, as well as on the implementation of codes of conduct. In addition, the AC supervises the submission by the Company of the Group's financial information and a number of other audit related issues.

The AC is also responsible for reviewing the effectiveness of the external audit process. JSC KPMG ("KPMG") has been the external auditor to the Company since 2009 and the team is led by Mr Yerkozha Akylbek. As part of the annual external audit review, the AC considers the fee proposals and effectiveness of the external audit process in determining whether to reappoint KPMG.

It is noted that in accordance with its Terms of Reference, the AC shall meet as often as it deems necessary but, in any case, at least four times per year. The meetings are held to coincide with key dates in the financial reporting and audit cycle, at such times and places as determined by the chairman of the Committee, with further meetings to occur, or actions to be taken by unanimous written consent, when deemed necessary or desirable by the Committee or its chairman.

In 2017 the AC held eight meetings and provided support to the Board in all matters associated with the Company's keys projects, including reviewing and improving the Company's consolidated and separate

financial statements, and the development of the Group's Internal Audit function and improvement of internal controls.

Corporate Governance & Nominations Committee

The Corporate Governance & Nominations Committee ("**CGNC**") comprises at least three members and meets at least three times a year. As at 31 December 2017, the Committee was chaired by Philippe Mailfait,

while Igor Makarov and Riccardo Orcel, both members of the Board comprised the remaining members of
the CGNC.
Mr. Riccardo Orcel resigned as a Director and ceased to be a member of the CGNC, with effect from 11
April 2018.
The CGNC's role is to recommend and annually review the corporate governance guidelines for the Company and its consolidated subsidiaries, and to oversee corporate governance matters.
The primary responsibilities of the Committee are to assist the Board in:
• recommending and annually reviewing corporate governance guidelines for the Company and its consolidated subsidiaries (together, the Group) and overseeing corporate governance matters;
• identifying individuals qualified to become Board members and recommending such individuals to the Board for nomination for election to the Board;
When considering Board appointments, the CGNC assesses candidates from the point of view of experience, skills, gender, age, nationality and educational background, among other considerations;
• making recommendations to the Board concerning committee appointments (other than the Committee) and subsidiaries' boards and CEOs appointments;
• coordinating an annual review of the Board's and its committees' performance;
• monitoring and securing the Company's compliance with the New Facilities Agreement and ancillary finance and security agreements;
• making recommendations to the Board concerning the terms of the Group's Code of Ethics; and
• assessing and making recommendations to the Board concerning the directors and officers' liabilities insurance of the Company.
In 2017 the CGNC held five meetings and passed ten resolutions in writing, which were passed unanimously. The majority of Committee meetings have been to consider and nominate individuals for
employment or selecting candidates as Board members of the Company or its subsidiaries. A key issue for
2017 for the Committee has been the Company's IPO and change in tax residency of the Company.
Remuneration Committee
The Remuneration & Nominations Committee ("**RemCo**") comprises at least three members and will meet
at least three times a year. As at 31 December 2017 the RemCo was chaired by Gulzhan Moldazhanova,
while Olga Mashkovskaya and Anton Vishnevskiy, both members of the Board, and Artem Leontiev, a
non-member of the Board, were the other members.
The RemCo is responsible for determining and reviewing, among other matters, the Company's remuneration policies, compensation and benefits plans, including incentive compensation and equitybased
plans. Remuneration policies are determined on the basis of an employee's qualifications and performance, as well as the complexity of his or her job. Wages for each employee are generally reviewed

annually and revised in accordance with a performance assessment and local labour market conditions. The
remuneration of independent directors is a matter for the Chairman of the Board of Directors and the executive directors. No director or manager may be involved in any decisions as to his/her own remuneration.
The committee's responsibility also is to prepare selection criteria and appointment procedures for members

of the Board of Directors and to review on a regular basis the structure, size and composition of the Board of Directors. In undertaking this role, the RemCo refers to the skills, knowledge and experience required of the Board of Directors, given the Company's stage of development and makes recommendations to the Board of Directors as to any changes. The RemCo also considers future appointments in respect of the composition of the Board of Directors, as well as making recommendations regarding the membership of the AC.

In 2017 the RemCo did not meet but passed two written resolutions unanimously, and approved remuneration levels for the Company's Non-Executive Directors and senior management team members.

Internal Auditor

The Company's internal auditor is responsible for the recommendation of an auditing plan to the Audit Committee of the Board of Directors. The internal auditor carries out auditing assignments in accordance with such plan and oversees and reports on the Company's compliance with the plan's recommendations.

The internal auditor also files a half-year report with the Audit Committee and the Board of Directors, and must be available for any meetings of the Audit Committee or the Board of Directors.

Share Dealing Code

Upon admission to the Main Market of the London Stock Exchange in November 2017, the Company adopted a code of securities dealing in relation to the GDRs, the Ordinary Shares and any other securities of the Company which is based on the requirements of the E.U. Market Abuse Regulation (EU) 596/2014.

This code applies to the Directors and other relevant employees of the Group.

Company Secretary

The current Company Secretary in the territory of Jersey is Intertrust Corporate Services (Jersey) Limited of 44 Esplanade, St Helier, Jersey, JE4 9WG. The Company Secretary was appointed on 10 April 2007.

Besides the Jersey Company Secretary, the Company has appointed a co-secretary in the territory of the Republic of Cyprus - Inter Jura Cy (Services) Limited of Lampousas 1, Nicosia 1095, Cyprus.

Shareholdings of Directors and Management Team

As of the date of this Report none of the Directors or Managers directly hold any shares of the Company.

Mr. Oleg Deripaska is the ultimate beneficial owner of both Basic Element and B-Finance Ltd, which are the majority shareholders of the Company.

Remuneration of the Members of the Board

Remuneration of the members of the Board shall be determined and approved by the Board. For the year ended 31 December 2017 remuneration paid to Non-Executive members of the Board amounted to USD 427 thousand.

Responsibility Statement

We, members of the Board, confirm that, to the best of our knowledge:

The consolidated financial statements, prepared in accordance with International Financial Reporting

Standard IAS 34 *Interim Financial Reporting*, give a true and fair view of the assets, liabilities, financial position and profit and loss of the Company and its subsidiaries, taken as a whole. This annual report includes a fair review of the development and performance of the business and the position of the Company and its subsidiaries, taken as a whole, together with a description of the principal risks and uncertainties that they face.

Information for shareholders and investors

Ordinary shares

The authorised and issued fully paid share capital of En+ Group divided into 571,428,572 ordinary shares with the par value of USD 0.00007 each.

Global Depositary Receipts

The En+ Group's ordinary shares in the form of Global Depositary Receipts (GDRs) are listed on the London Stock Exchange and the Moscow Exchange. GDRs are included in First Level Quotation List of the Moscow Exchange. One GDR represents one share.

As of 31 December 2017, 112,142,858 GDRs, including the over-allotment option, which was not exercised during the stabilisation period (in the amount of 5,000,000 GDRs) represented approximately 19.6% of En+ Group's share capital.

On 7 March 2018, En+ Group received notification from Basic Element Limited that, with effect from 27 February 2018, it converted 5,000,000 GDRs representing ordinary shares of the Company held by it into ordinary shares. Thereby, the amount of GDRs became equal to 107,142,858, which represents approximately 18,8 % of En+ Group's share capital.

Depositary bank

The Company's depositary bank is Citibank, registered address: 388 Greenwich Street New York, New York 10013, United States of America.

En+ Group's securities identification numbers

CUSIP[25]:

-Regulation S GDR 29355E208

-Rule 144A GDR 29355E109

ISIN[26]:

-Regulation S GDR US29355E2081

-Rule 144A GDR US29355E1091

Common Code[27]:

-Regulation S GDR 170465199

-Rule 144A GDR 171560667

[25] CUSIP (Committee on Uniform Security Identification Procedures) - identification number is given to the issue of shares for the purposes of facilitating clearing.

[26] ISIN (International Securities Identification Number) - international identification number of the share.

[27] Common Code - a nine-digit identification code issued jointly by CEDEL and Euroclear.

Dividend policy

In June 2017, the Board of Directors of En+ Group adopted a new dividend policy, which ensures the payment, on at least a semi-annual basis, of dividends, which will be equal to the sum of:

· 75% of the Free Cash Flow of the Energy segment, subject to a minimum of USD 250 million per annum; and

· 100% of the dividends received from UC RUSAL[28].

Dividend payments

Dividends to be paid for 2017 from the Energy segment will amount to USD 250 million, including USD
68 million declared in March 2018. Dividends from UC RUSAL for 2017 amounted to USD 144 million.

The Company does not plan to pay any further dividends in respect of 2017.

Therefore, total dividend payments for 2017 amounted to USD 394 million, while the overall dividend
payments since the IPO amount to USD 193 million in total[29].

En+ Group Shareholder Structure as of 31 December 2017

Note: Due to rounding, total may not correspond with the sum of the separate figures

(1) The ultimate beneficial owner is Mr. Oleg Deripaska. Entities include B-Finance Limited (53.86%) and Basic Element Limited (12.22%).

(2) Other includes the shares owned by VTB (1.40%), Polina Deripaska (5.80%) and other shareholders each owning less than 3% of the shares.

(3) The free-float, as per the Company's estimate, includes the 6.25% shareholding of cornerstone investor, AnAn Group (Singapore) Pte. Ltd.

Information disclosure

The Company pays considerable attention to ensure that any relevant information is delivered to all shareholders and analysts at the same time, in accordance with the FCA's Disclosure Guidance and Transparency Rules.

The information is distributed through the following channels:

– London Stock Exchange and Moscow Exchange websites; the Company's price-sensitive information is disclosed through information disclosure systems

– The En+ Group website; the Company publishes releases on key events as well as operational and financial results.

[28] UC RUSAL dividend policy: annual payout of up to 15% of Covenant EBITDA subject to compliance with relevant regulation and loan agreements. Covenant EBITDA is defined as UC RUSAL EBITDA on LTM basis as defined in the relevant credit agreements, adding dividends
declared by Norilsk Nickel and attributable to the shares owned by UC RUSAL.

[29] Any future decision to declare and pay dividends will be subject to applicable law and commercial considerations.

66.08%
15.17%
18.75%
Basic Element Group Other Free-float
1 2 3

Annual General Meeting

AGM information can be found on the Investors' section of the Group's website: http://eng.enplus.ru

E-mail

The Investor Relations Department can be contacted with respect to any queries at:ir@enplus.ru

EN+ GROUP PLC
Consolidated Financial Statements for the year ended 31 December 2017

Contents

Statement of Directors' Responsibilities

The Directors acknowledge that it is their responsibility to prepare the consolidated financial statements for the year ended 31 December 2017, in accordance with applicable law and regulations. Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have elected to prepare the financial statements in accordance with International Financial Reporting Standards.

Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Parent Company and of the profit or loss of the Parent Company for that period. In preparing these financial statements, the Directors are required to:

• select suitable accounting policies and then apply them consistently;
• make judgements and estimates that are reasonable and prudent;
• state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
• prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Parent Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the financial statements comply with Companies (Jersey) Law 1991. They have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the company and to prevent and detect fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the company's website. Legislation in Jersey governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The consolidated statement of profit or loss and other comprehensive income is to be read in conjunction with the
notes to, and forming part of, the consolidated financial statements set out on pages 16 to 112.

		Year ended 31 December	
		2017	**2016**
	Note	**USD million**	**USD million**
Revenues	6	12,094	9,776
Cost of sales		(7,970)	(6,810)
Gross profit		**4,124**	**2,966**
Distribution expenses		(666)	(568)
General and administrative expenses		(863)	(709)
(Impairment)/reversal of impairment of non-current assets	5	(89)	18
Net other operating expenses	7	(136)	(34)
Results from operating activities		**2,370**	**1,673**
Share of profits of associates and joint ventures	14	621	847
Finance income	9	59	88
Finance costs	9	(1,432)	(1,241)
Results from disposal and deconsolidation of subsidiaries including items recycled from other comprehensive income	2(g)	-	298

Profit before taxation 1,618 1,665
Income tax expense 11 (215) (304)
Profit for the year 1,403 1,361
Attributable to:
Shareholders of the Parent Company 727 689
Non-controlling interests 17(g) 676 672
Profit for the year 1,403 1,361
Earnings per share
Basic and diluted earnings per share (USD) 10 **1.425 1.378**

The consolidated statement of profit or loss and other comprehensive income is to be read in conjunction with the
notes to, and forming part of, the consolidated financial statements set out on pages 16 to 112.

These consolidated financial statements were authorised for issue by the Board of Directors on 14 March
2018 and were signed on its behalf by:
Maxim Sokov Andrey Yashchenko
Director Chief Financial Officer
Year ended 31 December
2017 2016
Note
USD million USD million
Profit for the year
1,403 1,361
Other comprehensive income
Items that will never be reclassified subsequently to profit or loss:
Actuarial loss on post retirement benefit plans 19(b)
(8) (2)
Revaluation of non-current assets 12(g)
- 3,175
Taxation 11(c)
- (635)
(8) 2,538
Items that are or may be reclassified subsequently to profit or loss:
Foreign currency translation differences on foreign operations
39 284
Foreign currency translation differences for equity-accounted investees
245 675
Change in fair value of cash flow hedges
- 36
Items recycled from other comprehensive income on deconsolidation of subsidiaries
- 22
Share of other comprehensive income of associates 14
(28) -
Unrealised gain on available-for-sale assets
9 7
265 1,024
Other comprehensive income for the year, net of tax
257 3,562
Total comprehensive income for the year
1,660 4,923
Attributable to:

Shareholders of the Parent Company
853 3,170
Non-controlling interests 17(g)
807 1,753
Total comprehensive income for the year
1,660 4,923
EN+ GROUP PLC
Consolidated Statement of Financial Position as at 31 December 2017
The consolidated statement of financial position is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 16 to 112.
85
31 December
2017 2016
Note USD million USD million
ASSETS
Non-current assets
Property, plant and equipment 12 9,940 9,355
Goodwill and intangible assets 13 2,392 2,300
Interests in associates and joint ventures 14 4,459 4,156
Deferred tax assets 11(b) 87 108
Derivative financial assets 20 34 51
Other non-current assets 75 181
Total non-current assets 16,987 16,151
Current assets
Inventories 15 2,495 2,034
Trade and other receivables 16(a) 1,279 1,401
Prepaid expenses and other current assets 56 59
Derivative financial assets 20 29 16
Cash and cash equivalents 16(c) 974 669
Total current assets 4,833 4,179
Total assets 21,820 20,330
EQUITY AND LIABILITIES
Equity 17
Share capital - -
Share premium 973 -
Additional paid-in capital 9,193 9,193
Revaluation reserve 2,471 2,456
Other reserves (72) (63)
Foreign currency translation reserve (4,544) (4,683)
Accumulated losses (6,030) (6,503)
Total equity attributable to shareholders of the Parent Company
1,991 400
Non-controlling interests 17(g) 2,394 1,785
Total equity 4,385 2,185
Non-current liabilities
Loans and borrowings 18 10,962 12,095
Deferred tax liabilities 11(b) 1,306 1,394
Provisions - non-current portion 19 542 618
Derivative financial liabilities 20 61 3
Other non-current liabilities 262 177
Total non-current liabilities 13,133 14,287
Current liabilities
Loans and borrowings 18 2,067 2,110
Provisions - current portion 19 40 64
Trade and other payables 16(b) 2,143 1,652
Derivative financial liabilities 20 52 32
Total current liabilities 4,302 3,858
Total equity and liabilities 21,820 20,330
EN+ GROUP PLC
Consolidated Statement of Cash Flows for 2017
The consolidated statement of cash flows is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 16 to 112.

Year ended
31 December
2017 2016
Note USD million USD million
OPERATING ACTIVITIES
Profit for the year 1,403 1,361
Adjustments for:
Depreciation and amortisation 736 641
Impairment/(reversal of impairment) of non-current assets 5 89 (18)
Net foreign exchange gain (29) (57)
Loss on disposal of property, plant and equipment 7 28 15
Share of profits of associates and joint ventures 14 (621) (847)
Interest expense 9 1,117 1,060
Net effect of discounting of trade receivables and payables 5 29
Interest income 9 (21) (39)
Income tax expense 11 215 304
Dividend income 9 (1) (2)
Impairment/(reversal of impairment) of inventories 3 (9)
Impairment of trade and other receivables 7 28 3
Provision for legal claims 7 - 4
Reversal of tax provision (2) -
Pension provision 3 3
Environmental provision 3 -
Change in fair value of derivative financial instruments 9 287 157
Result from disposal and deconsolidation of subsidiaries
including items recycled from other comprehensive income 2(g)
- (298)
Operating profit before changes in working capital 3,243 2,307
Increase in inventories (431) (85)
Increase in trade and other receivables (163) (37)
Increase/(decrease) in trade and other payables 294 (80)
Cash flows from operations before income tax 2,943 2,105
Income taxes paid 11(f) (289) (155)
Cash flows from operating activities 2,654 1,950
EN+ GROUP PLC
Consolidated Statement of Cash Flows for 2017
The consolidated statement of cash flows is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 16 to 112.

Year ended
31 December
2017 2016
Note USD million USD million
INVESTING ACTIVITIES
Proceeds from disposal of property, plant and equipment 48 35
Acquisition of property, plant and equipment (970) (834)
Acquisition of intangible assets (20) (17)
Interest received 14 27
Dividends from associates and joint ventures 806 336
Loans given to joint ventures - (6)
Dividends received - 2
Contribution to short-term and long-term investments - (2)
Proceeds from long-term investments 7 11
Proceeds from disposal of available-for-sale investments - 60
Acquisition of promissory notes - (22)
Proceeds from promissory notes 10 29
Repayment of short-term deposit - 2
Acquisition of subsidiaries (4) -
Proceeds from disposal of a subsidiary 2(g) - 298
Loans issued (11) (99)
Change in restricted cash (4) -
Cash flows used in investing activities (124) (180)

FINANCING ACTIVITIES
Proceeds from borrowings 8,610 7,035
Repayment of borrowings (9,832) (5,858)
Acquisition of non-controlling interest 17(a)(ii) (241) (827)
Proceeds from disposal of shares in subsidiaries - 39
Proceeds from Offering 1,000 -
Interest paid (980) (867)
Restructuring fees and expenses related to Offering (64) (14)
Payments from settlement of derivative instruments (182) (446)
Distributions to shareholder
17(e),
17(a)(iii)
(15) (318)
Dividends to shareholders 17(d) (373) (318)
Dividends to non-controlling shareholders of subsidiaries 17(d) (155) (130)
Cash flows used in financing activities (2,232) (1,704)
Net increase in cash and cash equivalents 298 66
Cash and cash equivalents at beginning of the year, excluding
restricted cash
656 577
Effect of exchange rate changes on cash and cash equivalents 3 13
Cash and cash equivalents at end of the year, excluding
restricted cash 16(c)
957 656
Restricted cash amounted to USD 17 million and USD 13 million at 31 December 2017 and
31 December 2016, respectively.
EN+ GROUP PLC
Consolidated Statement of Changes in Equity for 2017
The consolidated statement of changes in equity is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out
on pages 16 to 185. 88
USD million Attributable to shareholders of the Parent Company
Share
premium
Additional
paid-in
capital
Revaluation
reserve
Other
reserves
Foreign
currency
translation
reserve
Accumulated
losses Total
Noncontrolling
interests
Total
equity
Balance at 1 January 2016 - 9,193 - (96) (5,078) (5,889) (1,870) 873 (997)
Comprehensive income
Profit for the year - - - - - 689 689 672 1,361
Revaluation of hydro assets as at 1 January 2016 (12(g)) - - 1,479 - - - 1,479 554 2,033
Taxation - (296) - - - (296) (111) (407)
Revaluation of hydro assets as at 31 December 2016 (12(g)) - - 1,131 - - - 1,131 11 1,142
Taxation - (226) - - - (226) (2) (228)
Other comprehensive income for the year - - - 33 360 - 393 629 1,022
Total comprehensive income for the year - - 2,088 33 360 689 3,170 1,753 4,923
Transactions with owners
Change in effective interest in subsidiaries (17(a)) - - 368 - 35 (726) (323) (690) (1,013)
Dividends to shareholders (17(d)) - - - - - (280) (280) - (280)
Dividends to non-controlling shareholders (17(d)) - - - - - - - (130) (130)
Other distributions (17(a) and (e)) - - - - - (297) (297) (21) (318)

Total transactions with owners - - 368 - 35 (1,303) (900) (841) (1,741)
Balance 31 December 2016 - 9,193 2,456 (63) (4,683) (6,503) 400 1,785 2,185
Balance at 1 January 2017 - 9,193 2,456 (63) (4,683) (6,503) 400 1,785 2,185
Comprehensive income
Profit for the year - - - - - 727 727 676 1,403
Other comprehensive income for the year - - - (9) 135 - 126 131 257
Total comprehensive income for the year - - - (9) 135 727 853 807 1,660
Transactions with owners
Shares issued upon Offering, net of related expenses of USD 27 million
(17(a)(i))
973 - - - - - 973 - 973
Change in effective interest in subsidiaries (17(a)(ii)) - - 15 - 4 (3) 16 (43) (27)
Dividends to shareholders (17(d)) - - - - - (350) (350) - (350)
Dividends to non-controlling shareholders (17(d)) - - - - - - - (155) (155)
Other contributions (17(e)) - - - - - 99 99 - 99
Total transactions with owners 973 - 15 - 4 (254) 738 (198) 540
Balance 31 December 2017 973 9,193 2,471 (72) (4,544) (6,030) 1,991 2,394 4,385

1. Background
(a) Organisation
EN+ GROUP PLC (the "Parent Company") was established as a limited liability company according to the legislation of the British Virgin Islands on 30 April 2002 under the name of Baufinanz Limited. On 18 March 2004 the Parent Company registered a change of its legal name to Eagle Capital Group Limited. On 25 August 2005 the Parent Company changed its domicile to Jersey and was renamed to En+ Group Limited. On 1 June 2017 the Parent Company changed its status to a public company and was renamed to EN+ GROUP PLC. The Parent Company's registered office is 44 Esplanade, St Helier, Jersey, JE4 9WG, British Channel Islands.
EN+ GROUP PLC is a parent company for vertically integrated aluminium and power group, engaged in aluminium production, energy generation and distribution and other businesses (together with the Parent Company referred to as "the Group").
On 8 November 2017 the Parent Company successfully completed an initial public offering ("Offering") of global depositary receipts ("GDRs") on the London Stock Exchange and the Moscow Exchange. The offer price has been set at USD 14 per GDR for London Stock Exchange and RUB 840 per GDR for the Moscow Exchange, with each GDR representing one ordinary share in the Parent Company. The total size of the offering amounted to 107,142,858 GDRs, representing USD 1.5 billion at the offer price, of which USD 1.0 billion (71,428,572 GDRs) is primary proceeds and USD 0.5 billion (35,714,286 GDRs) is a secondary component.
The shareholding structure of the Company as at 31 December 2017 and 31 December 2016 was as follows:

	31 December 2017	31 December 2016
B-Finance Limited	53.86%	61.55%
Publicly held	18.75%	-
Basic Element Limited	12.22%	21.10%
Other shareholders	15.17%	17.35%
Total	**100.00%**	**100.00%**

The ultimate parent undertaking of the Group is Fidelitas International Investments Corp., the company incorporated in the Republic of Panama ("Fidelitas"), and the ultimate beneficial owner of the Group (the "Shareholder") is Mr. Oleg Deripaska ("Mr. Deripaska"). He also has a number of other business interests outside of the Group. Related party transactions are detailed in note 24.
(b) Operations
As at 31 December 2017 the Group's operations comprised the following:
United Company RUSAL Plc and its subsidiaries ("UC RUSAL") operate in the aluminium industry primarily in the Russian Federation, Ukraine, Guinea, Jamaica, Ireland, Nigeria and Sweden and are principally engaged in the mining and refining of bauxite and nepheline ore into alumina, the smelting of primary aluminium from alumina and the fabrication of aluminium and aluminium alloys into semi-fabricated and finished products.

Other activities of the Group include generation, transmission and distribution of energy in East Siberia, Russia, through its main power subsidiaries: JSC Eurosibenergo ("Eurosibenergo"), LLC Eurosibenergo-Hydrogeneration ("ESE-Hydrogeneration"), PJSC Irkutskenergo ("Irkutskenergo")

andJSC Krasnoyarsk Hydro-Power Plant ("Krasnoyarsk HPP"), as well as its supporting operations engaged in the supply of logistics services and coal resources to the Group.

(c) Business environment in emerging economies

The Russian Federation, Ukraine, Jamaica, Nigeria and Guinea have been experiencing political and economic changes that have affected, and may continue to affect, the activities of enterprises operating in these environments. Consequently, operations in these countries involve risks that typically do not exist in other markets, including reconsideration of privatisation terms in certain countries where the Group operates following changes in governing political powers.

The conflict in Ukraine and related events has increased the perceived risks of doing business in the Russian Federation. The imposition of economic sanctions on Russian individuals and legal entities by the European Union, the United States of America, Japan, Canada, Australia and others, as well as retaliatory sanctions imposed by the Russian government, has resulted in increased economic uncertainty including more volatile equity markets, a depreciation of the Russian Rouble, a reduction in both local and foreign direct investment inflows and a significant tightening in the availability of credit. In particular, some Russian entities may be experiencing difficulties in accessing international equity and debt markets and may become increasingly dependent on Russian state banks to finance their operations. The longer term effects of recently implemented sanctions, as well as the threat of additional future sanctions, are difficult to determine.

The consolidated financial statements reflect management's assessment of the impact of the Russian, Ukrainian, Jamaican, Nigerian and Guinean business environments on the operations and the financial position of the Group. The future business environment may differ from management's assessment.

2. Basis of preparation

(a) Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRSs"), which collective term includes all International Accounting Standards and related interpretations, promulgated by the International Accounting Standards Board ("IASB").

In preparing these consolidated financial statements the Group has applied the following standards and interpretations which are effective in respect of the financial years beginning on 1 January 2017.

- Amendments to IAS 7 *Statement of Cash Flows*
- Amendments to IAS 12 *Income taxes*
- Annual Improvements to IFRSs (Amendments to IFRS 12 *Disclosure of Interests in Other Entities*)

The IASB has issued the following amendments, new standards and interpretations which are not yet effective in respect of the financial years included in these consolidated financial statements, and which have not been adopted in these consolidated financial statements.

	Effective for accounting periods beginning on or after
IFRS 9, *Financial Instruments*	1 January 2018
IFRS 15, *Revenue from Contracts with Customers*	1 January 2018
IFRS 16, *Leases*	1 January 2019

The Group is required to adopt IFRS 9 *Financial Instruments* and IFRS 15 *Revenue from Contracts with Customers* from 1 January 2018. The Group has assessed the estimated impact that the initial application of IFRS 9 and IFRS 15 will have on its consolidated financial statements. The Group is in the process of making an assessment of the impact of IFRS 16 on its consolidated financial

statements.
Based on preliminary assessment the new Standards IFRS 15 and IFRS 9 are not expected to have a significant effect on the consolidated financial statements of the Group. The estimated impact of the adoption of these standards on the Group's equity as at 1 January 2018 is based on assessments undertaken to date and is summarised below. The actual impacts of adopting the standards at 1 January 2018 may change because the new accounting policies are subject to change until the Group presents its first financial statements that include the date of initial application.

IFRS 9, *Financial instruments*

IFRS 9 *Financial Instruments* sets out requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard replaces IAS 39 *Financial Instruments: Recognition and Measurement*.

(i) Classification - Financial assets

IFRS 9 contains a new classification and measurement approach for financial assets that reflects the business model in which assets are managed and their cash flow characteristics.
IFRS 9 contains three principal classification categories for financial assets: measured at amortised cost, fair value through other comprehensive income ("FVOCI") and fair value through profit or loss ("FVTPL"). The standard eliminates the existing IAS 39 categories of held to maturity, loans and receivables and available for sale.
Under IFRS 9, derivatives embedded in contracts where the host is a financial asset in the scope of the standard are never bifurcated. Instead, the hybrid financial instrument as a whole is assessed for classification.
Based on its preliminary assessment, the Group does not believe that the new classification requirements will have a material impact on its accounting for trade receivables, loans, investments in debt securities.

(ii) Impairment - Financial assets

IFRS 9 replaces the 'incurred loss' model in IAS 39 with a forward-looking 'expected credit loss' ("ECL") model. This will require considerable judgement about how changes in economic factors affect ECLs, which will be determined on a probability-weighted basis.
The new impairment model will apply to financial assets measured at amortised cost or FVOCI, except for investments in equity instruments.
Under IFRS 9, loss allowances will be measured on either of the following bases:

- *12-month ECLs*. These are ECLs that result from possible default events within the 12 months after the reporting date; and
- *lifetime ECLs*. These are ECLs that result from all possible default events over the expected life of trade receivables.

Lifetime ECL measurement applies if the credit risk of a financial asset at the reporting date has increased significantly since initial recognition and 12-month ECL measurement applies if it has not. An entity may determine that a financial asset's credit risk has not increased significantly if the asset has low credit risk at the reporting date. However, lifetime ECL measurement always applies for trade receivables without a significant financing component.
The Group believes that impairment losses are likely to increase and become more volatile for assets in the scope of the IFRS 9 impairment model. Based on the impairment methodology described below, the Group has preliminary estimated that application of IFRS 9's impairment requirements at 1 January 2018 would not result in significant additional impairment losses.

Trade and other receivables

The estimated ECLs were calculated based on actual credit loss experience over the past two years. The estimated additional impairment loss for trade receivables was approximately USD 35-57 million as at 1 January 2018.

Cash and cash equivalents

The cash and cash equivalents are held with bank and financial institution counterparties, which are rated moderate to minimal credit risk as at 31 December 2017.
The Group considers that its cash and cash equivalents have low credit risk based on the external

credit ratings of the counterparties.
The Group monitors changes in credit risk by tracking published external credit ratings.
The Group preliminary estimated that application of IFRS 9's impairment requirements at 1 January 2018 will not result in impairment to be recognised.

(iii) Classification - Financial liabilities

IFRS 9 largely retains the existing requirements in IAS 39 for the classification of financial liabilities. However, under IAS 39 all fair value changes of liabilities designated as at FVTPL are recognised in profit or loss, whereas under IFRS 9 these fair value changes are generally presented as follows:

♣ the amount of change in the fair value that is attributable to changes in the credit risk of the liability is presented in OCI; and

♣ the remaining amount of change in the fair value is presented in profit or loss.

The Group's assessment did not indicate any material impact regarding the classification of financial liabilities at 1 January 2018.

(iv) Hedge accounting

When initially applying IFRS 9, the Group may choose as its accounting policy to continue to apply the hedge accounting requirements of IAS 39 instead of the requirements in IFRS 9. The Group has chosen to apply the hedge accounting requirements of IAS 39.

(v) Disclosures

IFRS 9 will require extensive new disclosures, in particular about hedge accounting, credit risk and expected credit losses. The Group's assessment included an analysis to identify data gaps against current processes and the Group is in the process of implementing the system and controls changes that it believes will be necessary to capture the required data.

(vi) Transition

The Group will take advantage of the exemption allowing it not to restate comparative information for prior periods. Differences in the carrying amounts of financial assets and financial liabilities resulting from the adoption of IFRS 9 will generally be recognised in retained earnings and reserves as at 1 January 2018.
The following assessments was made on the basis of the facts and circumstances that existed at the date of initial application:
- The determination of the business model within which a financial asset is held (held for collateral or held for trading).

IFRS 15, *Revenue from contracts with customers*

IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It replaces existing revenue recognition guidance, including IAS 18 *Revenue*, IAS 11 *Construction Contracts* and IFRIC 13 *Customer Loyalty Programmes*.

(vii) Sales of goods

For the sale of primary aluminium, alloys, alumina, bauxite, coal and other products revenue is currently recognised when related risks and rewards of ownership transfer under delivery terms of the contracts. Revenue is recognised at this point provided that the revenue and costs can be measured reliably, the recovery of the consideration is probable and there is no continuing management involvement with the goods.
Under IFRS 15, revenue will be recognised when a customer will obtain control of the goods. Based on management's assessment this will not significantly impact the Group's revenue recognition approach and the timing of revenue recognition.
As part of sales of goods the Group also performs transportation to the point of delivery to customer under contract terms. In certain cases the control for goods delivered is transferred to customer at earlier point than the transportation is completed. Currently revenue is recognised both for goods and transportation services at the point in time when the risks and rewards of goods ownership transfer to customer.
Under IFRS 15, revenue from sale of goods will be recognised when a customer obtains control of the goods and revenue for the transportation after the above control transfer will be recognised over time from goods control transfer till completion of the transportation. Based on management's

assessment such revenue deferral will not significantly impact the total amount of revenue recognised by the Group for each reporting period.
Under certain Group sale contracts the final price for the goods shipped is determined a few months later than the delivery took place. Under current requirements the Group determines the amount of revenue at the moment of recognition based on estimated selling price. At price finalisation the difference between estimated price and actual one is recognised as revenue from sale of goods. IFRS 15 application will not result in a significant change in the amount of revenue recognised and the moment of recognition. But IFRS 15 will impact the classification of the revenue recognised: revenue initially recognised at the moment of control transfer to the customer will be recognised as revenue

from contract with customers. The amount of price adjustment on finalisation will be recognised as other revenue.

(viii) Rendering of services

The Group is involved in sales of energy and provision of transportation services. Revenue from energy sales is recognised over time during the period when the energy is transferred to the customer. Based on management's assessment this will not significantly impact the Group's revenue recognition approach in terms of the timing of revenue recognition and amount of revenue recognised for the reporting period. Revenue from transportation services is related to the sales of goods and is considered above.

(ix) Transition

The Group plans to adopt IFRS 15 using the cumulative effect method, with the effect of initially applying this standard recognised at the date of initial application (i.e. 1 January 2018). As a result, the Group will not apply the requirements of IFRS 15 to the comparative period presented.

IFRS 16, *Leases*

IFRS 16 replaces existing leases guidance including IAS 17 *Leases*, IFRIC 4 *Determining whether an Arrangement contains a Lease*, SIC-15 Operating Leases-Incentives and SIC-27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*.
The standard is effective for annual periods beginning on or after 1 January 2019. Early adoption is permitted for entities that apply IFRS 15 at or before the date of initial application of IFRS 16.
IFRS 16 introduces a single, on-balance sheet lease accounting model for lessees. A lessee recognises a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are recognition exemptions for short-term leases and leases of low value items. Lessor accounting remains similar to the current standard - i.e. lessors continue to classify leases as finance or operating leases.
The Group is currently assessing the impacts of adopting IFRS 16 on its financial statements.

(i) Transition

As a lessee, the Group can either apply the standard using a:

- retrospective approach; or
- modified retrospective approach with optional practical expedients.

The lessee applies the election consistently to all of its leases.
The Group plans to apply IFRS 16 initially on 1 January 2019, using the modified retrospective approach. Therefore, the cumulative effect of adopting IFRS 16 will be recognised as an adjustment to the opening balance of retained earnings at 1 January 2019, with no restatement of comparative information.
When applying the modified retrospective approach to leases previously classified as operating leases under IAS 17, the lessee can elect, on a lease-by-lease basis, whether to apply a number of practical expedients on transition. The Group is assessing the potential impact of using these practical expedients.

(b) Basis of measurement

The consolidated financial statements have been prepared in accordance with the historical cost basis except as set out in the significant accounting policies in notes 12 and 20.

(c) Functional and presentation currency

The Parent Company's functional currency is the United States Dollar ("USD") because it reflects the economic substance of the underlying events and circumstances of the Parent Company. The functional currencies of the Group's significant subsidiaries are the currencies of the primary economic environment and key business processes of these subsidiaries and include USD, Russian Roubles ("RUB"), Ukrainian Hryvna and Euros ("EUR"). The consolidated financial statements are presented in USD, rounded to the nearest million, except as otherwise stated herein.

(d) Use of judgments, estimates and assumptions

The preparation of consolidated financial statements in conformity with IFRSs requires management to make judgements, estimates and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the consolidated financial statements, and the reported revenue and costs during the relevant period. Management bases its judgements and estimates on historical experience and various other factors that are believed to be appropriate and reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions and conditions.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgement made by management in the application of IFRSs that have a significant effect on the consolidated financial statements and estimates with a significant risk of material adjustment in the next year are discussed in note 26.

(e) Consolidation of UC RUSAL

Following the UC RUSAL global offering and issuance of additional shares by UC RUSAL the Group's interest in UC RUSAL reduced below 50% to 47.41% by 31 December 2010. In November 2012 the Parent Company purchased additional 0.72% shares of UC RUSAL for cash consideration of USD 70 million.

The Group's management believes that its current 48.13% shareholding in UC RUSAL, considering the size and dispersion of shareholding of other UC RUSAL's vote holders and the terms of the shareholders' agreements between UC RUSAL's principal shareholders enable the Parent Company to retain control over UC RUSAL, and therefore UC RUSAL's results of operations are consolidated into the Group's consolidated financial statements. The terms of the shareholders' agreements include among others provisions entitling the Parent Company to:

- nominate at least 50% of UC RUSAL's board of directors and two independent directors;
- appoint UC RUSAL's CEO.

(f) Consolidation of OJSC Irkutsk Electric Grid Company ("Irkutsk GridCo")

In December 2009, the Group sold to third parties under share purchase contracts all the shares in two Cyprus companies of the Group controlling 34.16% of the shares in Irkutsk GridCo; subsequently the Group purchased back 19.9% in Irkutsk GridCo. The arrangements attached to the share purchase contracts enable the Group to retain certain rights with respect to the disposed shares and the sale did not result in deconsolidation. As at 31 December 2017 effective interest in Irkutsk GridCo held by the Group is 52.3% (31 December 2016: 51.9%).

As laws and regulations in the electricity sector in Russia are in the developing stage there is an uncertainty with respect to the legal interpretation of the existing arrangements which enable the Group to control Irkutsk GridCo and may be interpreted by the Russian regulatory authorities as noncompliant with applicable legislation upon enforcement. Management believes that such arrangements are compliant with the legislation and therefore the Group has the ability to control Irkutsk GridCo as described above. Should the arrangements be found non-compliant upon their enforcement, the Group may be required to unwind the arrangements subsequent to their enforcement and sell Irkutsk GridCo to a third party at that time.

(g) Deconsolidation and disposal of subsidiaries

Alpart

In July 2016 the Group entered into an agreement to sell its 100% stake in the Alumina Partners of Jamaica ("Alpart") to the Chinese state industrial group, JIUQUAN IRON & STEEL (GROUP) Co. Ltd. ("JISCO") for a consideration of USD 299 million. In November 2016 the Group completed the sale of Alpart and received the full consideration in cash.

3. Significant accounting policies

Significant accounting policies are described in the related notes to the consolidated financial statements captions and in this note.

The accounting policies and judgements applied by the Group in these consolidated financial statements are the same as those applied by the Group in its consolidated financial statements as at and for the year ended 31 December 2016 and have been consistently applied to all periods presented in these consolidated financial statements.

(a) Basis of consolidation

(i) Subsidiaries and non-controlling interests

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. When assessing control, potential voting rights that presently are exercisable are taken into account.

The consolidated financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The accounting policies of subsidiaries have been changed when necessary to align them with the policies adopted by the Group.

Non-controlling interests represent the portion of the net assets of subsidiaries attributable to interests that are not owned by the Group, whether directly or indirectly through subsidiaries, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability.

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from equity attributable to the equity shareholders of the Group. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of profit or loss and other comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the equity shareholders of the Group.

Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so causes the non-controlling interests to have a deficit balance.

Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and noncontrolling-
interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (refer to notes 16 and 21) or, when appropriate, the cost on initial recognition of an investment in an associate or joint venture (refer to note 14).

(ii) Acquisitions of non-controlling interests

The acquisition of an additional non-controlling interest in an existing subsidiary after control has been obtained is accounted for as an equity transaction with any difference between the cost of the additional investment and the carrying amount of the net assets acquired at the date of exchange

recognised directly in equity.
A put option (a mandatory offer) to acquire a non-controlling interest in subsidiary after control has been obtained and accounted by the Group as an equity transaction whereby the issue of the put option results in the recognition of a liability for the present value of the expected exercise price and the derecognition of non-controlling interests within consolidated equity. Subsequent to initial recognition, changes in the carrying amount of the put liability are recognised within equity. If the put option expires unexercised then the put liability is derecognised and non-controlling interests are recognised.

(iii) Acquisitions from entities under common control

Business combinations arising from transfers of interests in entities that are under the common control of the shareholder that controls the Group are accounted for as if the acquisition had occurred at the beginning of the earliest period presented or, if later, at the date that common control was established. The assets and liabilities acquired are recognised at the carrying amounts recognised previously in the Group's controlling shareholder's consolidated financial statements. The components of the equity of the acquired entities are added to the same components within Group equity except that any share capital of the acquired entities is recognised as part of additional paid-in capital. Any cash paid for the acquisition is recognised directly in equity.

(iv) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income and expenses arising from intragroup
transactions, are eliminated in preparing the consolidated financial statements. Unrealised gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

(b) Foreign currencies

(i) Foreign currency transactions

Transactions in foreign currencies are translated into the respective functional currencies of Group entities at the exchange rates ruling at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated to the functional currency at the exchange rate at that date. The foreign currency gain or loss on monetary items is the difference between the amortised cost in the functional currency at the beginning of the period, adjusted for effective interest and payments during the period, and the amortised cost in foreign currency translated at the exchange rate at the end of the reporting period. Non-monetary items in a foreign currency are measured based on historical cost are translated using the exchange rate at the date of transaction. Foreign currency differences arising on retranslation are recognised in profit or loss, except for differences arising on the retranslation of qualifying cash flow hedges to the extent the hedge is effective, which is recognised in other comprehensive income.

(ii) Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated from their functional currencies to USD at the exchange rates ruling at the reporting date. The income and expenses of foreign operations are translated to USD at exchange rates approximating exchange rates at the dates of the transactions.
Foreign currency differences arising on translation are recognised in other comprehensive income and presented in the currency translation reserve in equity. For the purposes of foreign currency translation, the net investment in a foreign operation includes foreign currency intra-group balances for which settlement is neither planned nor likely in the foreseeable future and foreign currency differences arising from such a monetary item are recognised in the statement of profit or loss and other comprehensive income.
When a foreign operation is disposed of, such that control, significant influence or joint control is lost, the cumulative amount of the currency translation reserve is transferred to profit or loss as part of the gain or loss on disposal. When the Group disposes of only part of its interest in a subsidiary that includes a foreign operation while retaining control, the relevant proportion of the cumulative

amount is reattributed to non-controlling interests. When the Group disposes of only part of its investment in an associate or joint venture that includes a foreign operation while retaining significant influence or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.
When the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely in the foreseeable future, foreign exchange gains and losses arising from such a monetary item are considered to form part of a net investment in a foreign operation and are recognised in other comprehensive income, and presented in the translation reserve in equity.

4. Segment reporting
(a) Reportable segments
An operating segment is a component of the Group that engages in business activities from which it may earn revenue and incur expenses, including revenue and expenses that relate to transactions with any of the Group's other components. All operating segments' operating results are reviewed regularly by the Group's CEO to make decisions about resources to be allocated to the segment and assess its performance and for which discrete consolidated financial statements are available.
Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.
Based on the current management structure and internal reporting the Group has identified the following five segments:
• *Metals.* The Metals segment is comprised of UC RUSAL which is involved in mining and refining of bauxite into alumina; production and sale of primary aluminium, alumina and related products and also includes equity investment in Norilsk Nickel. The Metals segment is disclosed based on public financial statements of UC RUSAL. All adjustments made to UC RUSAL, including adjustments arising from different time of IFRS first time adoption, are included into reconciliation of reportable segment revenue, profit or loss, assets and liabilities.
The Power and Coal assets of UC RUSAL are included into the Metals segment.
• *Power.* The Power segment is involved in generation, transmission and distribution of energy in East Siberia and Volga regions of Russia.
• *Coal.* The Coal segment is engaged in the mining and sale of coal in the East Siberia region. Brown and fossil coals are the products of the segment.
• *Logistics.* The logistics segment is engaged in transportation services both for other segments and for the third parties.
• *Other.* The Other segment is comprised production and processing of molybdenum and ferromolybdenum, and also aluminium processing plant.
These business units are managed separately and results of their operations are reviewed by the CEO on a regular basis.
Management additionally analyses performance of the Group through principal business segments (note 4(c)).
(b) Segment results, assets and liabilities
For the purposes of assessing segment performance and allocating resources between segments, the Group's senior executive management monitor the results, assets and liabilities attributable to each reportable segment on the following bases:
Total segment assets include all tangible, intangible assets and current assets.
Total segment liabilities include all current and non-current liabilities.

Revenue and expenses are allocated to the reportable segments with reference to sales generated by those segments and the expenses incurred by those segments or which otherwise arise from the depreciation or amortisation of assets attributable to those segments.

The measure used for reporting segment results is the net profit adjusted for income tax and other items not specifically attributed to individual segments, such as finance income, costs of loans and borrowings. The segment profit or loss is included in the internal management reports that are reviewed by the Group's CEO. Segment profit or loss is used to measure performance as management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries.

In addition to receiving segment information concerning segment results, management is provided with segment information concerning revenue (including inter-segment revenue), the carrying value of investments and share of profits/(losses) of associates and joint ventures, depreciation, amortisation, interest income and expenses, other finance income and costs, income tax, loss on disposal of property, plant and equipment, impairment of non-current assets and additions of noncurrent segment assets used by the segments in their operations. Inter-segment pricing is determined primarily on a consistent basis using market benchmarks.

Reportable segments

Year ended 31 December 2017

USD million	Metals	Power	Coal	Logistics	Other	Total
Revenue from external customers	9,807	1,812	127	60	286	12,092
Inter-segment revenue	162	915	215	96	14	1,402
Total segment revenue	**9,969**	**2,727**	**342**	**156**	**300**	**13,494**
Segment profit/(loss)	**1,222**	**330**	**7**	**18**	**(22)**	**1,555**
Impairment of non-current assets	(84)	-	-	-	(1)	(85)
Loss on disposal of property, plant and equipment	(25)	(3)	-	-	-	(28)
Share of profits of associates and joint ventures	620	1	-	-	-	621
Interest expense, net	(572)	(418)	(10)	(13)	(25)	(1,038)
Other finance (costs)/income, net	(283)	12	(4)	-	1	(274)
Depreciation and amortisation	(488)	(221)	(16)	(4)	(6)	(735)
Income tax	(66)	(149)	-	(6)	3	(218)
Additions to non-current segment assets during the year	(852)	(129)	(27)	(138)	(12)	(1,158)
Cash and cash equivalents	831	113	1	12	1	958

Interests in associates and
joint ventures 4,448 11 -
-
-
4,459
Other segment assets 10,495 6,180 361 217 143 17,396
Total segment assets 15,774 6,304 362 229 144 22,813
Loans and borrowings (8,479) (4,468) (228) (59) (333) (13,567)
Other segment liabilities (2,851) (1,289) (124) (166) (117) (4,547)
Total segment liabilities (11,330) (5,757) (352) (225) (450) (18,114)

Year ended 31 December 2016
USD million Metals Power Coal Logistics Other Total
Revenue from external
customers 7,849 1,546 93 55 231
9,774
Inter-segment revenue 134 531 167 78 14 924
Total segment revenue 7,983 2,077 260 133 245 10,698
Segment profit/(loss) 1,179 317 (15) 18 (18) 1,481
Reversal of impairment/
(impairment) of non-current
assets 44 (26) -
-
-
18
Loss on disposal of property,
plant and equipment (12) - (3)
-
-
(15)
Share of profits/(loss) of
associates and joint ventures 848 (1) -
-
-
847
Interest expense, net (598) (320) (12) (4) (24) (958)
Other finance (costs)/income,
net (262) 155 (6)
(2)
1
(114)
Result from disposal and
deconsolidation of subsidiaries
including items recycled from
other comprehensive income 298 - -
-
-
298
Depreciation and amortisation (453) (166) (15) (1) (6) (641)
Income tax (175) (119) (5) (4) - (303)
Additions to non-current
segment assets during the year (583) (262) (11)
(28)
(11)
(895)
Cash and cash equivalents 544 96 7 5 3 655
Interests in associates and
joint ventures 4,147 9 -

-
-
4,156

Other segment assets	9,761	5,981	302	74	123	16,241
Total segment assets	**14,452**	**6,086**	**309**	**79**	**126**	**21,052**
Loans and borrowings	(8,965)	(4,071)	(188)	(42)	(304)	(13,570)
Other segment liabilities	(2,188)	(1,464)	(114)	(41)	(105)	(3,912)
Total segment liabilities	**(11,153)**	**(5,535)**	**(302)**	**(83)**	**(409)**	**(17,482)**

(i) Reconciliation of reportable segment revenue, profit or loss, assets and liabilities

	Year ended 31 December 2017	**Year ended 31 December 2016**
	USD million	**USD million**
Revenue		
Reportable segment revenue	13,494	10,698
Elimination of inter-segment revenue	(1,402)	(924)
Unallocated revenue	2	2
Consolidated revenue	**12,094**	**9,776**

	Year ended 31 December 2017	**Year ended 31 December 2016**
	USD million	**USD million**
Profit/(loss)		
Reportable segment profit	1,555	1,481
Impairment of non-current assets	(4)	-
Income tax benefit/(expense)	3	(1)
Interest expense, net	(58)	(63)
Other finance costs	(3)	(19)
Unallocated expense	(90)	(37)
Consolidated profit for the year	**1,403**	**1,361**

	31 December 2017	**31 December 2016**
	USD million	**USD million**
Assets		
Reportable segment assets	22,813	21,052
Elimination of inter-segment receivables	(520)	(394)
Consolidation adjustment	(513)	(469)
Unallocated assets	40	141
Consolidated total assets	**21,820**	**20,330**
Liabilities		
Reportable segment liabilities	(18,114)	(17,482)
Elimination of inter-segment payables	520	394
Consolidation adjustments	2	-
Elimination of payables between unallocated and reportable segments, net of unallocated liabilities	157	(1,057)
Consolidated total liabilities	**(17,435)**	**(18,145)**

(ii) Geographic information

The Group's operating segments are managed on a worldwide basis, but operate in four principal geographical areas: the CIS, Europe, Africa and the Americas. In the CIS, production facilities operate in Russia, Ukraine and Armenia. In Europe, production facilities are located in Italy, Ireland

and Sweden. African production facilities are represented by the bauxite mines and an alumina refinery in Guinea and an aluminium plant in Nigeria. In the Americas the Group operates one production facility in Jamaica, one in Guyana and a trading subsidiary in the United States of America.

The following table sets out information about the geographical location of the Group's revenue from external customers and the Group's property, plant and equipment, intangible assets, interests in associates and joint ventures and goodwill ("specified non-current assets"). The geographical location of customers is based on the location at which the services were provided or the goods delivered. The geographical location of the specified non-current assets is based on the physical location of the asset. Unallocated specified non-current assets comprise mainly goodwill and interests in associates and joint ventures.

Revenue from external customers	**Year ended 31 December**	
	2017	**2016**
	USD million	**USD million**
Russia	4,067	3,371
USA	1,445	1,193
Japan	872	610
Netherlands	728	664
Turkey	658	634
Greece	450	260
Poland	411	377
South Korea	380	313
Norway	295	179
France	277	178
Italy	261	244
Germany	259	200
Sweden	251	182
China	52	24
Switzerland	23	52
Other countries	1,665	1,295
	12,094	**9,776**

Specified non-current assets	**31 December**	
	2017	**2016**
	USD million	**USD million**
Russia	13,058	12,454
Ireland	407	414
Guinea	200	117
Ukraine	183	192
Sweden	153	152
Unallocated	2,986	2,822
	16,987	**16,151**

(c) Principal business segments

Management analyses performance of the Group through two principal business segments:

1. "METALS" or "UC RUSAL" as described in note 4(a);
2. "ENERGY" (En+ Group excluding UC RUSAL, formerly EN+) is predominantly comprised of power assets and operations as described in note 1(b).

31 December 2017 31 December 2016
USD million
EN+ GROUP
Consolidated
METALS Adjustments ENERGY
EN+ GROUP
Consolidated
METALS Adjustments ENERGY
Non-current assets

Property, plant and equipment 9,940 4,323 - 5,617 9,355 4,065 - 5,290
Goodwill and intangible assets 2,392 2,552 (469) 309 2,300 2,470 (469) 299
Interests in associates and joint ventures 4,459 4,448 - 11 4,156 4,147 - 9
Derivative financial assets 34 34 - - 51 51 - -
Deferred tax assets 87 63 - 24 108 51 - 57
Other non-current assets 75 72 (4,097) 4,100 181 52 (4,094) 4,223
16,987 11,492 (4,566) 10,061 16,151 10,836 (4,563) 9,878
Current assets
Inventories 2,495 2,414 (44) 125 2,034 1,926 - 108
Trade and other receivables 1,279 1,008 (113) 384 1,401 1,130 (77) 348
Prepaid expenses and other current assets 56 - 45 11 59 - 41 18
Derivative financial assets 29 29 - - 16 16 - -
Cash and cash equivalents 974 831 - 143 669 544 - 125
4,833 4,282 (112) 663 4,179 3,616 (36) 599
Total assets 21,820 15,774 (4,678) 10,724 20,330 14,452 (4,599) 10,477

31 December 2017 31 December 2016
USD million
EN+ GROUP
Consolidated
METALS Adjustments ENERGY
EN+ GROUP
Consolidated
METALS Adjustments ENERGY
Equity
Share capital - 152 (152) - - 152 (152) -
Share premium 973 - - 973 - - - -
Additional paid-in capital 9,193 15,786 (8,925) 2,332 9,193 15,786 (8,925) 2,332
Revaluation reserve 2,471 - - 2,471 2,456 - - 2,456
Other reserves (72) 2,847 (2,951) 32 (63) 2,882 (2,969) 24
Foreign currency translations reserve (4,544) (8,801) 4,343 (86) (4,683) (9,058) 4,477 (101)
Accumulated losses/retained earnings (6,030) (5,540) 1,068 (1,558) (6,503) (6,463) 1,587 (1,627)
Total equity attributable to shareholders
of the Parent Company 1,991 4,444 (6,617) 4,164 400 3,299 (5,982) 3,083
Non-controlling interests 2,394 - 2,054 340 1,785 - 1,460 325
4,385 4,444 (4,563) 4,504 2,185 3,299 (4,522) 3,408
Non-current liabilities
Loans and borrowings 10,962 7,744 - 3,218 12,095 7,532 - 4,563
Deferred tax liabilities 1,306 522 (2) 786 1,394 585 - 809
Provisions - non-current portion 542 427 - 115 618 423 - 195
Derivative financial liabilities 61 61 - - 3 3 - -
Other non-current liabilities 262 104 - 158 177 51 - 126
13,133 8,858 (2) 4,277 14,287 8,594 - 5,693
Current liabilities
Loans and borrowings 2,067 735 - 1,332 2,110 1,433 - 677
Provisions - current portion 40 27 - 13 64 40 - 24
Trade and other payables 2,143 1,658 (113) 598 1,652 1,054 (77) 675
Derivative financial liabilities 52 52 - - 32 32 - -
4,302 2,472 (113) 1,943 3,858 2,559 (77) 1,376
Total equity and liabilities 21,820 15,774 (4,678) 10,724 20,330 14,452 (4,599) 10,477

Year ended
31 December 2017 31 December 2016
USD million
EN+ GROUP
Consolidated
METALS Adjustments ENERGY
EN+ GROUP
Consolidated
METALS Adjustments ENERGY
Revenues 12,094 9,969 (1,110) 3,235 9,776 7,983 (689) 2,482
Cost of sales (7,970) (7,183) 1,040 (1,827) (6,810) (6,030) 689 (1,469)
Gross profit 4,124 2,786 (70) 1,408 2,966 1,953 - 1,013

Distribution expenses (666) (446) 26 (246) (568) (376) - (192)
General and administrative expenses (863) (632) - (231) (709) (531) - (178)
(Impairment)/reversal of impairment of noncurrent
assets (89) (84) - (5) 18 44 - (26)
Net other operating expenses (136) (101) - (35) (34) (22) - (12)
Results from operating activities 2,370 1,523 (44) 891 1,673 1,068 - 605
Share of profits of associates and joint
ventures 621 620 - 1 847 848 - (1)
Dividend income - - (144) 144 - - (120) 120
Results from disposal and deconsolidation of
subsidiaries including items recycled from
other comprehensive income - - - - 298 298 - -
Finance income 59 21 - 38 88 19 (105) 174
Finance costs (1,432) (876) - (556) (1,241) (879) 105 (467)
Profit before taxation 1,618 1,288 (188) 518 1,665 1,354 (120) 431
Income tax expense (215) (66) 2 (151) (304) (175) - (129)
Profit for the year 1,403 1,222 (186) 367 1,361 1,179 (120) 302
Profit attributable to:
Shareholders of the Parent Company 727 1,222 (820) 325 689 1,179 (732) 242
Non-controlling interests 676 - 634 42 672 - 612 60
Profit for the year 1,403 1,222 (186) 367 1,361 1,179 (120) 302

Year ended
31 December 2017 31 December 2016
USD million
EN+ GROUP
Consolidated
METALS Adjustments ENERGY
EN+ GROUP
Consolidated
METALS Adjustments ENERGY
Profit for the year 1,403 1,222 (186) 367 1,361 1,179 (120) 302
Adjustments for non-cash items 1,840 906 142 792 946 298 120 520
Operating profit before changes in
working capital 3,243 2,128 (44) 1,159 2,307 1,477 - 830
Changes in working capital (300) (326) 44 (18) (202) (177) - (25)
Cash flows from operations before income
tax 2,943 1,802 - 1,141 2,105 1,300 - 805
Income taxes paid (289) (100) - (189) (155) (55) - (100)
Cash flows from operating activities 2,654 1,702 - 952 1,950 1,245 - 705
Cash (used in)/generated from investing
activities, including: (124) 2 (144) 18 (180) 103 (120) (163)
Capital expenditure (including pot rebuilds
and intangible assets) (990) (842) - (148) (851) (575) - (276)
Dividends from associates and joint ventures 806 806 - - 336 336 - -
Dividends from subsidiaries - - (144) 144 - - (120) 120
Loans issued (11) (11) - - (99) - - (99)
Acquisition of subsidiaries (4) (1) - (3) - - - -
Proceeds from disposal of a subsidiary - - - - 298 298 - -
Proceeds from disposal of available-for-sale
investments - - - - 60 - - 60
Interest received 14 8 - 6 27 17 - 10
Other receipts, net 61 42 - 19 49 27 - 22

Year ended
31 December 2017 31 December 2016
USD million
EN+ GROUP
Consolidated
METALS Adjustments ENERGY
EN+ GROUP
Consolidated
METALS Adjustments ENERGY

Cash flows used in financing activities,
including: (2,232) (1,421) 144 (955) (1,704) (1,305) 120 (519)
Interest paid (980) (493) - (487) (867) (452) - (415)
(Repayment of)/proceeds from borrowings,
net (1,222) (411) - (811) 1,177 (143) - 1,320
Acquisition of non-controlling interest (241) - - (241) (827) - - (827)
Payments from settlement of derivative
instruments (182) (182) - - (446) (446) - -
Restructuring fees and expenses related to
Offering (64) (36) - (28) (14) (14) - -
Proceeds from Offering 1,000 - - 1,000 - - - -
Proceeds from disposal of shares in
subsidiaries - - - - 39 - - 39
Distributions to shareholder (15) - - (15) (318) - - (318)
Dividends to shareholders (373) (299) 299 (373) (318) (250) 250 (318)
Dividends to non-controlling shareholders of
subsidiaries (155) - (155) - (130) - (130) -
Net increase in cash and cash equivalents 298 283 - 15 66 43 - 23
Cash and cash equivalents at beginning of
the year, excluding restricted cash 656 531 - 125 577 494 - 83
Effect of exchange rate changes on cash and
cash equivalents 3 - - 3 13 (6) - 19
Cash and cash equivalents at end of the
year, excluding restricted cash 957 814 - 143 656 531 - 125

5. Impairment of assets
The carrying amounts of the Group's non-financial assets, other than inventories and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists then the asset's recoverable amount is estimated. For goodwill and intangible assets that are not yet available for use, the recoverable amount is estimated at each reporting date.
An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. A cash-generating unit is the smallest identifiable asset group that generates cash flows that are largely independent from other asset groups. Impairment losses are recognised in profit or loss. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the units and then to reduce the carrying amount of the other assets in the unit (group of units) on a pro rata basis.
The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.
An impairment loss in respect of goodwill is not reversed. In respect of other assets, impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.
Goodwill that forms part of the carrying amount of an investment in an associate or a joint venture is not recognised separately and, therefore, is not tested for impairment separately. Instead, the entire amount of the investment is tested for impairment as a single asset when there is objective evidence that the investment in an associate or a joint venture may be impaired.
Year ended 31 December
2017 2016
USD million USD million
(Impairment)/ reversal of impairment of property, plant and
equipment (note 12) (25)
107
Impairment of other assets (64) (89)

(89) 18

6. Revenues

Revenue from the sale of goods is recognised when the significant risks and rewards of ownership have been transferred to the buyer, recovery of the consideration is probable, the associated costs and possible return of goods can be estimated reliably, there is no continuing management involvement with the good and the amount of revenue can be measured reliably. This is generally when title passes. If it is probable that discounts will be granted and the amount can be measured reliably, then the discount is recognised as a reduction of revenue as the sales are recognised.

For the majority of sales transactions (excluding sales of electricity and heat) agreements specify that title passes on the bill of lading date, which is the date the commodity is delivered to the shipping agent.

Revenue is not reduced for royalties or other taxes payable from production.

Sales of electricity and heat are carried out on both regulated and unregulated power markets. Revenue in the regulated power market in Russia is based on the application of authorised tariffs as approved by the Federal Tariff Service (for energy and capacity sales) and the Regional Energy Commission (for heat sales). Revenue is recognised on a monthly basis upon the delivery of the electricity and heat, excluding value-added tax.

Under competitive bilateral contracts electricity and capacity supply trading is based on unregulated prices negotiated between customers and suppliers. In order to sell necessary volume of electricity and capacity to the buyers the Group is required to purchase the equivalent volume from wholesale market. Management of the Group has exercised critical judgment in respect of transactions under free bilateral contracts to reflect their economic substance, thus the amounts of revenue and cost of sales are shown net for presentation purposes.

According to the Resolution of the Russian Government No. 1172 dated 27 December 2010 the seller is required to sell all electricity volume produced on wholesale market including the volume required for own production needs. In order to provide self-consumption the Group has to repurchase selfproduced electricity back from wholesale market. The amounts of revenue and expenses of selfproduced and consumed electricity volume are shown net for presentation purposes based on selling prices on a day-ahead market. Management believes that such presentation provides more relevant and meaningful information about the operation of the Group.

The Group's retail electricity and heating sales, other than to residential customers, are made on the basis of contracts signed with customers. Residential customers pay for their electricity usage on a monthly basis by means of a "self read" system. Residential customers pay for heating usage at a flat rate, based on a floor space of their apartments in square meters.

Revenue comprises the sales value of electricity and heating supplied to customers during the period, excluding value added tax ("VAT"). Electricity revenue is recognised on the date the metered information is read by or reported to the Group; heat sales are recognised as produced and delivered.

	Year ended 31 December	
	2017	**2016**
	USD million	**USD million**
Sales of primary aluminium and alloys	**8,169**	**6,487**
Third parties	5,537	3,991
Related parties - companies capable of exerting significant influence	2,622	2,489
Related parties - companies under common control	10	7
Sales of alumina and bauxite	**778**	**655**
Third parties	434	377
Related parties - companies capable of exerting significant influence	227	186
Related parties - associates and joint ventures	117	92

Sales of semi-finished products and foil	**536**	**417**
Third parties	536	416

	Year ended 31 December	
	2017	**2016**
	USD million	**USD million**
Related parties - companies under common control	-	1
Sales of electricity	**1,319**	**1,200**
Third parties	1,256	1,150
Related parties - companies under common control	47	36
Related parties - associates and joint ventures	16	14
Sales of heat	**462**	**345**
Third parties	434	322
Related parties - companies capable of exerting significant influence	2	-
Related parties - companies under common control	26	23
Sales of ferromolybdenum	**66**	**51**
Third parties	66	51
Other revenues	**764**	**621**
Third parties	637	515
Related parties - companies capable of exerting significant influence	8	11
Related parties - companies under common control	36	31
Related parties - associates and joint ventures	83	64
	12,094	**9,776**

The Group's customer base is diversified and includes only one major customer - Glencore International AG (a member of Glencore International Plc Group which is a shareholder of the UC RUSAL Plc with a 8.75% share) with whom transactions have exceeded 10% of the Group's revenue. In 2017 revenues from sales of primary aluminium and alloys to this customer amounted to USD 2,431 million (2016: USD 2,322 million).

7. Net other operating expenses

	Year ended 31 December	
	2017	**2016**
	USD million	**USD million**
Impairment of trade and other receivables	(28)	(3)
Charity	(35)	(25)
Provision for legal claims	-	(4)
Loss on disposal of property, plant and equipment	(28)	(15)
Other operating (expenses)/income, net	(45)	13
	(136)	**(34)**

Other expenses in the amount of USD 45 million for the year ended 31 December 2017 include penalties of USD 22 million that relate to the amount paid by the Group in relation to the legal claim from Swedish electricity supplier.

Management reassessed classification of transportation and other expenses in comparative data to comply with current year presentation. After reclassification they are recognised within distribution and administrative expenses instead of cost of sales and other operating expenses for the year ended 31 December 2016.

8. Personnel costs

Personnel costs comprise salaries, annual bonuses, annual leave and cost of non-monetary benefits.

Salaries, annual bonuses, paid annual leave and cost of non-monetary benefits are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.
The employees of the Group are also members of retirement schemes operated by local authorities. The Group is required to contribute a certain percentage of their payroll to these schemes to fund the benefits.
The Group's total contribution to those schemes charged to profit or loss during the years presented is shown below.
The Group's net obligation in respect of defined benefit pension and other post-retirement plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value and the fair value of any plan assets are deducted. The discount rate is the yield at the reporting date on government bonds that have maturity dates approximating the terms of the Group's obligations. The calculation is performed using the projected unit credit method. When the calculation results in a benefit to the Group, the recognised asset is limited to the present value of any future refunds from the plan or reductions in future contributions to the plan.
Where there is a change in actuarial assumptions, the resulting actuarial gains and losses are recognised directly in other comprehensive income.
When the benefits of a plan are improved, the portion of the increased benefit relating to past service by employees is recognised in profit or loss immediately.
The Group recognises gains and losses on the curtailment or settlement of a defined benefit plan when the curtailment or settlement occurs. The gain or loss on curtailment comprises any resulting change in the fair value of plan assets, any change in the present value of the defined benefit obligation, any related actuarial gains and losses.
The Group also makes contributions for the benefit of employees to Russia's and the Ukrainian State's pension funds. The contributions are expensed as incurred.

	Year ended 31 December	
	2017	**2016**
	USD million	**USD million**
Contributions to defined contribution retirement plans	(273)	(227)
Contributions to defined benefit retirement plans	(4)	(3)
Total retirement costs	(277)	(230)
Wages and salaries	(1,133)	(939)
	(1,410)	**(1,169)**

9. Finance income and costs

Finance income comprises interest income on funds invested, dividend income, changes in the fair value of financial assets at fair value through profit or loss and foreign currency gains. Interest income is recognised as it accrues, using the effective interest method.
Finance expenses comprise interest expense on borrowings, unwinding of the discount on provisions, foreign currency losses and changes in the fair value of financial assets at fair value through profit

or loss. All borrowing costs are recognised in profit or loss using the effective interest method, except for borrowing costs related to the acquisition, construction and production of qualifying assets which are recognised as part of the cost of such assets.
Foreign currency gains and losses are reported on a net basis.

	Year ended 31 December	
	2017	**2016**
	USD million	**USD million**
Finance income		
Net foreign exchange gain	29	41
Interest income	21	39
Dividend income	1	2
Other finance income	8	6
	59	**88**

Finance costs
Interest expense - *third parties* (1,115) (1,053)
Interest expenses on company loans from related parties -
companies capable of exerting significant influence (2)
(7)
Change in fair value of derivative financial instruments (refer to note
20) (287)
(157)
Other finance costs (28) (24)
(1,432) (1,241)

10. Earnings per share

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders for the years ended 31 December 2017 and 31 December 2016.

Year ended
31 December
2017 2016
Issued ordinary shares at the beginning of the year 500,000,000 500,000,000
Issuance of shares on the Offering (note 17(a)) 71,428,572 -
Weighted average number of shares 510,317,460 500,000,000
Profit for the year attributable to the shareholders of the Parent
Company, USD million 727 689
Basic and diluted earnings per share, USD 1.425 1.378

In June 2017 and October 2017 the number of shares of the Parent Company was changed as described in Note 17(a). Therefore, basic and diluted earnings per share were retrospectively adjusted for the effect of the shares split. Shares issuance within Offering was accounted for the weighted average numbers of shares calculation for the year ended 31 December 2017 only.
There were no outstanding dilutive instruments during the years ended 31 December 2017 and 31 December 2016.

11. Income tax expense

Income tax expense comprises current and deferred tax. Income tax expense is recognised in the statement of profit or loss and other comprehensive income except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.
Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.
Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of goodwill, the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit, and differences relating to investments in subsidiaries to the extent that they probably will not reverse in the foreseeable future. New information may become available that causes the Company to change its judgement regarding the adequacy of existing tax liability. Such changes to tax liabilities will impact tax expenses in the period that such a determination is made. Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same taxation authority and the Group has both the right and the intention to settle its current tax assets and liabilities on a net or simultaneous basis.
A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which temporary differences can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.
Additional income taxes that arise from the distribution of dividends are recognised at the same time

as the liability to pay the related dividends is recognised.

(a) Income tax expense

	Year ended 31 December	
	2017	2016
	USD million	USD million
Current tax expense		
Current tax for the year	(319)	(252)
Deferred tax expense		
Origination and reversal of temporary differences	104	(52)
	(215)	**(304)**

In 2017 the Parent Company changed tax residency from Jersey to Cyprus. The Parent Company's applicable tax rate is 12.5%. Subsidiaries pay income taxes in accordance with the legislative requirements of their respective tax jurisdictions. For subsidiaries domiciled in Russia the applicable tax rate is 20%; in Ukraine of 18%; Cyprus of 12.5%; Guinea of 0%; China of 25%; Kazakhstan of 20%; Australia of 30%; Jamaica of 25%; Ireland of 12.5% and Sweden of 22%. For the Group's subsidiaries domiciled in Switzerland the applicable tax rate for the year is the corporate income tax rate in the Canton of Zug, Switzerland, which differs depending on the company's tax status. The rate consists of a federal income tax and a cantonal/communal income and capital taxes. The latter includes a base rate and a multiplier, which may change from year to year. Applicable income tax rates for 2017 are 9.27% and 14.60% for different subsidiaries. For the Group's significant trading

companies the applicable tax rate is 0%. The applicable tax rates for the year ended 31 December 2017 were the same as for the year ended 31 December.

Reconciliation of effective tax rate

	Year ended 31 December			
	2017		2016	
	USD million	%	USD million	%
Profit before taxation	**1,618**	**(100)**	**1,665**	**(100)**
Income tax at tax rate applicable for the Parent Company	(202)	13	(208)	13
Non-deductible expenses	(23)	1	(47)	3
Effect of impairment of non-current assets	-	-	(12)	1
Effect of changes in investment in Norilsk Nickel	35	(2)	64	(4)
Change in unrecognised deferred tax assets	(32)	2	(48)	3
Tax provision reversal	22	(1)	-	-
Effect of different income tax rate	(15)	1	(53)	(4)
Income tax	**(215)**	**13**	**(304)**	**18**

(b) Recognised deferred tax assets and liabilities

Deferred tax assets and liabilities are attributable to the following items:

USD million	**Assets**		**Liabilities**		**Net**	
	31 December		**31 December**		**31 December**	
	2017	**2016**	**2017**	**2016**	**2017**	**2016**
Property, plant and equipment	49	62	(1,433)	(1,408)	(1,384)	(1,346)
Inventories	49	51	(13)	(7)	36	44
Trade and other receivables	18	22	(8)	(6)	10	16
Financial instruments	16	-	(7)	(11)	9	(11)
Tax loss carry-forwards	62	43	-	-	62	43
Others	189	89	(141)	(121)	48	(32)
Tax assets/(liabilities)	383	267	(1,602)	(1,553)	(1,219)	(1,286)

Set off of tax	(296)	(159)	296	159	-	-
Net deferred tax assets/(liabilities)	**87**	**108**	**(1,306)**	**(1,394)**	**(1,219)**	**(1,286)**

(c) Movement in temporary differences during the year

USD million	**1 January 2017**	**Recognised in profit or loss**	**Currency translation**	**31 December 2017**
Property, plant and equipment	(1,346)	3	(41)	(1,384)
Inventories	44	(8)	-	36
Trade and other receivables	16	(6)	-	10
Financial instruments	(11)	20	-	9
Tax loss carry-forwards	43	17	2	62
Others	(32)	78	2	48
	(1,286)	**104**	**(37)**	**(1,219)**

USD million	**1 January 2016**	**Recognised in profit or loss**	**Recognised directly in equity***	**Currency translation**	**31 December 2016**
Property, plant and equipment	(599)	(14)	(635)	(98)	(1,346)
Inventories	32	11	-	1	44
Trade and other receivables	19	(5)	-	2	16
Financial instruments	(22)	11	-	-	(11)
Tax loss carry-forwards	62	(18)	-	(1)	43
Others	12	(37)	(6)	(1)	(32)
	(496)	**(52)**	**(641)**	**(97)**	**(1,286)**

* Temporary differences on property, plant and equipment relate to revaluation of hydro assets and were recognised in other comprehensive income. Others in amount of USD 6 million were recognised in the transactions with owners part of the Consolidated Statement of Changes in Equity.

(d) Unrecognised deferred tax assets

Deferred tax assets have not been recognised in respect of the following items:

	31 December 2017 USD million	**31 December 2016 USD million**
Deductible temporary differences	719	591
Tax loss carry-forwards	436	513
	1,155	**1,104**

Deferred tax assets have not been recognised in respect of these items because it is not probable that future taxable profits will be available against which the Group can utilise the benefits therefrom.

Tax losses expire in the following years:

Year of expiry	**31 December 2017 USD million**	**31 December 2016 USD million**
Without expiry	430	505
From 2 to 5 years	4	3

Up to 1 year 2 5
436 513
(e) Unrecognised deferred tax liabilities
Tthe Group's subsidiaries have retained earnings where dividend distributions are subject to taxation, for which deferred taxation has not been provided because remittance of the earnings has been

indefinitely postponed through reinvestment and, as a result, such amounts are considered to be permanently invested. It was not practicable to determine the amount of temporary differences relating to investments in subsidiaries where the Group is able to control the timing of reversal of the difference. Reversal is not expected in the foreseeable future.
(f) Current taxation in the consolidated statement of financial position represents:

	31 December 2017	31 December 2016
	USD million	USD million
Net income tax receivable at the beginning of the year	(18)	(75)
Income tax for the year	319	252
Income tax paid	(289)	(155)
Dividend withholding tax	(26)	(23)
Translation difference	(19)	(17)
	(33)	**(18)**
Represented by:		
Income tax payable (note 16(b))	18	26
Prepaid income tax	(51)	(44)
Net income tax receivable	**(33)**	**(18)**

12. Property, plant and equipment
(a) Accounting policy
(i) Recognition and measurement
Until 1 January 2016 all items of property, plant and equipment were measured at cost less accumulated depreciation and impairment losses. The cost of property, plant and equipment at 1 January 2004, the date of transition to IFRSs, was determined by reference to its fair value at that date.
Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of selfconstructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the asset to a working condition for its intended use, the costs of dismantling and removing the items and restoring the site on which they are located and capitalised borrowing costs. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.
When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.
The cost of periodic relining of electrolysers is capitalised and depreciated over the expected production period.
Gains or losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and are recognised net within gain/(loss) on disposal of property, plant and equipment in profit or loss.
Most of the hydro assets have long useful lives (up to 100 years) and their performance does not deteriorate significantly. Considering recent changes in the regulation of Russian power sector (100% liberalisation) and the fact that hydropower is one of the most efficient sectors of the electric power industry, the management believes that hydropower assets were significantly undervalued prior to 1 January 2016.
On 1 January 2016 the Group identified a separate class of assets - hydro assets - and changed its accounting policy for this class from the cost to the revaluation model to provide users with more

relevant information on the Group's financial position.
Hydro assets are a class of property, plant and equipment with unique nature and use in production of hydropower plants. Since 1 January 2016 hydro assets are measured at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Revaluations are made based on periodic valuation by external independent valuer.
Determined class of assets may be revalued on a rolling basis provided revaluation of the class of assets are completed within a short period and provided the revaluations are kept up to date.
After an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount of the asset.

A revaluation increase on hydro assets is recognised directly under the heading of revaluation surplus in other comprehensive income. However, the increase is recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss. A revaluation decrease on hydro assets is recognised in profit or loss. However, the decrease is recognised in other comprehensive income to the extent of any credit balance existing in the revaluation surplus.

(ii) Subsequent costs

The cost of replacing a part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Group and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

(iii) Exploration and evaluation assets

Exploration and evaluation activities involve the search for mineral resources, the determination of technical feasibility and the assessment of commercial viability of an identified resource. Exploration and evaluation activities include:

- researching and analysing historical exploration data;
- gathering exploration data through topographical, geochemical and geophysical studies;
- exploratory drilling, trenching and sampling;
- determining and examining the volume and grade of the resource;
- surveying transportation and infrastructure requirements; and
- conducting market and finance studies.

Administration costs that are not directly attributable to a specific exploration area are charged to profit or loss.
License costs paid in connection with a right to explore in an existing exploration area are capitalised and amortised over the term of the permit.
Exploration and evaluation expenditure is capitalised as exploration and evaluation assets when it is expected that expenditure related to an area of interest will be recouped by future exploitation, sale, or, at the reporting date, the exploration and evaluation activities have not reached a stage that permits a reasonable assessment of the existence of commercially recoverable ore reserves. Capitalised exploration and evaluation expenditure is recorded as a component of property, plant and equipment at cost less impairment losses. As the asset is not available for use, it is not depreciated. All capitalised
exploration and evaluation expenditure is monitored for indications of impairment. Where there are indicators of potential impairment, an assessment is performed for each area of interest in conjunction with the group of operating assets (representing a cash-generating unit) to which the exploration is attributed. Exploration areas at which reserves have been discovered but which require major capital expenditure before production can begin are continually evaluated to ensure that commercial quantities of reserves exist or to ensure that additional exploration work is underway or planned. To the extent that capitalised expenditure is not expected to be recovered it is charged to profit or loss.

Exploration and evaluation assets are transferred to mining property, plant and equipment or intangible assets when development is sanctioned.

(iv) Stripping costs

Expenditure relating to the stripping of overburden layers of ore, including estimated site restoration costs, is included in the cost of production in the period in which it is incurred.

(v) Mining assets

Mining assets are recorded as construction in progress and transferred to mining property, plant and equipment when a new mine reaches commercial production.

Mining assets include expenditure incurred for acquiring mineral and development rights and developing new mining operations.

Mining assets include interest capitalised during the construction period, when financed by borrowings.

(vi) Depreciation

The carrying amounts of property, plant and equipment (including initial and any subsequent capital expenditure) are depreciated to their estimated residual value over the estimated useful lives of the specific assets concerned, or the estimated life of the associated mine or mineral lease, if shorter. Estimates of residual values and useful lives are reassessed annually and any change in estimate is taken into account in the determination of remaining depreciation charges. Leased assets are depreciated over the shorter of the lease term and their useful lives. Land is not depreciated.

Any accumulated depreciation at the date of the revaluation is eliminated against the gross amount of the assets, and the net amount is restated to the revalued amount of the asset.

The property, plant and equipment is depreciated on a straight-line or units of production basis over the respective estimated useful lives as follows:

- Hydro assets predominantly 49 to 62 years;
- Buildings and constructions predominantly 15 to 50 years;
- Machinery and equipment 4 to 50 years;
- Electrolysers 4 to 15 years;
- Mining assets units of production on proven and probable reserves;
- Other 1 to 30 years.

(vii) Leased assets

Leases under the terms of which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset.

The corresponding finance lease obligation is included within interest bearing liabilities. The interest element is allocated to accounting periods during the lease term to reflect a constant rate of interest on the remaining balance of the obligation for each accounting period.

Assets held under other leases (operating leases) are not recognised in the statement of financial position. Payments made under the lease are charged to profit or loss in equal instalments over the accounting periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the leased assets. Lease incentives received are recognised in profit or loss as an integral part of the aggregate net lease payments made. Contingent rentals are charged to profit or loss in the accounting period in which they are incurred.

Long-term land leases may be recognised as finance leases even without the transfer of ownership of the land at the end of the lease if in the Group's judgment, the lease transfers significantly all the risks and rewards of ownership of the land such that the Group is in a position economically similar to that of a purchaser.

(b) Disclosure

USD million	Land and buildings	Machinery and equipment	Electrolysers	Hydroassets	Mining assets	Construction in progress	Other	Total
Cost/Deemed cost								
At 1 January 2016	**4,129**	**6,737**	**2,148**	**294**	**669**	**1,660**	**366**	**16,003**
Revaluation of hydro assets as at 1 January 2016	-	-	-	1,941	-	-	-	1,941
Additions	-	22	89	-	33	738	8	890
Disposals	(102)	(441)	(15)	-	(128)	(15)	(5)	(706)
Transfers and reclassifications (note 12(f))	153	353	14	157	15	(628)	(64)	-
Revaluation of hydro assets as at 31 December 2016	-	-	-	1,068	-	-	-	1,068
Change in estimate of site restoration provision	-	-	-	-	(1)	-	-	(1)
Translation difference	196	194	(19)	459	97	68	22	1,017
At 31 December 2016	**4,376**	**6,865**	**2,217**	**3,919**	**685**	**1,823**	**327**	**20,212**
Additions	-	157	109	-	17	868	7	1,158
Acquired through business combinations	-	-	-	-	-	-	10	10
Disposals	(20)	(50)	(13)	-	(75)	(30)	(5)	(193)
Transfers	127	437	24	24	13	(638)	13	-
Change in estimate of site restoration provision	-	-	-	-	7	-	-	7
Translation difference	99	117	3	208	37	25	9	498
At 31 December 2017	**4,582**	**7,526**	**2,340**	**4,151**	**684**	**2,048**	**361**	**21,692**

USD million	Land and buildings	Machinery and equipment	Electrolysers	Hydroassets	Mining assets	Construction in progress	Other	Total
Depreciation and impairment losses								
At 1 January 2016	**(2,148)**	**(4,898)**	**(1,763)**	**(93)**	**(597)**	**(1,073)**	**(245)**	**(10,817)**
Revaluation of hydro assets as at 1 January 2016	-	-	-	92	-	-	-	92
Depreciation charge	(120)	(290)	(152)	(67)	(6)	-	(16)	(651)
Reversal of impairment/(impairment losses)	66	85	4	(6)	(22)	(20)	-	107
Disposals	94	432	12	-	114	-	3	655
Transfers and reclassifications (note 12(f))	(6)	(9)	-	-	-	2	11	(2)
Revaluation of hydro assets as at 31 December 2016	-	-	-	74	-	-	-	74
Translation difference	(101)	(116)	20	-	(82)	(30)	(6)	(315)

At 31 December 2016 **(2,215) (4,796) (1,879) - (593) (1,121) (253) (10,857)**
Depreciation charge (135) (345) (149) (101) (7) - (18) (755)
(Impairment losses)/reversal of
impairment
(3) 33 (5) - 27 (80) 3 (25)
Disposals 5 36 11 - 23 - 3 78
Translation difference (67) (76) (3) (1) (28) (13) (5) (193)
At 31 December 2017 **(2,415) (5,148) (2,025) (102) (578) (1,214) (270) (11,752)**
Net book value
At 1 January 2016 1,981 1,839 385 201 72 587 121 5,186
At 31 December 2016 2,161 2,069 338 3,919 92 702 74 9,355
At 31 December 2017 **2,167 2,378 315 4,049 106 834 91 9,940**

Depreciation expense of USD 703 million (2016: USD 604 million) has been charged to cost of goods sold, USD 7 million (2016: USD 4 million) to distribution expenses and USD 18 million (2016: USD 21 million) to administrative expenses.
Interest capitalised for the years ended 31 December 2017 and 31 December 2016 was USD 19 million and USD 5 million, respectively.
Included in construction in progress at 31 December 2017 and 31 December 2016 are advances to suppliers of property, plant and equipment of USD 136 million and USD 99 million, respectively.

(c) Leases

At 31 December 2017 and 31 December 2016 the carrying value of plant and equipment held under finance leases was USD 170 million and USD 32 million, respectively.

(d) Impairment

Management reviewed the carrying amount of the group's non-financial assets at the reporting date to determine whether there were any indicators of impairment or reversal of impairment.
Based on the analysis performed, management identified several factors that indicated that previously recognised impairment loss in respect of a number of the Group's cash generating units may require reversal. These include significant increase of aluminium and alumina prices during the year as a result of continued LME recovery. In aluminium production, the Group faced increase in cash cost due to increase in alumina costs partially counterbalanced by application of cash cost control measures. For alumina cash generating units, major influence was on the part of recovery in alumina prices and increase in prices of energy resources being a significant part of cash cost. Bauxite cash generating units incurred more or less stable sale price of bauxite. For Irkutsk GridCo cash generating unit the regulated tariffs are set up for additional volumes of electricity transmission from 2021. Coal segment extended its sales to foreign markets.
For the purposes of impairment testing value in use of each cash generating unit was determined by discounting expected future net cash flows of the cash generating unit.

UC RUSAL

At 31 December 2017 and 31 December 2016 management identified several indicators that a number of the Group's cash-generating units may be impaired or see reversal of previously recognised impairment loss.
Based on results of impairment testing as at 31 December 2017, management has concluded that a reversal of previously recognised impairment loss relating to property, plant and equipment should be recognised in these consolidated financial statements in respect of the Windalco cash generating unit in the amount of USD 63 million.
Based on results of impairment testing as at 31 December 2016, management has concluded that an impairment loss relating to property, plant and equipment should be recognised in these financial statements in respect of the Bauxite Company of Guyana Inc., Armenal and Ural Foil cash generating units in the amounts of USD 58 million, USD 48 million and USD 13 million, respectively, as the determined recoverable amount was negative. Management has also concluded that a reversal of previously recognised impairment loss relating to property, plant and equipment should be recognised in these financial statements in respect of the Kubikenborg Aluminium, Kremniy, Windalco, Aughinish Alumina, Kandalaksha smelter and Irkutsk smelter cash generating units in the amounts of USD 124 million, USD 52 million, USD 48 million, USD 38 million, USD 30 million

and USD 7 million, respectively.
For the purposes of impairment testing the recoverable amount of each cash generating unit was determined by discounting expected future net cash flows of the cash generating unit. The pre-tax

discount rates applied to the above mentioned cash generating units, estimated in nominal terms based on an industry weighted average cost of capital, are presented in the table below.

	Year ended 31 December	
	2017	**2016**
Bauxite Company of Guyana Inc.	16.7%	16.7%
Armenal	20.0%	20.0%
Ural Foil	15.3%	15.3%
Kubikenborg Aluminium	14.4%	13.2%
Kremniy	15.9%	19.0%
Windalco	22.7%	31.5%
Aughinish Alumina	14.3%	13.5%
Kandalaksha smelter	18.6%	18.5%
Irkutsk smelter	16.3%	16.4%

The recoverable amount of a number of the cash generating units tested for impairment are particularly sensitive to changes in forecast aluminium and alumina prices, foreign exchange rates and applicable discount rates.
Additionally, management identified specific items of property, plant and equipment that are no longer in use and therefore are not considered to be recoverable amounting to USD 83 million at 31 December 2017 (2016: USD 67 million). These assets have been impaired in full. No further impairment of property, plant and equipment or reversal of previously recorded impairment was identified by management.

ENERGY

At 31 December 2017 and 2016 management identified several indicators that property, plant and equipment of Coal and Irkutsk GridCo cash-generating units may be impaired or see reversal of previously recognised impairment loss. As a result of impairment testing performed no impairment or reversal of impairment was recognised.
The following key assumptions were used to determine the recoverable amount of the Coal cashgenerating
unit at 31 December 2017:

- The sales volumes in 2018 were projected based on the approved budget for 2018. The sales volumes of coal in 2018 were planned at the level of 13,394 thousand tons. The expected growth till 2027 was estimated as 5% as compared to 2018;
- Average price for coal in 2018 was estimated at the level of USD 15 (RUB 873) per ton of coal and changed from decrease of 1% to increase of 4% per annum till 2027. The anticipated price growth included in the cash flow projections for the years from 2019 to 2027 has been based on the publicly available forecasts of Ministry of Economic Development of the Russian Federation;
- The post-tax discount rate was estimated in nominal terms based on the weighted average cost of capital and was 13%;

A terminal value was derived following the forecast period assuming a 4% annual growth rate.
The following key assumptions were used to determine the recoverable amount of the Coal cashgenerating
unit at 31 December 2016:

- The sales volumes in 2017 were projected based on the approved budget for 2017. The sales volumes of coal in 2017 were planned at the level of 12,451 thousand tons. The expected growth till 2026 was estimated as 26.4% as compared to 2017;
- Average price for coal in 2017 was estimated at the level of USD 12 (RUB 789) per ton of coal and increased by 4%-8% per annum till 2026. The anticipated price growth included in the cash

flow projections for the years from 2018 to 2026 has been based on the publicly available forecasts of Ministry of Economic Development of the Russian Federation;

- The post-tax discount rate was estimated in nominal terms based on the weighted average cost of capital and was 14%;
- A terminal value was derived following the forecast period assuming a 4% annual growth rate.

The recoverable amount of the Coal cash-generating unit is particularly sensitive to changes in forecast of sales volumes, coal prices and applicable discount rates.

The following key assumptions were used to determine the recoverable amount of the Irkutsk GridCo cash-generating unit at 31 December 2017:

- The sales volume of electricity transmission in 2018 were planned at the level of 43 million MWh. The expected growth till 2027 was estimated as 14.2% as compared to 2018;
- Tariffs for electricity transmission were estimated at the levels of USD 7-11 (RUB 431-663) per MWh depending on market segment in 2018 and increased by 40% till 2027 as compared to 2018. The anticipated growth of tariffs included in the cash flows projections for the years from 2019 to 2027 has been based on the publicly available forecasts of Ministry of Economic Development of the Russian Federation in relation to inflation;
- The post-tax discount rate was estimated in nominal terms based on the weighted average cost of capital and amounted to 12.2%;
- A terminal value was derived following the forecast period assuming a 4% annual growth rate.

The following key assumptions were used to determine the recoverable amount of the Irkutsk GridCo cash-generating unit at 31 December 2016:

- The sales volume of electricity transmission in 2017 were planned at the level of 45 million MWh. The expected growth till 2026 was estimated as 17.3% as compared to 2017;
- Tariffs for electricity transmission were estimated at the levels of USD 6-8 (RUB 385-525) per MWh depending on market segment in 2017 and increased by 44% till 2026 as compared to 2017. The anticipated growth of tariffs included in the cash flows projections for the years from 2018 to 2026 has been based on the publicly available forecasts of Ministry of Economic Development of the Russian Federation in relation to inflation;
- The post-tax discount rate was estimated in nominal terms based on the weighted average cost of capital and amounted to 15.2%;
- A terminal value was derived following the forecast period assuming a 4% annual growth rate.

The recoverable amount estimated at 31 December 2017 and 31 December 2016 includes cash flows from sales of electricity transmission to Taishet aluminium smelter starting from 2021. In case Taishet aluminium smelter is not launched a significant impairment of property, plant and equipment may need to be recognised.

The recoverable amount of the Irkutsk GridCo cash-generating unit is also particularly sensitive to changes in forecast of electricity transmission volumes and tariffs, as well as applicable discount rates.

Additionally, management identified specific items of property, plant and equipment that are no longer in use and therefore are not considered to be recoverable amounting to USD 5 million (2016: USD 6 million). These assets have been impaired in full. No further impairment of property, plant and equipment or reversal of previously recorded impairment was identified by management.

(e) Security

The carrying value of property, plant and equipment which subject to lien under loan agreements was USD 1,150 million at 31 December 2017 (31 December 2016: USD 274 million) (note 18).

(f) Reclassification

During 2016 the management and technical specialists of the Group reviewed the classification of property, plant and equipment to categories. As a result, the Group reclassified some assets between the categories to reflect technical and economic basis respective to production cycle.

(g) Hydro assets

An independent valuation analysis of hydro assets has been carried out following the decision to change accounting policy to the revaluation model for this class of property, plant and equipment beginning from 1 January 2016 (note 12(a)(i)). The fair value of hydro assets is estimated to be USD 2,230 million with an equity effect of USD 2,033 million and revaluation loss of USD 4 million recognised in profit or loss.

In October 2016 the Group acquired previously leased dams from the lessor (note 22(d)) for a cash consideration of USD 138 million (RUB 9,280 million at average annual exchange rate), excluding VAT. As at 31 December 2016 the consideration was paid.

As at 31 December 2016 as a result of the independent valuation analysis the fair value of hydro assets was estimated in the amount of USD 3,919 million with an additional equity effect of USD 1,142 million and an additional revaluation loss of USD 2 million recognised in profit or loss.

As at 31 December 2016 the increase in fair value mostly refers to the dams acquired in 2016 which are classified as hydro assets and were previously leased. These dams complement existing hydro assets of the Group. As a result, the ability to integrate these dams into the Group's existing generation and distribution facilities has led the management to perform a new revaluation at the end of 2016.

As at 31 December 2017 valuation by external independent valuer was not performed because based on the management analysis fair value of hydro assets approximates their carrying amount at that date.

Net book value as at 31 December 2017 according to the cost model amounted to USD 433 million (31 December 2016: USD 402 million, 1 January 2016: USD 201 million).

The valuation analysis primarily was based on the cost approach to determine depreciated replacement cost as it is the most reliable method to estimate value for the assets that have not an active market and do not generate an identifiable revenue stream by asset. This method considers the cost to reproduce or replace the property, plant and equipment, adjusted for physical depreciation, functional and economical obsolescence.

Depreciated replacement cost was estimated based on internal sources and, where available, analysis of the Russian and international markets for similar property, plant and equipment. Various market data were collected from published information, catalogues, statistical data etc.

In addition cash flow testing was conducted to identify if there is an economic obsolescence of the hydro assets. Forecasts of net cash flows were determined based on the actual results for the

preceding years and approved budgets. Based on the analysis results, there is no economic obsolescence as at 1 January 2016 and 31 December 2016.

The fair value measurement for hydro assets have been categorised as Level 3 fair values based on the inputs to the valuation techniques used.

13. Goodwill and intangible assets

(a) Accounting policy

(i) Goodwill

On the acquisition of a subsidiary, an interest in a joint venture or an associate or an interest in a joint arrangement that comprises a business, the identifiable assets, liabilities and contingent liabilities of the acquired business (or interest in a business) are recognised at their fair values unless the fair values cannot be measured reliably. Where the fair values of assumed contingent liabilities cannot be measured reliably, no liability is recognised but the contingent liability is disclosed in the same manner as for other contingent liabilities.

Goodwill arises when the cost of acquisition exceeds the fair value of the Group's interest in the net fair value of identifiable net assets acquired. Goodwill is not amortised but is tested for impairment annually. For this purpose, goodwill arising on a business combination is allocated to the cashgenerating

units expected to benefit from the acquisition and any impairment loss recognised is not reversed even where circumstances indicate a recovery in value.

In respect of associates or joint ventures, the carrying amount of goodwill is included in the carrying amount of the interest in the associate and joint venture and the investment as a whole is tested for impairment whenever there is objective evidence of impairment. Any impairment loss is allocated to

the carrying amount of the interest in the associate and joint venture.
When the fair value of the Group's share of identifiable net assets acquired exceeds the cost of acquisition, the difference is recognised immediately in profit or loss.

(ii) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in profit or loss when incurred.
Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditure is capitalised only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable and the Group intends to and has sufficient resources to complete development and to use or sell the asset. The expenditure capitalised includes the cost of materials, direct labour and overhead costs that are directly attributable to preparing the asset for its intended use and capitalised borrowing costs. Other development expenditure is recognised in profit or loss when incurred.
Capitalised development expenditure is measured at cost less accumulated amortisation and accumulated impairment losses (refer to note 12(d)).

(iii) Other intangible assets

Other intangible assets that are acquired by the Group, which have finite useful lives, are measured at cost less accumulated amortisation and accumulated impairment losses (refer to note 12(d)).

(iv) Subsequent expenditure

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognised in profit or losswhen incurred.

(v) Amortisation

Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use. The estimated useful lives are as follows:

- software 5 years;
- other intangible assets 2-8 years.

The amortisation method, useful lives and residual values are reviewed at each financial year end and adjusted if appropriate.

(b) Disclosure

USD million	**Goodwill**	**Other intangible assets**	**Total**
Cost			
Balance at 1 January 2016	**2,400**	**573**	**2,973**
Additions	-	20	20
Disposals	-	(14)	(14)
Foreign currency translation	248	6	254
Balance at 31 December 2016	**2,648**	**585**	**3,233**
Additions	17	23	40
Disposals	-	(20)	(20)
Foreign currency translation	80	2	82
Balance at 31 December 2017	**2,745**	**590**	**3,335**
Amortisation and impairment losses			
Balance at 1 January 2016	**(450)**	**(470)**	**(920)**
Amortisation charge	-	(12)	(12)
Foreign currency translation	-	(1)	(1)
Balance at 31 December 2016	**(450)**	**(483)**	**(933)**
Amortisation charge	-	(8)	**(8)**

Foreign currency translation - (2) **(2)**
Balance at 31 December 2017 (450) (493) (943)
Net book value
At 1 January 2016 1,950 103 2,053
At 31 December 2016 2,198 102 2,300
At 31 December 2017 2,295 97 2,392

(c) Amortisation charge

The amortisation charge is included in cost of sales in statement of profit or loss and other comprehensive income.

(d) Impairment testing of goodwill and other intangible assets

For the purposes of impairment testing, goodwill is allocated to the following cash-generating units. These units represent the lowest level within the group at which the goodwill is monitored for internal management purposes.

The aggregate carrying amounts of goodwill allocated to each business, and the related impairment losses recognised, are as follows:

USD million	**Allocated goodwill**	**Accumulated impairment loss**	**Allocated goodwill**	**Accumulated impairment loss**
	2017	**2017**	**2016**	**2016**
UC RUSAL	2,468	(449)	2,388	(449)
Irkutskenergo	276	-	259	-
Strikeforce Mining and Resources PLC ("SMR")	1	(1)	1	(1)
	2,745	**(450)**	**2,648**	**(450)**

UC RUSAL

For the purposes of impairment testing, the entire amount of goodwill is allocated to the aluminium segment of the UC RUSAL's operations. The aluminium segment represents the lowest level within the UC RUSAL at which the goodwill is monitored for internal management purposes. The recoverable amount represents value in use as determined by discounting the future cash flows generated from the continuing use of the plants within the UC RUSAL's aluminium segment.

At 31 December 2017, management analysed changes in the economic environment and developments in the aluminium industry and the Group's operations since 31 December 2016 and performed an impairment test for goodwill at 31 December 2017 using the following assumptions to determine the recoverable amount of the segment:

- Total production was estimated based on average sustainable production levels of 3.8 million metric tonnes of primary aluminium, of 8.0 million metric tonnes of alumina and of 12.3 million metric tonnes of bauxite. Bauxite and alumina will be used primarily internally for production of primary aluminium;
- Sales prices were based on the long-term aluminium price outlook derived from available industry and market sources at USD 2,058 per tonne for primary aluminium in 2018, USD 2,043 in 2019, USD 2,035 in 2020, USD 2,037 in 2021, USD 2,053 in 2022. Operating costs were projected based on the historical performance adjusted for inflation;
- Nominal foreign currency exchange rates applied to convert operating costs of the Group denominated in RUB into USD were RUB 62.3 for one USD in 2018, RUB 61.4 in 2019, RUB 62.2 in 2020, RUB 60.5 in 2021, RUB 59.5 in 2022. Inflation of 3.9% - 4.9% in RUB and 1.3% - 2.3% in USD was assumed in determining recoverable amounts;
- The pre-tax discount rate was estimated in nominal terms based on the weighted average cost of capital basis and was 13.1%;

• A terminal value was derived following the forecast period assuming a 1.7% annual growth rate.
Values assigned to key assumptions and estimates used to measure the unit's recoverable amount was based on external sources of information and historic data. Management believes that the values assigned to the key assumptions and estimates represented the most realistic assessment of future trends. The results were particularly sensitive to the following key assumptions:

• A 5% reduction in the projected aluminium price level would have resulted in a decrease in the recoverable amount by 26% but would not lead to an impairment;

• A 5% increase in the projected level of electricity and alumina costs in the aluminium production would have resulted in a 17% decrease in the recoverable amount but would not lead to an impairment;

• A 1% increase in the discount rate would have resulted in a 7% decrease in the recoverable amount but would not lead to an impairment.

Based on results of impairment testing of goodwill, management concluded that no impairment should be recorded in the consolidated financial statements as at 31 December 2017.

At 31 December 2016, management analysed changes in the economic environment and developments in the aluminium industry and the Group's operations since 31 December 2015 and performed an impairment test for goodwill at 31 December 2016 using the following assumptions to determine the recoverable amount of the segment:

• Total production was estimated based on average sustainable production levels of 3.7 million metric tonnes of primary aluminium, of 7.8 million metric tonnes of alumina and of 12.0 million

metric tonnes of bauxite. Bauxite and alumina will be used primarily internally for production of primary aluminium;

• Sales prices were based on the long-term aluminium price outlook derived from available industry and market sources at USD 1,673 per tonne for primary aluminium in 2017, USD 1,703 in 2018, USD 1,726 in 2019, USD 1,789 in 2020, USD 1,911 in 2021. Operating costs were projected based on the historical performance adjusted for inflation;

• Nominal foreign currency exchange rates applied to convert operating costs of the Group denominated in RUB into USD were RUB 62.4 for one USD in 2017, RUB 67.7 in 2018, RUB 69.7 in 2019, RUB 71.0 in 2020, RUB 69.0 in 2021. Inflation of 4.4% - 5.4% in RUB and 1.3% - 2.2% in USD was assumed in determining recoverable amounts;

• The pre-tax discount rate was estimated in nominal terms based on the weighted average cost of capital basis and was 13.7%;

• A terminal value was derived following the forecast period assuming a 1.8% annual growth rate.
Values assigned to key assumptions and estimates used to measure the unit's recoverable amount was based on external sources of information and historic data. Management believes that the values assigned to the key assumptions and estimates represented the most realistic assessment of future trends. The results were particularly sensitive to the following key assumptions:

• A 5% reduction in the projected aluminium price level would have resulted in a decrease in the recoverable amount by 23% but would not lead to an impairment;

• A 5% increase in the projected level of electricity and alumina costs in the aluminium production would have resulted in a 15% decrease in the recoverable amount but would not lead to an impairment;

• A 1% increase in the discount rate would have resulted in a 8% decrease in the recoverable amount but would not lead to an impairment.

Based on results of impairment testing of goodwill, management concluded that no impairment should be recorded in the consolidated financial statements as at 31 December 2016.

ENERGY

Goodwill primarily resulted from the acquisition of Irkutskenergo. For the purposes of impairment testing, goodwill is allocated to Irkutskenergo cash generating unit. This represents the lowest level within the Group at which goodwill is monitored for internal management purposes.

Management performs impairment testing of goodwill annually at 31 December of the respective

calendar year.
The recoverable amount of Irkutskenergo in 2017 and 2016 was determined by reference to its value in use derived by discounting of the future cash flows generated from continuing use of production facilities within Irkutskenergo cash generating unit of the Group.
The following key assumptions were used to determine the recoverable amount of the segment at 31 December 2017:
• The sales volumes in 2018 were projected based on the approved budgets for 2018. In particular, the sales volumes of electricity in 2018 were planned at the level of 64 million MWh and 64 million MWh in 2019. The expected growth till 2027 was estimated as 8.5% as compared to 2018. The sales volumes of heat in 2018 were planned at the level of 20 million Gcal and no growth till 2027 is expected.
• Sales prices were based on the long-term price outlook derived from the available industry and market sources. The prices for electricity were estimated at the levels of USD 2.3 - 31.1

(RUB 137-1,817) per MWh depending on market segment in 2018 and increased by 42-45% respectively till 2027. The tariffs for heat were estimated as USD 16.9 (RUB 988) per Gcal in 2018 and grew by 38% till 2027. Operating costs were projected based on the historical performance of Irkutskenergo and the anticipated increase during the projected period was in line with inflation.
• The post-tax discount rate was estimated in nominal terms based on the weighted average cost of capital amounted to 14.0% ;
A terminal value was derived following the forecast period assuming a 4% annual growth rate.
The following key assumptions were used to determine the recoverable amount of the cash generating unit at 31 December 2016:
• The sales volumes in 2017 were projected based on the approved budgets for 2017. In particular, the sales volumes of electricity in 2017 were planned at the level of 64 million MWh and 66 million MWh in 2018. The expected growth till 2026 was estimated as 12.1% as compared to 2017. The sales volumes of heat in 2017 were planned at the level of 20 million Gcal and no growth till 2026 is expected.
• Sales prices were based on the long-term price outlook derived from the available industry and market sources. The prices for electricity were estimated at the levels of USD 1.1 - 26.7 (RUB 64-1,617) per MWh depending on market segment in 2017 and increased by 28-53% respectively till 2026. The tariffs for heat were estimated as USD 15.7 (RUB 954) per Gcal in 2017 and grew by 45% till 2026. Operating costs were projected based on the historical performance of Irkutskenergo and the anticipated increase during the projected period was in line with inflation.
• The post-tax discount rate was estimated in nominal terms based on the weighted average cost of capital amounted to 14.8% ;
• A terminal value was derived following the forecast period assuming a 4% annual growth rate.
Based on results of impairment testing, management concluded that no impairment for Irkutskenergo cash generating unit should be recorded in the consolidated financial statements at 31 December 2017 and 31 December 2016.
Reasonable possible change in key assumptions will not lead to an impairment.

14. Interests in associates and joint ventures

An associate is an entity in which the Group or Company has significant influence, but not control or joint control, over its management, including participation in the financial and operating policy decisions.
A joint venture is an arrangement whereby the Group or Company and other parties contractually agree to share control of the arrangement, and have rights to the net assets of the arrangement.
An investment in an associate or a joint venture is accounted for in the consolidated financial statements under the equity method, unless it is classified as held for sale (or included in a disposal group that is classified as held for sale). Under the equity method, the investment is initially recorded

at cost, adjusted for any excess of the Group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment (if any). Thereafter, the investment is adjusted for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment. Any acquisition-date excess over cost, the Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated statement of profit or loss and other comprehensive income, whereas

the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of other comprehensive income.

When the Group's share of losses exceeds its interest in the associate or the joint venture, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee.

Unrealised profits and losses resulting from transactions between the Group and its associates and joint venture are eliminated to the extent of the group's interest in the investee, except where unrealised losses provide evidence of an impairment of the asset transferred, in which case they are recognised immediately in profit or loss.

If an investment in an associate becomes an investment in a joint venture or vice versa, retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method.

In all other cases, when the group ceases to have significant influence over an associate or joint control over a joint venture, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former investee at the date when significant influence or joint control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset.

In the Group's statement of financial position, investments in associates and joint venture are stated at cost less impairment losses, unless classified as held for sale (or included in a disposal group that is classified as held for sale).

An impairment loss in respect of an investment in an associate or joint venture is calculated as the difference between its carrying amount after application of the equity method of accounting and its recoverable amount. The recoverable amount of such investment is the greater of its value in use and its fair value less cost to sell. In determining the value in use of the investment the Group estimates: (a) its share of the present value of the estimated future cash flows expected to be generated by the investee, including the cash flows from the operations of the investee and the proceeds on the ultimate disposal of the investment; or (b) the present value of the estimated future cash flows expected to arise from the dividends to be received from the investee and from its ultimate disposal depending on which available information with respect to each investee is more reliable. An impairment loss is reversed to the extent that the recoverable amount of the investment subsequently increases and the resulting carrying amount does not exceed the carrying amount that would have been determined, after application of the equity method, had no impairment loss previously been recognised.

	31 December	
	2017	**2016**
	USD million	**USD million**
Balance at the beginning of the year	**4,156**	**3,222**
Group's share of profits and other gains attributable to associates	621	847
Dividends	(535)	(490)
Group's share of other comprehensive income	(28)	-
Reversal of provision for a guarantee included in the share of profits	-	(100)
Foreign currency translation	245	677
Balance at the end of the year	**4,459**	**4,156**

	31 December 2017 USD million	31 December 2016 USD million
Goodwill included in interests in associates	2,609	2,477

The following list contains only the particulars of associates, all of which are corporate entities, which principally affected the results or assets of the Group.

Name of associate/ joint venture	Place of incorporation and operation	Particulars of issued and paid up capital	Proportion of ownership interest: Group's effective interest	Proportion of ownership interest: Group's nominal interest	Principal activity
PJSC MMC Norilsk Nickel	Russian Federation	158,245,476 shares, RUB 1 par value	13.39%	27.82%	Nickel and other metals production
Queensland Alumina Limited	Australia	2,212,000 shares, AUD 2 par value	9.63%	20%	Production of alumina under a tolling agreement
BEMO project	Cyprus, Russian Federation	BOGES Limited and BALP Limited - 10,000 shares EUR 1.71 each	24.07%	50%	Energy / Aluminium production

The summary of the consolidated financial statements of associates and joint ventures for the year ended 31 December 2017 is presented below:

	PJSC MMC Norilsk Nickel	Queensland Alumina Limited	BEMO project	Other associates and joint ventures	Group

share 100%
Group
share 100%
Group
share 100%
Group
share 100%
Non-current assets 5,889 12,109 119 552 1,422 2,970 177 356
Current assets 1,259 4,526 29 153 100 200 115 391
Non-current liabilities (2,698) (9,625) (76) (207) (960) (1,920) (41) (85)
Current liabilities (654) (2,352) (72) (358) (39) (78) (111) (407)
Net assets 3,796 4,658 - 140 523 1,172 140 255
PJSC MMC
Norilsk Nickel
Queensland
Alumina Limited BEMO project
Other associates
and joint ventures
Group
share 100%
Group
share 100%
Group
share 100%
Group
share 100%
Revenue 2,545 9,146 134 670 273 546 868 2,990
Profit/(loss) from
continuing operations 528 2,129 - 14 58 (17) 35 71
Other comprehensive
income 188 223 - 9 25 51 - 8
Total comprehensive
income 716 2,352 - 23 83 34 35 79

The summary of the consolidated financial statements of associates and joint ventures for the year ended 31 December 2016 is presented below:
PJSC MMC
Norilsk Nickel
Queensland
Alumina Limited BEMO project
Other associates
and joint ventures
Group
share 100%
Group
share 100%
Group
share 100%
Group
share 100%
Non-current assets 4,994 8,881 136 587 1,275 2,818 165 339
Current assets 1,577 5,668 22 115 77 153 153 498
Non-current liabilities (2,281) (8,115) (89) (242) (880) (1,817) (35) (73)

Current liabilities (698) (2,508) (69) (345) (36) (73) (155) (541)
Net assets 3,592 3,926 - 115 436 1,081 128 223
PJSC MMC
Norilsk Nickel
Queensland
Alumina Limited BEMO project
Other associates
and joint ventures
Group
share 100%
Group
share 100%
Group
share 100%
Group
share 100%
Revenue 2,289 8,165 125 625 282 563 899 3,063
Profit/(loss) from
continuing operations 688 2,198 - (24) 40 16 21 (3)
Other comprehensive
income 602 381 - (1) 67 139 6 4
Total comprehensive
income 1,290 2,579 - (25) 107 155 27 1
(a) PJSC MMC Norilsk Nickel
The Group's investment in Norilsk Nickel is accounted for using equity method and the carrying value as at 31 December 2017 and 31 December 2016 amounted USD 3,796 million and USD 3,592 million, respectively. The market value amounted USD 8,294 million and USD 7,348 million as at 31 December 2017 and 31 December 2016, respectively, and is determined by multiplying the quoted bid price per share on the Moscow Exchange on the year-end date by the number of shares held by the Group.
(b) Queensland Alumina Limited
The carrying value of the Group's investment in Queensland Alumina Limited as at both 31 December 2017 and 31 December 2016 amounted to USD nil million. At 31 December 2017 management has not identified any impairment reversal indicators relating to the Group's investment in QAL and as a result no detailed impairment testing was performed in relation to this investment.
(c) BEMO project
The carrying value of the Group's investment in BEMO project as at 31 December 2017 and 31 December 2016 amounted USD 523 million and USD 436 million, respectively.
For the purposes of impairment testing, the BEMO project was separated into two cash generating units - the Boguchansky Aluminium Smelter ("BoAZ') and the Boguchansky Hydro Power Plant ("BoGES"). The recoverable amount was determined by discounting the expected future net cash flows of each cash generating unit.

At 31 December 2016 and 31 December 2017 management has not identified any impairment indicators relating to the Group's investment in BoGES and as a result no detailed impairment testing was performed in relation to this investment. Results of impairment testing of BoAZ investment for the year ended 31 December 2017 showed that investment in BoAZ is fully impaired and no reversal of previously recorded impairment was identified by management.
At 31 December 2017 accumulated losses of USD 573 million (2016: USD 550 million) related to impairment charges at BoAZ have not been recognised because the Group's investment has already been fully written down to USD nil million.
The recoverable amounts of the two cash generating units are particularly sensitive to changes in forecast aluminium and electricity prices, foreign exchange rates, applicable discount rates and, in

respect to BoAZ, the forecast period to reach full production capacity.
Summary of the additional financial information of the Group's effective interest in BEMO project for the year ended 31 December 2017 and 31 December 2016 is presented below (all in USD million):

	31 December 2017	31 December 2016
	USD million	USD million
Cash and cash equivalents	21	18
Current financial liabilities	(11)	(7)
Non-current financial liabilities	(920)	(844)
Depreciation and amortisation	(18)	(16)
Interest income	1	1
Interest expense	(25)	(28)
Income tax expense	(4)	(11)

15. 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.
The cost of inventories is determined under the weighted average cost method, and includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity.
Net realisable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and selling expenses.
The production costs include mining and concentrating costs, smelting, treatment and refining costs, other cash costs and depreciation and amortisation of operating assets.

	31 December	
	2017	2016
	USD million	USD million
Raw materials and consumables	1,103	910
Work in progress	684	586
Finished goods and goods for resale	895	741
	2,682	2,237
Provision for inventory obsolescence	(187)	(203)
	2,495	**2,034**

Inventories at 31 December 2017 and 31 December 2016 are stated at cost.
Inventories with a carrying value of USD 373 million and USD 402 million were pledged as collateral for secured bank loans at 31 December 2017 and 31 December 2016, respectively (note 18).
Inventory with a carrying value of USD 314 million is pledged under existing trading contracts at 31 December 2017 (31 December 2016: USD 78 million).

16. Non-derivative financial instruments

Non-derivative financial instruments comprise investments in securities, trade and other receivables (excluding prepayments and tax assets), cash and cash equivalents, loans and borrowings and trade and other payables (excluding advances received and tax liabilities).
Non-derivative financial instruments are recognised initially at fair value plus any directly attributable transaction costs.
A financial instrument is recognised when the Group becomes a party to the contractual provisions of the instrument. Financial assets are derecognised if the Group's contractual rights to the cash flows from the financial assets expire or if the Group transfers the financial asset to another party without retaining control or substantially all risks and rewards of the asset. Financial liabilities are derecognised if the Group's obligations specified in the contract expire or are discharged or cancelled.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.
Cash and cash equivalents comprise cash balances and call deposits with maturities at initial recognition of three months or less that are subject to insignificant risk of changes in their fair values, and are used by the Group in the management of its short-term commitments.
Subsequent to initial recognition non-derivative financial instruments are measured as described below:

- Trade and other receivables and other non-derivative financial assets are measured at amortised cost using the effective interest method, less any impairment losses.
- Trade and other payables and other non-derivative financial liabilities subsequent to initial recognition, are measured at amortised cost using the effective interest method. Investments in equity securities that are not quoted on a stock exchange and where fair value cannot be estimated on a reasonable basis by other means are measured at cost less impairment losses.

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is any objective evidence that it is impaired. A financial asset is considered

to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset occurred after the initial recognition of that asset and the impact can be estimated reliably.
Objective evidence that financial assets (including equity securities) are impaired can include default or delinquency by a debtor, restructuring of an amount due to the Group on terms that the Group would not consider otherwise, indications that a debtor or issuer will enter bankruptcy and the disappearance of an active market for a security. In addition, for an investment in an equity security, a significant or prolonged decline in its fair value below its cost is objective evidence of impairment.
An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the original effective interest rate.
Individually significant financial assets are tested for impairment on an individual basis. The remaining financial assets are assessed collectively in groups that share similar credit risk characteristics.
All impairment losses are recognised in profit or loss.
An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss was recognised. For financial assets measured at amortised cost, the reversal is recognised in profit or loss.
Impairment losses for trade receivables included within trade and other receivables whose recovery is considered doubtful but not remote are recorded using an allowance account. When the Group is satisfied that recovery is remote, the amount considered irrecoverable is written off against trade receivables directly and any amounts held in the allowance account relating to that receivable are reversed. Subsequent recoveries of amounts previously charged to the allowance account are reversed against the allowance account. Other changes in the allowance account and subsequent recoveries of amounts previously written off directly are recognised in profit or loss.
For disclosure of loans and borrowings refer to note 18.

(a) Trade and other receivables

	31 December 2017	31 December 2016
	USD million	**USD million**
Trade receivables from third parties	**588**	**467**
Trade receivables from related parties, including	**50**	**82**

Related parties - companies capable of exerting significant

influence 31
56
Related parties - companies under common control 5 15
Related parties - associates and joint ventures 14 11
VAT recoverable 336 293
Advances paid to third parties 105 96
Advances paid to related parties, including 41 54
Related parties - companies under common control 1 10
Related parties - associates and joint ventures 40 44
Other receivables from third parties 214 173
Other receivables from related parties, including 4 7
Related parties - companies capable of exerting significant
influence 3
-
Related parties - companies under common control - 5
Related parties - associates and joint ventures 1 2
Dividends receivables from related parties 3 311
Related parties - associates and joint ventures 3 311
1,341 1,483
Provision for doubtful debt (62) (82)
Total short-term receivables 1,279 1,401
(i) Ageing analysis
Included in trade and other receivables are trade receivables (net of allowance for doubtful debts) with the following ageing analysis as of the statement of financial position dates:
31 December
2017 2016
USD million USD million
Current 460 402
Past due 0-90 days 111 83
Past due 91-365 days 28 13
Past due over 365 days 5 14
Amounts past due 144 110
604 512
Trade receivables are on average due within 60 days from the date of billing. The receivables that are neither past due nor impaired (i.e. current) relate to a wide range of customers for whom there was no recent history of default.
Receivables that were past due but not impaired relate to a number of customers that have a good track record with the Group. Based on past experience, management believes that no impairment allowance is necessary in respect of these balances as there has not been a significant change in credit quality and the balances are still considered fully recoverable. The Group does not hold any collateral over these balances. Further details of the Group's credit policy are set out in note 21(e).

(b) Trade and other payables
31 December
2017 2016
USD million USD million
Accounts payable to third parties 751 578
Accounts payable to related parties, including 52 47
Related parties - companies capable of exerting significant
influence 14
18
Related parties - companies under common control 9 4
Related parties - associates and joint ventures 29 25

Advances received from third parties 440 180
Advances received from related parties, including 308 165
Related parties - companies capable of exerting significant influence 288
165
Related parties - associates and joint ventures 20 -
Other payables and accrued liabilities 495 615
Other payable and accrued liabilities to related parties, including -
8
Related parties - associates and joint ventures - 8
Dividends payable - 23
Current tax payable 18 26
Other current liabilities 79 10
2,143 1,652
All of the trade and other payables are expected to be settled or recognised as income within one year or are repayable on demand.
As at 31 December 2017 USD nil million and USD 109 million for the acquisition of Irkutskenergo were included in other non-current liabilities and short-term other payables and accrued liabilities, respectively (31 December 2016 USD 89 million and USD 206 million) (note 17(a)).
(c) Cash and cash equivalents
31 December
2017 2016
USD million USD million
Bank balances, USD 560 389
Bank balances, RUB 118 130
Bank balances, other currencies 145 97
Cash in transit 30 7
Short-term bank deposits 104 28
Other cash equivalents - 5
Cash and cash equivalents in the statement of cash flows 957 656
Restricted cash 17 13
Cash and cash equivalents in the statement of financial position 974
669
As at 31 December 2017 and 31 December 2016 included in cash and cash equivalents was restricted cash of USD 17 million and USD 13 million, respectively, pledged under a Swiss Law Pledged Agreement with BNP Paribas (Suisse) SA and Allied Irish Bank.

17. Equity
(a) Share capital, additional paid-in capital and transactions with shareholders
(i) Parent Company's share capital and initial public offering of GDRs
As at 31 December 2016 the Parent Company's authorised share capital comprised 50,000 ordinary shares, out of which 2,000 shares were issued with a par value of USD 1 each.
In June 2017 the number of shares of the Parent Company was changed such that each share in the capital of the Parent Company was subdivided into 250,000 shares. As a result of the transaction Parent Company's authorised share capital increased to 12,500,000,000 shares and issued share capital increased to 500,000,000 shares.
In October 2017 the Parent Company allotted 8,250,000,000 ordinary shares of USD 0.000004 each in favour of the Parent Company's shareholders. Immediately following the increase, the authorised share capital of the Parent Company was consolidated such that every 17.5 ordinary shares with a par value of USD 0.000004 were consolidated into 1 ordinary share with a par value of USD 0.00007 each. As a result of the transaction the Parent Company's authorised share capital comprises

714,285,714,286 shares, out of which 500,000,000 were issued with a par value of USD 0.00007 each.

On 8 November 2017 the Parent Company successfully completed the Offering on the London Stock Exchange and the Moscow Exchange (note 1(a)). The offer price has been set at USD 14 per GDR for London Stock Exchange and RUB 840 per GDR for the Moscow Exchange, with each GDR representing one ordinary share in the Parent Company. The total size of the offering amounted to 107,142,858 GDRs, representing USD 1.5 billion at the offer price, of which USD 1.0 billion (71,428,572 GDRs) is primary proceeds and USD 0.5 billion (35,714,286 GDRs) is a secondary component (placement of existing shares). The Parent Company raised from the Offering approximately USD 973 million, net of related expenses of USD 27 million, of which USD 942 million has been used to repay the Parent Company's Loan. In addition to USD 27 million directly related to the primary proceeds, another part of the listing expenses related to the secondary component of USD 14 million was recognised in the statement of profit or loss and other comprehensive income.

As at 31 December 2017 and 31 December 2016 all issued ordinary shares were fully paid.

(ii) Change in effective interest in subsidiaries

Irkutskenergo

In 2017 the Group increased its shareholding in Irkutskenergo up to 92.5%. As a result of the transactions the Group recognised a total distribution of USD 27 million.

Particularly, in June 2017 ESE-Hydrogeneration (former LLC Telmamskaya GES) submitted the mandatory offer to non-controlling shareholders of Irkutskenergo for purchase of non-controlling interest. The offer price was based on weighted six-months trading average price prior to the offer and amounted to RUB 17.42 per share (USD 0.3). The Group has accepted for purchase 0.7458% of Irkutskenergo shares for the aggregate amount of RUB 619 million (USD 11 million).

In 2016 the Group increased its shareholding in Irkutskenergo up to 90.8%. As a result of the transactions the Group recognised a total distribution of USD 976 million.

Particularly, in June 2016 the Group acquired 40.3% shares in Irkutskenergo from InterRAO Group for cash consideration of USD 1,047 million (RUB 70 billion) with the following payment terms:

- first instalment on the date of transaction in the amount of USD 676 million (RUB 45 billion)

- following 8 equal quarterly instalments of USD 46.75 million (RUB 3,125 million) per quarter within 2 years.

The fair value of consideration was determined by discounting the long-term part of payable at 11.9% and amounted to USD 1,020 million.

The acquisition is financed by syndicate loan from PJSC VTB BANK (VTB) and PJSC Sberbank (Sberbank) (see note18(a)(iii)).

Krasnoyarsk HPP

In 2016 the Group completed the consolidation of 100% shares in Krasnoyarsk HPP. As a result of the transactions the Group recognised a total distribution of USD 37 million.

Particularly, in June 2016 JSC Eurosibenergo submitted the mandatory offer to non-controlling shareholders of Krasnoyarsk HPP for purchase of non-controlling interest. The offer price was based on weighted six-months trading average price prior to the offer and amounted to RUB 81.1 per share (USD 1.2). The mandatory offer resulted in buy out of 10.0% of shares for USD 50 million.

In October 2016 subsequent to the mandatory offer and following consolidation of more than 95% of shares Krasnoyarsk HPP the Group submitted a buyout notice, under the price of RUB 97 per share (USD 1.5). As at 31 December 2016 due to the buyout notice procedures 1.4% of shares were bought out from non-controlling interest for USD 8 million.

(iii) Other distributions

In June and December 2016 the Group companies entered into loan agreements to settle indebtedness of companies under common control in the amount of USD 312 million. These loans were considered non-recoverable and were recorded as other distribution in these consolidated financial statements.

(b) Currency translation reserve

The currency translation reserve comprises all foreign exchange differences arising from the translation of the consolidated financial statements of foreign operations. The reserve is dealt with in accordance with the accounting policies set out in note 3(b).

(c) Other reserves

Other reserves include the cumulative unrealised actuarial gains and losses on the Group's defined post retirement benefit plans, the effective portion of the accumulative net change in fair value of cash flow hedges, the Group's share of other comprehensive income of associates and cumulative unrealised gains and losses on Group's available-for-sale investments which have been recognised directly in other comprehensive income.

(d) Dividends

In accordance with the Companies (Jersey) Law 1991 (the "Law"), the Parent Company may make distributions at any time in such amounts as are determined by the Parent Company out of the assets of the Parent Company other than the capital redemption reserves and nominal capital accounts, provided that the directors of the Parent Company make a solvency statement in accordance with that Law of Jersey at the time the distributions are proposed.

During 2017, the Parent Company declared interim dividends for 2016 in the amount of USD 24 million and interim dividends for 2017 in the amount of USD 326 million.

During 2017 dividends in the total amount of USD 373 million were distributed in cash including USD 47 million for 2016 (USD 23 million were accrued as a liability as at 31 December 2016) and USD 326 million for 2017.

During 2016, the Parent Company declared interim dividends for 2016 in the amount of USD 280 million.

Dividends in the total amount of USD 318 were distributed in cash including USD 61 million for 2015 and USD 257 million for 2016.

During 2017 and 2016 Group's subsidiaries paid dividends in the amount of USD 155 million and USD 130 million to the non-controlling shareholders of subsidiaries, respectively.

(e) Accrual and reversal of provision for guarantees

During 2016 the Group paid USD 6 million to the bank under guarantee agreement in respect of loan obligations of entity under common control. The remaining amount of issued guarantees as at 31 December 2016 was USD 108 million (note 22(f)). Management of the Group assessed the probability to make a payment under these guarantees and recognised a provision for the whole amount directly in equity. During 2017, the Group paid additional USD 15 million under this agreement and recorded this transaction as other distribution. In September 2017, the guarantee agreement was terminated, which resulted in the recognition of other contribution of USD 114 million.

(f) Revaluation reserve

The revaluation reserve comprises the cumulative net change in the fair value of hydro assets at the reporting date and is dealt with in accordance with the accounting policies set out in note 12(a)(i).

An independent valuation analysis of hydro assets has been carried out as at 1 January 2016 and 31 December 2016, the fair value of hydro assets was estimated at USD 2,230 million and USD 3,919 million, respectively (note 12(g)).

As a result of fair value valuation as at 1 January 2016 the Group recognised a revaluation reserve in the amount of USD 1,626 million net of tax (including USD 1,183 million attributable to shareholders of the Parent Company). During 2016, as a result of changes in effective interest in subsidiaries (note 12(g)), revaluation reserve attributable to the Parent company increased by USD 368 million, net of tax.

As at 31 December 2016 the Group revalued hydro assets (note 12(g)), as a result the additional revaluation reserve in the amount of USD 914 million (including USD 905 million attributable to shareholders of the Parent company), was recognised.

During 2017 as a result of changes in effective interest in Irkutskenergo, revaluation reserve attributable to the Parent Company increased by USD 15 million, net of tax.

As at 31 December 2017 the revaluation reserve amounted to USD 2,540 million, including USD 2,471 million attributable to shareholders of the Parent company (31 December 2016: USD

2,540 million and USD 2,456 million, respectively).

(g) Non-controlling interest

The following table summarises the information relating to each of the Group`s subsidiaries that has material non-controlling interest:

31 December 2017
UC RUSAL Irkutskenergo Group* LLC Baikal Yacht Club
OJSC Irkutsk Electric
Grid Company
Total
NCI percentage 51.9% 7.5% 49.0% 47.7%
Assets 15,290 4,297 1
558
Liabilities (11,330) (2,227) (34)
(143)
Net assets 3,960 2,070 (33)
415
Carrying amount of NCI 2,054 158 (16)
198 **2,394**
Revenue 9,969 2,345 -
362
Profit/(loss) 1,222 364 (4)
23
Other comprehensive income 222 1 - -
Total comprehensive income 1,444 365 (4)
23
Profit/(loss) attributable to NCI 634 34 (2)
10 **676**
Other comprehensive income attributable to NCI 115 7 (1) 10 **131**
807
Cash flows generated from operating activities 1,702 482 -
93
Cash flows generated from/(used in) investing activities 2 (401) (1) (50)
Cash flows (used in)/generated from financing activities (1,421) (100) 2 (43)
Net increase/(decrease) in cash and cash equivalents 283 (19) 1
- -
Dividends paid to NCI 155 - - - 155

*Net assets of Irkutskenergo Group were adjusted for the effect of Irkutskenergo investments in Irkutsk GridCo, Krasnoyarsk HPP and LLC KRAMZ.

31 December 2016
UC RUSAL
Irkutskenergo
Group*
LLC Baikal Yacht
Club
Krasnoyarsk HPP**
OJSC Irkutsk
Electric Grid
Company
Total
NCI percentage 51.9% 9.2% 49.0% 0.0%* 48.1%**
Assets 13,968 3,829 1 1,995 533
Liabilities (11,153) (2,123) (29) (324) (159)

Net assets 2,815 1,706 (28) 1,671 374
Carrying amount of NCI 1,460 158 (14) - 181 **1,785**
Revenue 7,983 2,006 - 72 280
Profit/(loss) 1,179 199 (3) 48 20
Other comprehensive income 979 898 - 907 -
Total comprehensive income 2,158 1,097 (3) 955 20
Profit/(loss) attributable to NCI 612 50 (3) 4 9 **672**
Other comprehensive income attributable to NCI 508 471 (5) 72 35 **1,081**
1,753
Cash flows generated from operating activities 1,244 381 - 12 77
Cash flows generated from/(used in) investing
activities 104 (376) (1) 45 (49)
Cash flows (used in)/generated from financing
activities (1,305) (21) 1 (33) (28)
Net increase/(decrease) in cash and cash
equivalents 43 (16) - - - -
Dividends paid to NCI 130 - - - - 130
* Net assets of Irkutskenergo Group were adjusted for the effect of Irkutskenergo investments in Irkutsk GridCo, Krasnoyarsk HPP and LLC KRAMZ.
** Net assets of Krasnoyarsk HPP segment were adjusted for investment in LLC KRAMZ.
*** Buyout notice resulted in the derecognition of the non-controlling interest of Krasnoyarsk HPP (note 17(a)).

18. Loans and borrowings
This note provides information about the contractual terms of the Group's loans and borrowings. For more information about the Group's exposure to interest rate and foreign currency risk refer to notes 21(c)(ii) and 21(c)(iii), respectively.

	31 December 2017	31 December 2016
	USD million	**USD million**
Non-current liabilities		
Secured bank loans	8,913	9,812
Secured company loans	-	1,000
Unsecured bank loans	650	1,088
Bonds	1,399	195
	10,962	**12,095**

	31 December 2017	31 December 2016
	USD million	**USD million**
Current liabilities		
Current portion of secured bank loans	567	853
Current portion of secured company loans	-	50
Current portion of unsecured bank loans	3	-
	570	**903**
Secured bank loans	577	578
Unsecured bank loans	765	492
Accrued interest	133	136
Bonds	22	1
	1,497	**1,207**
	2,067	**2,110**

(a) Loans and borrowings

	31 December 2017	31 December 2016
	USD million	**USD million**
Non-current liabilities		
Secured bank loans		
Variable		
USD - 3M Libor + 2.5%	1,678	-
USD - 3M Libor + 3.6% - 3.75%	4,464	1,196
USD - 3M Libor + 4.15% - 4.50%	-	312
USD - 3M Libor + 5.65% - 5.75%	-	4,923
USD - 3M Libor + 5.05%	-	95
USD - 1M Libor + 5.50%	44	37
EUR - 3M Euribor + 3.60%	-	55
EUR - 3M Libor + 3.50% - 4.50%	53	43
EUR - 6M Euribor + 0.75% - 1.95%	9	6
RUB - CBR + 1.50% - 2.00%	2,089	2,211
Fixed		
USD - fixed at 6.00%	486	486
RUB - fixed at 10.50% - 11.50%	86	-
EUR - fixed at 3.55%	-	38
RUB - fixed at 5.00% - 15.08%	4	410
	8,913	**9,812**
Secured company loans		
Variable		
RUB - CBR + 2.31%	-	108
Fixed		
USD - fixed at 6.15%	-	892
	-	**1,000**
Unsecured bank loans		
Variable		
RUB - CBR + 2.00%	254	241
USD - 3M Libor + 3.00% - 4.80%	100	300
Fixed		
RUB - fixed at 5.00%	5	5
RUB - ______fixed at 8.35%-12.50%	291	542
	650	**1,088**
Bonds	1,399	195
	10,962	**12,095**
Current liabilities		
Current portion of secured bank loans		
Variable		
USD - 3M Libor + 3.50% - 3.60%	82	395
USD - 3M Libor + 4.50%	-	163
USD - 3M Libor + 5.05% - 5.65%	-	155
EUR - 3M Libor + 3.50%	13	-
EUR - 3M Euribor + 3.60%	-	28
EUR - 3M Euribor + 4.50%	-	28
EUR - 6M Euribor + 0.75%-2.50%	2	1
USD - 1M Libor + 5.50%	9	22

31 December
2017 2016

USD million USD million
RUB - CBR + 1.5% - 2.00% 456 21
Fixed
USD - fixed at 5.00% 5 -
EUR - fixed at 3.55% - 26
RUB - fixed at 10.50% - 14
567 853
Current portion of secured company loans
Fixed
USD - fixed at 6.15% - 50
- 50
Current portion of unsecured bank loans
Fixed
RUB - fixed at 8.75% 3 -
3 -
Secured bank loans
Variable
USD - 1M Libor + 2.00% - 2.50% 145 123
USD - 2.15%+ cost of funds 100 -
USD - 3M Libor + 2.50% - 4.80% 95 64
USD - 2.05% - 2.50%+ cost of funds 34 95
EUR - 2.05% - 2.50%+ cost of funds 38 15
Fixed
USD - fixed at 2.50% - 5.00% 31 273
EUR - fixed at 2.60% 120 -
RUB - fixed at 9.75% - 16.70% 14 8
577 578
Unsecured bank loans
Fixed
RUB - fixed at 8.30%-13.50% 765 492
765 492
Accrued interest 133 136
Bonds 22 1
1,497 1,207
2,067 2,110
The secured bank and company loans (including guarantee agreement) are secured by pledges of shares of the following Group companies and associate:
31 December
2017 2016
% of shares % of shares
United Company RUSAL Plc - 29.99
PJSC Norilsk Nickel 25+1 share 27.8
JSC RUSAL URAL 11 36+1 share
JSC RUSAL Sayanogorsk 25+1 share 50-1 share
JSC RUSAL Bratsk 25+1 share 50-1 share
JSC RUSAL Krasnoyarsk - 50-1 share
JSC RUSAL Novokuznetsk - 40+1 share
JSC RUSAL Taishet 50 -

31 December
2017 2016
% of shares % of shares
Gershvin Investments Corp. Limited 100 100

Seledar Holding Corp Limited - 100
Aktivium B.V. 100 100
JSC Eurosibenergo - 50+2 shares
LLC ESE - Hydrogeneration 100 100
PJCS Krasnoyarsk Hydro-Power Plant 50+1 share 72.52
OJSC Irkutsk Electric Grid Company 33.27 33.27
PJCS Irkutskenergo 90.47 90.47
Skydrop 100 100
Thornstreet 100 100
LLC Sorsk Mining and Metallurgical Complex 100 100
LLC Sorsk Ferromolybdenum Plant 100 100
LLC Zhireken Ferromolybdenum Plant 100 100
OJSC Zhireken Mining and Metallurgical Complex 100 100
Strikeforce Mining and Resources (Geneva) 100 100
Strikeforce Mining and Resources Ltd 100 -
LLC Tyvinskaya Gornorudnaya Company - 100

Pledge of 47.84% shares of JSIC Ingosstrakh under the Group's bank loans was released in March 2017.

The bank loans are also secured as at 31 December 2017 and 31 December 2016 by the following:

- rights, including all monies and claims, arising out of certain sales contracts between the Group's trading subsidiaries and its ultimate customers, were assigned to secure the new syndicated Pre-Export Finance Term Facility Agreement (PXF) dated 24 May 2017 and the Combined PXF Facility dated 18 August 2014, respectively;
- export revenues of ferromolybdenum;
- properties, plant and equipment - refer to note 12(e);
- inventories - refer to note 15.

UC RUSAL

On 17 March 2017 UC RUSAL executed amendments to the existing credit facilities with Sberbank. Under USD credit agreements the interest rate decreased from 3M Libor + 5.75% p.a. (incl. 1.05% PIK) to 3M Libor + 4.75% p.a. (subject to min 3M Libor at the level of 1%), effective from 29 December 2016. Under RUB credit facility outstanding exposure was converted into USD (at the rate of Central Bank of Russia as of the date of conversion). The interest rate of 3M Libor + 4.75% p.a. (subject to min 3M Libor at the level of 1%), is effective from 18 March 2017. On 31 August 2017 UC RUSAL has agreed with Sberbank to extend final maturity under loans secured by Norilsk Nickel shares to 2024, decrease interest margin from 4.75% to 3.75% and adjust covenants mostly in line with PXF.

On 28 March 2017 UC RUSAL through its subsidiaries entered into the REPO transaction backed by bonds issued by RUSAL Bratsk - in number of 7,527,646 series 08 bonds. As a result of the transactions UC RUSAL raised funding in the amount of EUR100 million (USD 107 million) with fifteen months maturity at an effective rate of 2.6% p.a.

On 24 May 2017 UC RUSAL entered into a new syndicated Pre-Export Finance Term Facility Agreement (PXF) in the amount of USD1.7 billion, interest rate 3M LIBOR+3% per annum, maturity 5 years (repayment starting in 2 years). The proceeds of the facility were used for the purpose of refinancing the Group's current debt. In December 2017, the margin was reduced to 2.5 per cent per annum.

On 22 August 2017 UC RUSALexecuted amendments to Gazprombank facilities, reducing interest margin from 4.5% to 3.5%, extending final maturity and adjusting covenants in line with PXF. As at the date of these financial statements Gazprombank facilities were repaid in full out of proceeds of the third Eurobond placement in February 2018.

During 2017 UC RUSAL made principal repayments in the total amounts of USD 3,211 million and EUR 79 million (USD 104 million) under the Combined PXF Facility, credit facilities with Sberbank, Gazprombank, VTB Capital, Sovcombank and Credit Bank of Moscow.

The nominal value of the UC RUSAL's loans and borrowings was USD 7,072 million at 31 December 2017 (31 December 2016: USD 8,852 million).

ENERGY

(i) Parent Company

In August 2015 the Parent Company entered into the USD 1,043 million loan agreement ("Loan") with GrandStroy LLC (Lender) bearing fixed interest of 9.33% which replaced a former loan. Simultaneously, the Parent Company provided corporate guarantee ("Guarantee") in favour of PJSC VTB BANK (VTB) securing the obligations of the Lender under USD 1,043 million facility agreement ("VTB Facility"). The Loan and the VTB Facility were to be repaid in December 2019. The maturity date can be extended to December 2021 by mutual agreement of the parties.

During 2015 and 2016 the Parent Company entered into several amendments implementing new interest rate of 7.66% p.a. from March 2016, 6.65% p.a. from September 2016 and 6.15% p.a. from December 2016.

During 2016 the Parent Company entered into the amendment to the Loan converting part of the USD-denominated loan to RUB.

As at 31 December 2016 USD-denominated part of Loan was USD 942 million bearing 6.15% interest rate and RUB-denominated part of Loan was USD 108 million (RUB 6,540 million) bearing Bank of Russia Key Rate ("CBR") plus 2.31% p.a.

As at 31 December 2016 the outstanding amount under the Guarantee was USD 942 million bearing interest 6% p.a.

In January 2017, the Group acquired 100% of the shares in GrandStroy LLC, the Lender of the Parent Company under the loan agreement, for a cash consideration of USD 3 million.

In November 2017 the outstanding amount under the VTB facility of USD 942 million was fully repaid from the Offering proceeds (note 17(a)).

(ii) Sberbank facilities of Eurosibenergo

As at 31 December 2017 and 31 December 2016 Eurosibenergo had RUB-denominated loan in the amount of USD 1,126 million (RUB 64,878 million) and USD 1,077 million (RUB 65,303 million) bearing 10.5% and 12.5% effective interest, respectively, and USD-denominated loan in the amount of USD 486 million and USD 488 million bearing 7.4% and 7.4% effective interest, respectively.

The terms of the above loans require Eurosibenergo to maintain a certain Net Debt/EBITDA ratio, calculated quarterly based on the Russian statutory accounting records of the certain Group's subsidiaries.

(iii) Syndicate facilities

In June 2016 Telmamskaya HPP LLC entered into the syndicate loan agreement with Sberbank and VTB to finance the acquisition of non-controlling interest in Irkutskenergo (note 17(a)). Total amount of opened credit line is USD 1,257 million (RUB 84,000 million). The loan is payable until June 2023 and bears CBR+2%. As at 31 December 2016 the outstanding amount of this loan was USD 1,065 million (RUB 64,618 million).

In November 2016 this credit line was extended by USD 171 million (RUB 10,950 million at exchange rate on drawdown date) to finance an acquisition of dams from a third party (note 12). The extended credit line is payable by two tranches until November 2021, bearing CBR+2% and 10.5%, respectively.

In 2017 four tranches of USD 54 million (RUB 3,125 million) each were received according to the payment schedule for acquisition of non-controlling interest in Irkutskenergo (note 17(a)).

As at 31 December 2017 the outstanding amount of this loan was USD 1,500 million (RUB 86,395 million) bearing 10.3% effective interest.

The nominal value of ENERGY loans and borrowings was USD 4,500 million at 31 December 2017 (31 December 2016: USD 5,204 million).

(b) Bonds

As at 31 December 2017 1,289,314 series 07 bonds, 51,509 series 08 bonds and 4,221,951 series BO-01 bonds were outstanding (traded in the market).

The closing market price at 31 December 2017 was RUB 1,008, RUB 1,016, RUB 1,062 per bond

for the first, second and the third tranches, respectively.
In February 2017 UC RUSAL completed the debut offering of Eurobonds with the following key terms: principal amount of USD 600 million, tenor of 5 years, coupon rate of 5.125% per annum. The bonds proceeds, excluding related expenses, in the amount of USD 597 million were applied for partial prepayment of RUSAL's existing pre-export finance facility. The closing market price at 31 December 2017 was USD 1,024 per bond.
In February 2017 UC RUSAL registered Panda Bond Offering Circular for the total amount of RMB 10 billion (c.USD1.5 billion) with the Shanghai Stock Exchange with the right to make placement in tranches with different maturities but not higher than 7 years. In March 2017 the first tranche of RMB 1 billion was placed for 3 years and 5.5% per annum. In September 2017 the second tranche of RMB 500 million was placed for 3 years and 5.5% per annum. The tranches are subject to put option after 2 years. The funds were used for working capital needs and refinancing of existing debt.
On 3 April 2017 RUSAL Bratsk announced a coupon rate in respect to the series 08 bonds at the level of 9% per annum for the 13-16 semi-annual coupon periods after which the series 08 bonds will be subject to a put option and coupon rate revision. On 12 April 2017 UC RUSAL exercised an option to repurchase the outstanding RUB-denominated bonds series 08.
In May 2017 the Group completed the offering of Eurobonds with the following key terms: principal amount of USD 500 million, tenor of 6 years, coupon rate of 5.3% per annum. The bonds proceeds were applied for partial prepayment of RUSAL's debt. The closing market price at 31 December 2017 was USD 1,030 per bond.

19. Provisions

(a) Accounting policy

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as finance costs.

(i) Site restoration

The mining, refining and smelting activities of the Group can give rise to obligations for site restoration and rehabilitation. Restoration and rehabilitation works can include facility decommissioning and dismantling, removal or treatment of waste materials, land rehabilitation, and site restoration. The extent of work required and the associated costs are dependent on the requirements of law and the interpretations of the relevant authorities.
Provisions for the cost of each restoration and rehabilitation program are recognised at the time that environmental disturbance occurs. When the extent of disturbance increases over the life of an operation, the provision is increased accordingly. Costs included in the provision encompass obligated and reasonably estimable restoration and rehabilitation activities expected to occur progressively over the life of the operation and at the time of closure in connection with disturbances at the reporting date. Routine operating costs that may impact the ultimate restoration and rehabilitation activities, such as waste material handling conducted as an integral part of a mining or production process, are not included in the provision. Costs arising from unforeseen circumstances, such as the contamination caused by unplanned discharges, are recognised as an expense and liability when the event gives rise to an obligation which is probable and capable of reliable estimation.
Restoration and rehabilitation provisions are measured at the expected value of future cash flows, discounted to their present value and determined according to the probability of alternative estimates of cash flows occurring for each operation. Discount rates used are specific to the country in which the operation is located. Significant judgements and estimates are involved in forming expectations of future activities and the amount and timing of the associated cash flows. Those expectations are formed based on existing environmental and regulatory requirements.
When provisions for restoration and rehabilitation are initially recognised, the corresponding cost is capitalised as an asset, representing part of the cost of acquiring the future economic benefits of the

operation. The capitalised cost of restoration and rehabilitation activities is amortised over the estimated economic life of the operation on a units of production or straight-line basis. The value of the provision is progressively increased over time as the effect of discounting unwinds, creating an expense recognised as part of finance expenses.

Restoration and rehabilitation provisions are also adjusted for changes in estimates. Those adjustments are accounted for as a change in the corresponding capitalised cost, except where a reduction in the provision is greater than the unamortised capitalised cost, in which case the capitalised cost is reduced to nil and the remaining adjustment is recognised in profit or loss. Changes to the capitalised cost result in an adjustment to future amortisation charges. Adjustments to the estimated amount and timing of future restoration and rehabilitation cash flows are a normal occurrence in light of the significant judgements and estimates involved. Factors influencing those changes include revisions to estimated reserves, resources and lives of operations; developments in technology; regulatory requirements and environmental management strategies; changes in the estimated costs of anticipated activities, including the effects of inflation and movements in foreign exchange rates; and movements in general interest rates affecting the discount rate applied.

(ii) Restructuring

A provision for restructuring is recognised when the Group has approved a detailed and formal restructuring plan, and the restructuring either has commenced or has been announced publicly. Future operating costs are not provided for.

(iii) Legal claim

In the normal course of business the Group may be involved in legal proceedings. Where management considers that it is more likely than not that proceedings will result in the Group compensating third parties a provision is recognised for the best estimate of the amount expected to be paid. Where management considers that it is more likely than not that proceedings will not result in the Group compensating third parties or where, in rare circumstances, it is not considered possible to provide a sufficiently reliable estimate of the amount expected to be paid, no provision is made for any potential liability under the litigation but the circumstances and uncertainties involved are disclosed as contingent liabilities. The assessment of the likely outcome of legal proceedings and the amount of any potential liability involves significant judgement. As law and regulations in many of the countries in which the Group operates are continuing to evolve, particularly in the areas of taxation, sub-soil rights and protection of the environment, uncertainties regarding litigation and regulation are greater than those typically found in countries with more developed legal and regulatory frameworks.

(iv) Guarantee

Where the Group enters into financial guarantee contracts to guarantee the indebtedness of other companies, controlled by the beneficial shareholder of the Group, the Group considers these to be insurance arrangements and accounts for them as such. In this respect, the Group treats the guarantee contract as a contingent liability until such time as it becomes probable that the Group will be required to make a payment under the guarantee.

(b) Disclosure

USD million
Pension
liabilities
Site
restoration
Provisions
for legal
claims
Tax
provisions
Provision
for

guarantee Total
Balance at 1 January 2016 84 419 13 42 189 747
Non-current 77 400 - 35 138 650
Current 7 19 13 7 51 97
Provisions made during the
year 11 30 5 - - 46
Provisions reversed during the
year - - (1) - (100) (101)
Actuarial gains and losses 2 - - - - 2
Provisions used during the
year (7) (2) (12) (17) - (38)
Disposal of subsidiary - (22) - - - (22)
Change in estimates - (1) - - - (1)
Translation difference 10 19 1 - 19 49
Balance at 31 December
2016 100 443 6 25 108 682
Non-current 92 422 - 6 98 618

USD million
Pension
liabilities
Site
restoration
Provisions
for legal
claims
Tax
provisions
Provision
for
guarantee Total
Current 8 21 6 19 10 64
Provisions made during the
year 12 10 5 - - 27
Provisions reversed during the
year - (42) (1) (10) (114) (167)
Actuarial gains and losses 8 - - - - 8
Provisions used during the
year (8) - (3) (13) - (24)
Change in estimates - 7 - - - 7
Translation difference 4 41 - (2) 6 49
Balance at 31 December
2017 116 459 7 - - 582
Non-current 107 435 - - - 542
Current 9 24 7 - - 40
116 459 7 - - 582
(c) Pension liabilities
As at 31 December 2017 the pension liability is represented by UC RUSAL USD 69 million (31 December 2016: USD 57 million) and ENERGY USD 47 million (31 December 2016: USD 43 million).
The provision for pensions mainly comprises lump sum payments at retirement by aluminium plants located in Russia and Ukraine, and by electricity generating company Irkutskenergo and Krasnoyarsk HPP. The Group also provides pension benefits to eligible participants at facilities located outside of

the Russian Federation and Ukraine.

UC RUSAL

Group subsidiaries in the Russian Federation

The Group voluntarily provides long-term and post-employment benefits to its former and existing employees including death-in-service, jubilee, lump sum upon retirement, material support for pensioners and death-in-pension benefits. Furthermore, the Group provides regular social support payments to some of its veterans of World War II.

The above employee benefit programs are of a defined benefit nature. The Group finances these programs on a pay-as-you-go basis, so plan assets are equal to zero.

Group subsidiaries in Ukraine

Due to legal requirements, the Ukrainian subsidiaries are responsible for partial financing of the state hardship pensions for those of its employees who worked, or still work, under severe and hazardous labour conditions (hardship early retirement pensions). These pensions are paid until the recipient reaches the age of entitlement to the State old age pension (55-60 years for female (dependent on year of birth) and 60 years for male employees). In Ukraine, the Group also voluntarily provides long-term and post-employment benefits to its employees including death-in-service, lump sum benefits upon retirement and death-in-pension benefits.

The above employee benefit programs are of a defined benefit nature. The Group finances these programs on a pay-as-you-go basis, so plan assets are equal to zero.

Group subsidiaries outside the Russian Federation and Ukraine

At its Guinean and Nigerian entities the Group provides a death-in-service benefit and lump-sum benefits upon disability and old-age retirement.

At its Guyana subsidiary, the Group provides a death-in-service benefit.

At its Italian subsidiary (Eurallumina) the Group only provides lump sum benefits upon retirement, which relate to service up to 1 January 2007.

In Sweden (Kubikenborg Aluminium AB), the Group provides defined benefit lifelong and temporary pension benefits. The lifelong benefits are dependent on the past service and average salary level of the employee, with an accrual rate that depends on the salary bracket the employee is in. The liability relates only to benefits accrued before 1 January 2004.

The number of employees in all jurisdictions eligible for the plans as at 31 December 2017 and 2016 was 57,423 and 56,611, respectively. The number of pensioners in all jurisdictions as at 31 December 2017 and 2016 was 45,044 and 45,915, respectively.

The Group expects to pay under the defined benefit retirement plans an amount of USD 5 million during the 12 month period beginning on 1 January 2018.

Actuarial valuation of pension liabilities

The actuarial valuation of the Group and the portion of the Group funds specifically designated for the Group's employees were completed by a qualified actuary, Robert van Leeuwen AAG, as at 31 December 2017, using the projected unit credit method as stipulated by IAS 19.

The key actuarial assumptions (weighted average, weighted by DBO) are as follows:

	31 December 2017	**31 December 2016**
	% per annum	% per annum
Discount rate	7.2	8.0
Expected return on plan assets	N/A	N/A
Future salary increases	8.3	7.7
Future pension increases	4.6	4.3
Staff turnover	4.0	4.0
Mortality	USSR population table for 1985, Ukrainian	

population table
for 2000
USSR population table
for 1985, Ukrainian
population table
for 2000
Disability
70% Munich Re for
Russia; 40% of death
probability for Ukraine
70% Munich Re for
Russia; 40% of death
probability for Ukraine

As at 31 December 2017 and 31 December 2016 the Group's obligations were fully uncovered as the Group has only wholly unfunded plans.

The principal assumptions used in determining pension obligations for the pension plans are shown below:

	31 December 2017 USD million	**31 December 2016 USD million**
Discount rate	7.5%	8.3%
Future salary increase	5.5%	6.5%
Pension and inflation rate increase	4%	5%

(d) Site restoration and environmental provisions

The Group provides for site restoration obligations when there is a specific legal or constructive obligation for mine reclamation, landfill closure (primarily comprising red mud basin disposal sites) or specific lease restoration requirements. The Group does not record any obligations with respect to decommissioning of its refining or smelting facilities and restoration and rehabilitation of the surrounding areas unless there is a specific plan to discontinue operations at a facility. This is because any significant costs in connection with decommissioning of refining or smelting facilities and restoration and rehabilitation of the surrounding areas would be incurred no earlier than when the facility is closed and the facilities are currently expected to operate over a term in excess of 50-100 years due to the perpetual nature of the refineries and smelters and continuous maintenance and upgrade programs resulting in the fair values of any such liabilities being negligible.

The site restoration provision recorded in these consolidated financial statements relates primarily to mine reclamation and red mud basin disposal sites at alumina refineries and ash dumps removal at coal burning electricity and heat generation stations.

The principal assumptions used in determining site restoration provision are:

	31 December 2017	**31 December 2016**
Timing of cash outflows	2018: USD 25 million 2019-2023: USD 239 million 2024-2034: USD 129 million after 2034: USD 262 million	2017: USD 20 million 2018-2022: USD 263 million 2023-2033: USD 113 million after 2033: USD 158

million
Years required to fill the ash dumps 17.8 17.4
Discount rate for Irkutskenergo 3.9% 4.9%
Discount rate for Coal segment assets 3.9%
4.9%
Risk free discount rate for UC RUSAL after adjusting
for inflation
2.29%
2.01%

The risk free rate for the year 2017-2016 represents an effective rate, which comprises rates differentiated by years of obligation settlement and by currencies in which the provisions were calculated.

At each reporting date the Directors have assessed the provisions for site restoration and concluded that the provisions and disclosures are adequate.

(e) Provisions for legal claims

The Group's subsidiaries are subject to a variety of lawsuits and claims in the ordinary course of its business. As at 31 December 2017, there were several claims filed against the Group's subsidiaries contesting breaches of contract terms and non-payment of existing obligations. Management has reviewed the circumstances and estimated that the amount of probable outflow related to these claims should not exceed USD 7 million (31 December 2016: USD 6 million). The amount of claims, where management assesses outflow as possible approximates USD 36 million (31 December 2016: USD 60 million).

At each reporting date the Directors have assessed the provisions for litigation and claims and concluded that the provisions and disclosures are adequate.

(f) Tax provisions

At each reporting date the Directors have assessed the provisions for taxation and concluded that the provisions and disclosures are adequate.

(g) Provision for guarantees

In September 2013 the Group entered into an agreement with OJSC RusHydro to provide funds to BoAZ, if the latter is unable to fulfil its obligations under its credit facility with GK Vnesheconombank ("VEB"). This agreement represents a surety for the increased credit limit obtained for the financing of BoAZ. The aggregate exposure under the agreement is limited to RUB 16.8 billion (31 December 2017 and 2016 USD 292 and USD 277 million, respectively) and is split between the Group and OJSC RusHydro in equal proportion.

During 2016 USD 100 million of provision previously recognised was reversed due to fact that maturity of the initial loan agreement between BoAZ and VEB was extended from 2027 to 2030 accordingly shifting the date principal repayments commence and the fact that BoGES will continue to support BoAZ in settling its liabilities under the credit facility including principal and interest repayments.

In 2015 the Group recognised a provision in the amount of RUB 6.5 billion (31 December 2016 USD 108 million) for a guarantee issued in favour of the bank in respect of certain loan obligations of several borrowers directly in equity. In September 2017, the guarantee agreement was terminated, which resulted in the recognition of other contribution of USD 114 million (notes 22(f), 17(e)).

20. Derivative financial assets and liabilities

Accounting policies

The Group enters, from time to time, into various derivative financial instruments to manage its exposure to commodity price risk, foreign currency risk and interest rate risk.

Embedded derivatives are separated from the host contract and accounted for separately if the economic characteristics and risks of the host contract and the embedded derivative are not closely related, a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative and the combined instrument is not measured at fair value through profit or loss.

On initial designation of the derivative as a hedging instrument, the Group formally documents the relationship between the hedging instrument and hedged item, including the risk management objectives and strategy in undertaking the hedge transaction and the hedged risk, together with the methods that will be used to assess the effectiveness of the hedging relationship. The Group makes an assessment, both at the inception of the hedge relationship as well as on an ongoing basis, of

whether the hedging instruments are expected to be highly effective in offsetting the changes in the fair value or cash flows of the respective hedged items attributable to the hedged risk, and whether the actual results of each hedge are within a range of 80% - 125%. For a cash flow hedge of a forecast transaction, the transaction should be highly probable to occur and should present an exposure to variation in cash flows that ultimately could affect reported profit or loss.

Derivatives are recognised initially at fair value; attributable transaction costs are recognised in profit or loss when incurred. Subsequent to initial recognition, derivatives are measured at fair value.

The measurement of fair value of derivative financial instruments, including embedded derivatives, is based on quoted market prices. Where no price information is available from a quoted market source, alternative market mechanisms or recent comparable transactions, fair value is estimated based on the Group's views on relevant future prices, net of valuation allowances to accommodate liquidity, modelling and other risks implicit in such estimates. Changes in the fair value therein are accounted for as described below.

When a derivative is designated as the hedging instrument in a hedge of the variability in cash flows attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction that could affect profit or loss, the effective portion of changes in the fair value of the derivative is recognised in other comprehensive income and presented in the hedging reserve in equity. Any ineffective portion of changes in the fair value of a derivative is recognised in profit or loss.

When the hedged item is a non-financial asset, the amount accumulated in equity is included in the carrying amount of the asset when the asset is recognised. In other cases, the amount accumulated in equity is reclassified to profit or loss in the same period that the hedged item affects profit or loss. If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated or exercised, or the designation is revoked, then hedge accounting is discontinued prospectively. If the forecast transaction is no longer expected to occur, then the balance in equity is reclassified to profit or loss.

Changes in the fair value of separated embedded derivatives and derivative financial instruments not designated for hedge accounting are recognised immediately in profit or loss.

Disclosures

	31 December 2017		**31 December 2016**	
	USD million		**USD million**	
	Derivative assets	**Derivative liabilities**	**Derivative assets**	**Derivative liabilities**
Petroleum coke supply contracts and other raw materials	36	82	62	5
Forward contracts for aluminium and other instruments	27	31	5	30
Total	**63**	**113**	**67**	**35**

Derivative financial instruments are recorded at their fair value at each reporting date. Fair value is estimated in accordance with Level 3 of the fair value hierarchy based on management estimates and consensus economic forecasts of relevant future prices, net of valuation allowances to accommodate liquidity, modelling and other risks implicit in such estimates. The Group's policy is to recognise transfers between levels of fair value hierarchy as at the date of the event or change in circumstances that caused the transfer. The following significant assumptions were used in estimating derivative instruments:

	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
LME Al Cash, USD per tonne	2,284	2,328	2,359	2,385	2,413	2,450	2,497	2,545
Platt's FOB Brent, USD per barrel	66	62	59	58	58	-	-	-

The movement in the balance of Level 3 fair value measurements of derivatives is as follows:

	31 December 2017	**2016**
	USD million	**USD million**
Balance at the beginning of the year	32	(300)
Unrealised changes in fair value recognised in other comprehensive income (cash flow hedge) during the year	-	36
Unrealised changes in fair value recognised in profit or loss (finance expense) during the period	(287)	(157)
Realised portion during the year	205	453
Balance at the end of the year	**(50)**	**32**

During the year 2017 there have been no changes in valuation techniques used to calculate the derivative financial instruments compared to prior year.

Management believes that the values assigned to the key assumptions and estimates represented the most realistic assessment of future trends. The results for the derivative instruments are not particularly sensitive to any factors other than the assumptions disclosed above.

Petroleum coke supply contracts and other raw materials

In May and September 2011, the Group entered into long-term petroleum coke supply contracts where the price of coke is determined with reference to the LME aluminium price and the Brent oil price. The strike price for aluminium is set at USD 2,403.45 per tonne and USD 1,735.03 per tonne, respectively, while the strike price for oil is set at USD 61.10 per barrel and USD 47.7 per barrel, respectively.

In May 2014, the Group entered into long-term petroleum coke supply contract where the price of coke is determined with reference to the LME aluminium price and average monthly aluminium quotations, namely of Aluminum MW US Transaction premium, MB Aluminium Premium Rotterdam Low - High» and Aluminum CIF Japan premium. The strike price for aluminium is set at USD 1,809.65 per tonne while the strike aluminium premium quotations for US, Europe and Japan are set at USD 403.96 per tonne, USD 313.30 per tonne and USD 366.00 per tonne, respectively.

In November 2015, the Group entered into long-term pitch supply contract where the price of pitch is determined with reference to the LME aluminium price. The strike price for aluminium is set at USD 1,508 per tonne.

21. Financial risk management and fair values

(a) Fair values

Management believes that the fair values of financial assets and liabilities approximate their carrying amounts.

The methods used to estimate the fair values of the financial instruments are as follows:

Trade and other receivables, cash and cash equivalents, current loans and borrowings and trade and other payables: the carrying amounts approximate fair value because of the short maturity period of the instruments.

Long-term loans and borrowings, other non-current liabilities: the fair values of other non-current liabilities are based on the present value of the anticipated cash flows and approximate carrying value, other than Eurobonds and RUSAL Bratsk bonds issued.

Derivatives: the fair value of derivative financial instruments, including embedded derivatives, is based on quoted market prices. Where no price information is available from a quoted market source, alternative market mechanisms or recent comparable transactions, fair value is estimated based on the Group's views on relevant future prices, net of valuation allowances to accommodate liquidity, modelling and other risks implicit in such estimates. Option-based derivatives are valued using Black-Scholes models and Monte-Carlo simulations. The derivative financial instruments are recorded at their fair value at each reporting date.

The following table presents the fair value of Group's financial instruments measured at the end of the reporting period on a recurring basis, categorised into the three-level fair value hierarchy as defined by IFRS 13, *Fair value measurement*. The level into which a fair value measurement is classified is determined with reference to the observability and significance of the inputs used in the valuation technique as follows:

- Level 1 valuations: Fair value measured using only Level 1 inputs i.e. unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date.
- Level 2 valuations: Fair value measured using Level 2 inputs i.e. observable inputs which fail to meet Level 1, and not using significant unobservable inputs. Unobservable inputs are inputs for which market data are not available.
- Level 3 valuations: Fair value measured using significant unobservable inputs.

As at 31 December 2017

		Carrying amount					**Fair value**			
	Note	**Designated at fair value**	**Fair value - hedging instrument**	**Loans and receivables**	**Other financial liabilities**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**
		USD million	**USD million**	**USD million**	**USD million**	**USD million**	**USD million**	**USD million**	**USD million**	**USD million**
Financial assets measured at fair value										
Petroleum coke supply contracts and other raw materials	20	36	-	-	-	36	-	-	36	36
Forward contracts for aluminium and other instruments	20	27	-	-	-	27	-	-	27	27
		63	**-**	**-**	**-**	**63**	**-**	**-**	**63**	**63**
Financial assets not measured at fair value*										
Trade and other receivables	16(a)	-	-	1,134	-	1,134	-	1,134	-	1,134
Cash and cash equivalents	16(c)	-	-	974	-	974	-	974	-	974
		-	**-**	**2,108**	**-**	**2,108**	**-**	**2,108**	**-**	**2,108**
Financial liabilities measured at fair value										
Petroleum coke supply contracts and other raw materials	20	(82)	-	-	-	(82)	-	-	(82)	(82)

Forward contracts for
aluminium and other
instruments 20 (31) - - - (31) - - (31) (31)
(113) - - - (113) - - (113) (113)
Financial liabilities not
measured at fair value*
Loans and borrowings 18(a) - - - (11,608) (11,608) - (11,736) - (11,736)
Unsecured bond issue 18(b) - - - (1,421) (1,421) (1,231) (233) - (1,464)
Trade and other payables 16(b) - - - (1,395) (1,395) - (1,395) - (1,395)
- - - (14,424) (14,424) (1,231) (13,364) - (14,595)
***** The Group has not disclosed the fair values for financial instruments such as short-term trade receivables and payables, because their carrying amounts are a reasonable approximation of fair values.

As at 31 December 2016

Carrying amount Fair value
Note
Designated at
fair value
Fair value -
hedging
instrument
Loans and
receivables
Other financial
liabilities Total Level 1 Level 2 Level 3 Total
USD
million
USD
million
USD
million
USD
million
USD
million USD million USD million
USD
million
USD
million
Financial assets measured
at fair value
Petroleum coke supply
contracts and other raw
materials 20 62 - - - 62 - - 62 62
Forward contracts for
aluminium and other
instruments 20 5 - - - 5 - - 5 5
67 - - - 67 - - 67 67
Financial assets not
measured at fair value*
Trade and other receivables 16(a) - - 1,254 - 1,254 - 1,254 - 1,254
Cash and cash equivalents 16(c) - - 669 - 669 - 669 - 669
- - 1,923 - 1,923 - 1,923 - 1,923
Financial liabilities
measured at fair value
Petroleum coke supply
contracts and other raw
materials 20 (5) - - - (5) - - (5) (5)
Forward contracts for
aluminium and other
instruments 20 (30) - - - (30) - - (30) (30)
(35) - - - (35) - - (35) (35)
Financial liabilities not
measured at fair value*
Loans and borrowings 18(a) - - - (14,009) (14,009) - (14,311) - (14,311)
Unsecured bond issue 18(b) - - - (196) (196) (208) - - (208)
Trade and other payables 16(b) - - - (1,307) (1,307) - (1,307) - (1,307)
- - - (15,512) (15,512) (208) (15,618) - (15,826)

***** The Group has not disclosed the fair values for financial instruments such as short-term trade receivables and payables, because their carrying amounts are a reasonable approximation of fair values.

(b) Financial risk management objectives and policies

The Group's principal financial instruments comprise bank loans and trade payables. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various financial assets such as trade receivables and cash and short-term deposits, which arise directly from its operations.

The main risks arising from the Group's financial instruments are cash flow interest rate risk, liquidity risk, foreign currency risk and credit risk. Management reviews and agrees policies for managing each of these risks which are summarised below.

The Board of Directors has overall responsibility for the establishment and oversight of the Group's risk management framework.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

(c) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising returns.

(i) Tariffs and commodity price risk

During the years ended 31 December 2017 and 31 December 2016, the Group has entered into certain commodity derivatives contracts in order to manage its exposure of commodity price risks.

The tariffs for electricity, heat and transmission services applied by the Group's significant subsidiaries are currently partially restraint by the government bodies. The Group cannot directly influence or mitigate the risks in relation to the change in tariffs.

A significant portion of the Group's generation activities is based on coal burning stations. A change in coal prices may have a significant impact on the Group's operations. To mitigate the risk of fluctuations in coal prices, the Group has increased its internal coal production through acquisition of coal mines and licences in the Eastern Siberia region. The Group aims at self-sufficiency in coal in the next several years.

(ii) Interest rate risk

The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term debt obligations with floating interest rates (note 18). The Group's policy is to manage its interest costs by monitoring changes in interest rates with respect to its borrowings.

The following table details the interest rate profile of the Group's and the Company's borrowings at the reporting date.

	31 December 2017		31 December 2016	
	Effective interest rate %	**USD million**	**Effective interest rate %**	**USD million**
Fixed rate loans and borrowings				

Loans and borrowings 2.6%-12.85% 1,810 2.5%-15.1% 3,236
1,810 3,236
Variable rate loans and borrowings
Loans and borrowings 1.55%-9.75% 9,665 0.53% - 12.31% 10,639
9,665 10,639
11,475 13,873

The following table demonstrates the sensitivity to cash flows from interest rate risk arising from floating rate non-derivative instruments held by the Group at the reporting date in respect of a reasonably possible change in interest rates, with all other variables held constant. The impact on the Group's profit before taxation and equity and retained profits/accumulated losses is estimated as an annualised input on interest expense or income of such a change in interest rates. The analysis has been performed on the same basis for all years presented.

Increase/ decrease
in basis points
Effect on profit before
taxation for the year
Effect on equity for
the year
USD million USD million
As at 31 December 2017
Basis percentage points +100 (97) (77)
Basis percentage points -100 97 77
As at 31 December 2016
Basis percentage points +100 (106) (85)
Basis percentage points -100 106 85

(iii) Foreign currency risk

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of group entities, primarily USD but also the Russian Rouble, Ukrainian Hryvna and Euros. The currencies in which these transactions primarily are denominated are RUB, USD and EUR.

Borrowings are primarily denominated in currencies that match the cash flows generated by the underlying operations of the Group, primarily USD but also RUB and EUR. This provides an economic hedge.

In respect of other monetary assets and liabilities denominated in foreign currencies, the Group ensures that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances or entering into currency swap arrangements.

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 is set out in the table below. Differences resulting from the translation of the financial statements of foreign operations into the Group's presentation currency are ignored.

USD million
USD-denominated
vs. RUB
functional
currency
RUB-denominated
vs. USD
functional
currency
EUR-denominated vs. USD
functional
currency
Denominated in other currencies
vs. USD

functional currency

	31 December 2017	31 December 2016	31 December 2017	31 December 2016	31 December 2017	31 December 2016	31 December 2017	31 December 2016
Non-current assets	-	-	3	3	1	3	-	1
Derivative financial assets	-	-	36	59	-	-	-	-
Trade and other receivables	1	-	429	324	91	44	26	18
Cash and cash equivalents	1	1	68	49	106	86	19	18
Loans and borrowings	(539)	(682)	(57)	(329)	(251)	(232)	-	-
Provisions	-	-	(100)	(71)	(41)	(33)	(11)	(15)
Derivative financial liabilities	-	-	(33)	(5)	-	-	-	-
Income taxation	-	-	(2)	(60)	-	-	(7)	-
Non-current liabilities	-	-	(9)	(9)	(8)	(8)	-	-
Trade and other payables	(3)	(2)	(403)	(440)	(63)	(41)	(50)	(57)
Net exposure arising from recognised assets and liabilities	**(540)**	**(683)**	**(68)**	**(479)**	**(165)**	**(181)**	**(23)**	**(35)**

Foreign currency sensitivity analysis

The following tables indicate the instantaneous change in the Group's profit before taxation (and accumulated losses) and other comprehensive income that could arise if foreign exchange rates to which the Group has significant exposure at the reporting date had changed at that date, assuming all other risk variables remained constant.

Year ended 31 December 2017

	Change in exchange rates	Effect on profit before taxation for the year USD million	Effect on equity for the year USD million
Depreciation of USD vs. RUB	5%	24	19
Depreciation of USD vs. EUR	5%	(8)	(8)
Depreciation of USD vs. other currencies	5%	(1)	(1)

Year ended 31 December 2016

	Change in exchange rates	Effect on profit before taxation for the year USD million	Effect on equity for the year USD million
Depreciation of USD vs. RUB	5%	10	5
Depreciation of USD vs. EUR	5%	(9)	(9)
Depreciation of USD vs. other currencies	5%	(2)	(2)

Results of the analysis as presented in the above tables represent an aggregation of the instantaneous effects on the Group entities' profit before taxation and other comprehensive income measured in the respective functional currencies, translated into USD at the exchange rates ruling at the reporting date for presentation purposes.

The sensitivity analysis assumes that the change in foreign exchange rates had been applied to remeasure those financial instruments held by the Group which expose the Group to foreign currency risk at the reporting date. The analysis excludes differences that would result from the translation of other financial statements of foreign operations into the Group's presentation currency. The analysis has been performed on the same basis for all years presented.

(d) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The group policy is to maintain sufficient cash and cash equivalents or have available funding through an adequate amount of committed credit facilities to meet its operating and financial commitments.

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, except loans presented as payable on demand due to breach of covenant:

31 December 2017

	Contractual undiscounted cash outflow					
	Within 1 year or on demand	**More than 1 year but less than 2 years**	**More than 2 years but less than 5 years**	**More than 5 years**	**TOTAL**	**Carrying amount**
	USD million	**USD million**	**USD million**	**USD million**	**USD million**	**USD million**
Trade and other payables to third parties	1,325	-	-	-	1,325	1,325
Trade and other payables to related parties	52	-	-	-	52	52
Bonds, including interest payable	101	379	757	513	1,750	1,421
Loans and borrowings, including interest payable	2,679	2,361	5,833	3,442	14,315	11,608
	4,157	**2,740**	**6,590**	**3,955**	**17,442**	**14,406**
Financial guarantees issued:						
Maximum amount guaranteed	75	71	-	-	146	-

31 December 2016

	Contractual undiscounted cash outflow					
	Within 1 year or on demand	**More than 1 year but less than 2 years**	**More than 2 years but less than 5 years**	**More than 5 years**	**TOTAL**	**Carrying amount**
	USD million	**USD million**	**USD million**	**USD million**	**USD million**	**USD million**

Trade and other payables to
third parties 1,226 - - - 1,226 1,226
Trade and other payables to
related parties 55 - - - 55 55
Bonds, including interest
payable 26 225 - - 251 196
Loans and borrowings,
including interest payable 2,936 3,215 10,885 842 17,877 14,009
4,243 3,440 10,885 842 19,409 15,486
Financial guarantees issued:
Maximum amount guaranteed 106 113 77 - 296 108

(e) Credit risk

The Group trades only with recognised, creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. The majority of the Group's third party trade receivables represent balances with the world's leading international corporations operating in the metals industry. In addition, receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is not significant. Goods are normally sold subject to retention of title clauses, so that in the event of nonpayment
the Group may have a secured claim. The Group does not require collateral in respect of trade and other receivables. The details of impairment of trade and other receivables are disclosed in note 16. Cash balances are held with high credit quality financial institutions. The extent of the Group's credit exposure is represented by the aggregate balance of financial assets and financial guarantees given.

At 31 December 2017 and 31 December 2016, the Group has certain concentrations of credit risk as 1.1% and 3.4 % of the total trade receivables were due from the Group's largest customer and 5.6% and 8.8% of the total trade receivables were due from the Group's five largest customers.

With respect to credit risk arising from guarantees, management have recognised a provision of USD nil million against the Group's exposure to guarantees as at 31 December 2017 (31 December 2016: USD 108 million) (note 19(g)).

(f) Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group manages its capital structure and makes adjustments to it, in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

The Board's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board of Directors monitors the return on capital, which the Group defines as net operating income divided by total shareholders' equity, excluding non-controlling interests. The Board of Directors also monitors the level of dividends to ordinary shareholders.

The Board seeks to maintain a balance between higher returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position.

There were no changes in the Group's approach to capital management during the year.

The Company and its subsidiaries were subject to externally imposed capital requirements in the both years presented in these consolidated financial statements.

(g) Master netting or similar agreements

The Group may enter into sales and purchase agreements with the same counterparty in the normal course of business. The related amount receivable and payable do not always meet the criteria for offsetting in the statement of financial position.

The following table sets out the carrying amounts of recognised financial instruments that are subject to the above agreements.

Year ended 31 December 2017

	Trade receivables	**Trade payables**
	USD million	**USD million**
Gross amounts	45	(34)
Net amounts presented in the statement of financial position	**45**	**(34)**
Amounts related to recognised financial instruments that do not meet some or all of the offsetting criteria	(22)	22
Net amount	**23**	**(12)**

Year ended 31 December 2016

	Trade receivables	**Trade payables**
	USD million	**USD million**
Gross amounts	52	(45)
Net amounts presented in the statement of financial position	**52**	**(45)**
Amounts related to recognised financial instruments that do not meet some or all of the offsetting criteria	(32)	32
Net amount	**20**	**(13)**

22. Commitments

(a) Capital commitments

UC RUSAL

UC RUSAL has entered into contracts that result in contractual obligations primarily relating to various construction and capital repair works. The commitments at 31 December 2017 and 31 December 2016 approximated USD 213 million and USD 157 million, respectively. These commitments are due over a number of years.

ENERGY

The ENERGY segment had outstanding capital commitments which had been contracted for at 31 December 2017 and 31 December 2016 in the amount of USD 24 million and USD 55 million, respectively. These commitments are due over a number of years.

(b) Purchase commitments

Commitments with third parties for purchases of alumina, bauxite, other raw materials and other purchases in 2018-2034 under supply agreements are estimated from USD 3,593 million to USD 4,381 million at 31 December 2017 (31 December 2016: USD 3,156 million to USD 4,089 million) depending on the actual purchase volumes and applicable prices.

Commitments with a related party - joint venture for purchases of primary aluminium and alloys in 2018-2030 under supply agreements are estimated from USD 6,837 million to USD 9,351 million at 31 December 2017 (31 December 2016: USD 5,748 million to USD 7,127 million) depending on the actual purchase volumes and applicable prices

(c) Sale commitments

Commitments with third parties for sales of alumina and other raw materials in 2018-2034 are estimated from USD 815 million to USD 1,041 million at 31 December 2017 (31 December 2016: from USD 806 million to USD 1,445 million) and will be settled at market prices at the date of delivery. Commitments with related parties for sales of alumina in 2018-2019 approximated from USD 414 million to USD 516 million at 31 December 2017 (31 December 2016: from USD 546 million to USD 680 million).

Commitments with related parties for sales of primary aluminium and alloys in 2018-2021 are estimated to range from USD 3,634 million to USD 3,928 million at 31 December 2017 (31 December 2016: USD 4,295 million to USD 4,463 million). Commitments with third parties for sales of primary aluminium and alloys in 2018-2021 are estimated to range from USD 1,266 million to USD 1,654 million at 31 December 2017 (31 December 2016: from USD 941 million to USD 1,252 million).

(d) Operating lease commitments

Non-cancellable operating lease rentals are payable as follows:

	31 December 2017 USD million	31 December 2016 USD million
Less than one year	31	30
Between one and five years	107	88
More than five years	126	126
	264	**244**

A number of lease contracts for land, heat network, property and equipment are for one year with the possibility of contract renewal in the future. Management of the Group believes that such contracts will be effective in 2018-2023 therefore expected lease expenses for the respective period were included in the table above.

(e) Social commitments

The Group contributes to the maintenance and upkeep of the local infrastructure and the welfare of its employees, including contributions toward the development and maintenance of housing, hospitals, transport services, recreation and other social needs of the regions of the Russian Federation where the Group's production entities are located. The funding of such assistance is periodically determined by management and is appropriately capitalised or expensed as incurred.

(f) Guarantees

In September 2015 the Parent Company issued a guarantee in respect of certain loan obligations of several borrowers which are not Group companies in favour of Sberbank. In 2015 the Group recognised a provision in the amount of RUB 6.5 billion (31 December 2016: USD 108 million) for a guarantee issued in favour of the bank in respect of loan obligations described above directly in equity (notes 19(g), 17(e)). In 2017 the guarantee agreement was terminated.

23. Contingencies

(a) Taxation

Russian tax, currency and customs legislation is subject to varying interpretations, and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transactions and activities of the Group may be challenged by the relevant local, regional and federal authorities. Notably recent developments in the Russian environment suggest that the authorities in this country are becoming more active in seeking to enforce, through the Russian court system, interpretations of the tax legislation, in particular in relation to the use of certain commercial trading structures, which may be selective for particular tax payers and different to the authorities' previous interpretations or practices. Different and selective interpretations of tax regulations by various government authorities and inconsistent enforcement create further uncertainties in the taxation environment in the Russian Federation.

Transfer pricing legislation enacted in the Russian Federation starting from 1 January 2012 provides for major modifications making local transfer pricing rules closer to OECD guidelines, but creating additional uncertainty in practical application of tax legislation in certain circumstances. These

transfer pricing rules provide for an obligation for the taxpayers to prepare transfer pricing documentation with respect to controlled transactions and prescribe the basis and mechanisms for accruing additional taxes and interest in case prices in the controlled transactions differ from the market level. The transfer pricing rules apply to cross-border transactions between related parties, as well as to certain cross-border transactions between independent parties, as determined under the Russian Tax Code (no threshold is set for the purposes of prices control in such transactions). In addition, the rules apply to in-country transactions between related parties if the accumulated annual

volume of the transactions between the same parties exceeds a particular threshold (RUB 1 billion in 2014 and thereon). The compliance of prices with the arm's length level could be as well subject to scrutiny on the basis of unjustified tax benefit concept.
Effective 1 January 2015 the concept of "beneficial ownership" which is broadly in line with the concept developed by the OECD were introduced into Russian tax legislation. In particular, based on this concept the double tax treaty relief should be available to foreign legal entities provided they have the actual right to receive income (i.e., they qualify as a "beneficial owner of income"). When determining the beneficial owner, the functions of a foreign person that is claiming the application of reduced tax rates under a double tax treaty and the risks that such person takes should be analyzed. Effective 1 January 2017, a non-resident income recipient should be obliged to provide a tax agent with confirmation that it is the beneficial owner of the income. However, at the moment there is no clear guidance in the tax legislation in what form such confirmation should be obtained.
No assurance can currently be given as to how the above concepts will be applied in practice, their potential interpretation by the Russian tax authorities and the possible impact on the Group.

UC RUSAL

In addition to the amounts of income tax UC RUSAL already has provided, there are certain tax positions it is reasonably possible (though less than 50% likely) that additional tax may be payable upon examination by the tax authorities or in connection with ongoing disputes with tax authorities. UC RUSAL's best estimate of the aggregate maximum of additional amounts that it is reasonably possible may become payable if these tax positions were not sustained at 31 December 2017 is USD 30 million (31 December 2016: USD 225 million).

ENERGY

During the past several years the Russian tax authorities have shown a tendency to take more assertive positions in their interpretation of tax legislation which has led to an increased number of material tax assessments issued by them as a result of tax audits. In practice, the Russian tax authorities generally interpret the tax laws in ways that do not favour taxpayers.
Tax declarations, together with related documentation, are subject to review and investigation by a number of authorities, each of which may impose fines, penalties and interest charges. Fiscal periods remain open to review by the authorities for three calendar years of review (one year in the case of customs). Under certain circumstances reviews may cover longer periods. In addition, in some instances, new tax regulations effectively have been given retroactive effect. Moreover, in October 2006, the Plenum of the Supreme Arbitration Court of the Russian Federation issued Ruling No. 53, formulating a concept of "unjustified tax benefit", which is defined in the Ruling by reference to specific examples of such tax benefits (e.g., tax benefits obtained as a result of a transaction that has no reasonable business purpose). There is a growing practice on the interpretation of this concept by the Russian tax authorities and the Russian courts and it is apparent that the Russian tax authorities actively seek to apply this concept when challenging tax positions taken by taxpayers. The tax authorities have actively sought to apply this concept when challenging tax positions taken by taxpayers in court, and this trend is anticipated to continue in the future. It is possible that additional taxes may be payable in respect of some operations of the Group upon examination by the tax

authorities or in connection with ongoing disputes with tax authorities. It could potentially have a significant impact on the consolidated financial statements of the Group.
Russian tax legislation includes "thin capitalisation" rules which limit the amount of interest that could be deducted by the Russian subsidiaries of the Company for corporate income tax purposes on "controlled" debts. The deductibility of interest is restricted to the extent that the controlled debt of a Russian company exceeds its net assets by more than three times. Interest on excess debt is nondeductible
and treated as a dividend subject to Russian withholding tax. Prior to 2017 loans provided between Russian affiliated companies were subject to thin capitalisation rules in case they have direct or indirect foreign shareholder owning more than 20%. There is contemplated tax practice with respect to such kind of transactions and tax authorities interpreted these rules differently. It is currently unclear how the Russian tax authorities will interpret and apply the amended thin

capitalisation rules.
The Russian subsidiaries of the Company may be affected by the Russian Federation's thin capitalisation rules which may result in assessment of additional taxes. The Group's best estimate of the aggregate maximum of additional amounts that it is reasonably possible may become payable if these tax positions were not sustained at 31 December 2017 is USD 7 million (31 December 2016: USD 18 million).

(b) Environmental contingencies

The Group and its predecessor entities have operated in the Russian Federation, Ukraine, Jamaica, Guyana, the Republic of Guinea and the European Union for many years and certain environmental problems have developed. Governmental authorities are continually considering environmental regulations and their enforcement and the Group periodically evaluates its obligations related thereto. As obligations are determined, they are recognised immediately. The outcome of environmental liabilities under proposed or any future legislation, or as a result of stricter enforcement of existing legislation, cannot reasonably be estimated. Under current levels of enforcement of existing legislation, management believes there are no possible liabilities, which will have a material adverse effect on the financial position or the operating results of the Group. However, the Group anticipates undertaking significant capital projects to improve its future environmental performance and to bring it into full compliance with current legislation.

(c) Legal contingencies

The Group's business activities expose it to a variety of lawsuits and claims which are monitored, assessed and contested on the ongoing basis. Where management believes that a lawsuit or another claim would result in the outflow of the economic benefits for the Group, a best estimate of such outflow is included in provisions in the consolidated financial statements (note 19(e)). As at 31 December 2017 the amount of claims, where management assesses outflow as possible approximates USD 36 million (31 December 2016: USD 60 million).

In January 2013, the Company received a writ of summons and statement of claim filed in the High Court of Justice of the Federal Capital Territory of Nigeria (Abuja) by plaintiff BFIG Group Divino Corporation ("BFIG") against certain subsidiaries of the Company. It is a claim for damages arising out of the defendants' alleged tortious interference in the bid process for the sale of the Nigerian government's majority stake in the Aluminium Smelter Company of Nigeria ("ALSCON") and alleged loss of BFIG's earnings resulting from its failed bid for the said stake in ALSCON. BFIG seeks compensatory damages in the amount of USD 2.8 billion plus interest. In January 2014 the court granted the Company's motion to join the Federal Republic of Nigeria and Attorney General of Nigeria to the case as co-defendants. On the latest hearing held on 8 November 2017 the Court has not upheld the claim and the claim was struck out. In January 2018 one of the Company's

subsidiaries, ALSCON and the Bureau of Public Enterprises of Nigeria entered into an addendum to the original sale and purchase contract regarding ALSCON.

(d) Risks and concentrations

A description of the Group's major products and its principal markets, as well as exposure to foreign currency risks are provided in note 1 "Background" and note 21(c)(iii) "Foreign currency risk". The price at which the Group can sell its products is one of the primary drivers of the Group's revenue. The UC RUSAL's prices are largely determined by prices set in the international market. The Group's future profitability and overall performance is strongly affected by the price of primary aluminium that is set in the international market.

24. Related party transactions

(a) Accounting policy

(a) A person, or a close member of that person's family, is related to the Group if that person:
(i) has control or joint control over the Group;
(ii) has significant influence over the Group; or
(iii) is a member of the key management personnel of the Group or the Group's parent.
(b) An entity is related to the Group if any of the following conditions applies:
(i) The entity and the Group are members of the same group (which means that each parent,

subsidiary and fellow subsidiary is related to the others).
(ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).
(iii) Both entities are joint ventures of the same third party.
(iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.
(v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.
(vi) The entity is controlled or jointly controlled by a person identified in (a).
(vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).
(viii) The entity, or any member of a group of which it is a part, provides key management personnel services to the group or to the group's parent.
Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

(b) Transactions with related parties

The Group transacts with related parties, the majority of which are entities under common control with the Group or under the control of minority shareholders of main subsidiaries or entities under its control.

Sales to related parties for the year are disclosed in note 6, trade receivables from related parties are disclosed in note 16(a), cash and cash equivalents are disclosed in note 16(c), accounts payable to related parties are disclosed in note 16(b) and other transactions with shareholders are disclosed in note 17. Related parties are mostly presented as parties under common control.
Purchases of raw materials and services from related parties for the period were as follows:

	Year ended 31 December	
	2017	**2016**
	USD million	**USD million**
Purchase of raw materials	**(448)**	**(373)**
Related parties - companies capable of exerting significant influence	*(123)*	*(143)*
Related parties - companies under common control	*(46)*	*(1)*
Related parties - associates and joint ventures	*(279)*	*(229)*
Energy costs	**(60)**	**(127)**
Related parties - companies capable of exerting significant influence	*(10)*	*(5)*
Related parties - companies under common control	*(21)*	*(11)*
Related parties - associates and joint ventures	*(29)*	*(111)*
Other services	**(138)**	**(129)**
Related parties - companies under common control	*(2)*	*(3)*
Related parties - associates and joint ventures	*(136)*	*(126)*
	(646)	**(629)**

On 11 April 2016 the Group pledged 15% shares of Eurosibenergo with the bank for the corporate guarantee provided by the related party under common control till 20 December 2019. In October 2017 the pledge was released.

(c) Remuneration to key management

For the year ended 31 December 2017 remuneration to key management personnel during the year was represented by short-term employee benefits and amounted to USD 18 million (31 December 2016: USD 14 million).

(d) Pricing policies

Prices for transactions with related parties are determined on a case by case basis but are not necessarily at arm's length.

25. Events subsequent to the reporting date

(a) Dividends distribution

Subsequently to the reporting date, the Parent Company declared interim dividends for 2017 in the amount of USD 68 million.

(b) Agreement with Nordea Bank AB

In January 2018 UC RUSAL entered into a bilateral facility agreement with Nordea Bank AB (publ) with the following key terms: principal amount of USD 200 million, tenor of 3 years, interest rate of 1M Libor + 2.4% per annum with a bullet repayment. The proceeds were applied for partial prepayment of Group's existing debt.

(c) UC RUSAL bonds

In February 2018 the Group completed its third offering of Eurobonds with the following key terms: principal amount of USD 500 million, tenor of 5 years, coupon rate of 4.85% per annum. The bonds proceeds were applied for partial prepayment of Group's existing debt.

In February 2018 the Group has fully redeemed 1,289,314 series 07 bonds for USD 23 million.

26. Accounting estimates and judgements

The Group has identified the following critical accounting policies under which significant judgements, estimates and assumptions are made and where actual results may differ from these estimates under different assumptions and conditions and may materially affect financial results of the financial position reported in future periods.

Property, plant and equipment - recoverable amount

In accordance with the Group's accounting policy, each asset or cash generating unit is evaluated every reporting period to determine whether there are any indications of impairment. If any such indication exists, a formal estimate of recoverable amount is performed and an impairment loss is recognised to the extent that carrying amount exceeds recoverable amount. The recoverable amount of an asset or cash generating group of assets is measured at the higher of fair value less costs to sell and value in use.

Fair value is determined as the amount that would be obtained from the sale of the asset in an arm's length transaction between knowledgeable and willing parties, and is generally determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset, including any expansion prospects, and its eventual disposal.

Value in use is also generally determined as the present value of the estimated future cash flows, but only those expected to arise from the continued use of the asset in its present form and its eventual disposal. Present values are determined using a risk-adjusted pre-tax discount rate appropriate to the risks inherent in the asset. Future cash flow estimates are based on expected production and sales volumes, commodity prices (considering current and historical prices, price trends and related factors), reserves (refer "Reserve estimates" below), operating costs, restoration and rehabilitation costs and future capital expenditure. This policy requires management to make these estimates and assumptions which are subject to risk and uncertainty; hence there is a possibility that changes in circumstances will alter these projections, which may impact the recoverable amount of the assets. In such circumstances, some or all of the carrying value of the assets may be impaired and the impairment would be charged against the profit or loss.

Property, plant and equipment - hydro assets - fair value

In accordance with the Group's accounting policy, hydro assets are carried at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Revaluations shall be made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period.

The valuation analysis is primarily based on the cost approach to determine depreciated replacement cost. This method considers the cost to reproduce or replace the property, plant and equipment, adjusted for physical depreciation, functional and economical obsolescence.

This policy requires management to make estimates and assumptions regarding both costs, as there is no active market for used assets of that type, and macroeconomic indicators to assess economical obsolescence which are subject to risk and uncertainty; hence there is a possibility that changes in circumstances will alter these estimates, which may impact the fair value of hydro assets. In such circumstances, fair value of hydro assets may be lower with respective decrease in revaluation reserve recognised through other comprehensive income.

Inventories - net realisable value

The Group recognises write-downs of inventories based on an assessment of the net realisable value of the inventories. A write-down is applied to the inventories where events or changes in circumstances indicate that the net realisable value is less than cost. The determination of net realisable value requires the use of judgement and estimates. Where the expectation is different from the original estimates, such difference will impact the carrying value of the inventories and the writedown
of inventories charged to the profit or loss in the periods in which such estimate has been changed.

Goodwill - recoverable amount

In accordance with the Group's accounting policy, goodwill is allocated to the Group's reportable business segments as they represent the lowest level within the Group at which the goodwill is monitored for internal management purposes and is tested for impairment annually at 31 December by preparing a formal estimate of recoverable amount. Recoverable amount is estimated as the value in use of the business segment.

Similar considerations to those described above in respect of assessing the recoverable amount of property, plant and equipment apply to goodwill.

Investments in associates and joint ventures - recoverable amount

In accordance with the Group's accounting policies, each investment in an associate or joint venture is evaluated every reporting period to determine whether there are any indications of impairment after application of the equity method of accounting. If any such indication exists, a formal estimate of recoverable amount is performed and an impairment loss recognised to the extent that the carrying amount exceeds the recoverable amount. The recoverable amount of an investment in an associate or joint venture is measured at the higher of fair value less costs to sell and value in use.

Similar considerations to those described above in respect of assessing the recoverable amount of property, plant and equipment apply to investments in associates or joint ventures. In addition to the considerations described above the Group may also assess the estimated future cash flows expected to arise from dividends to be received from the investment, if such information is available and considered reliable.

Legal proceedings

In the normal course of business the Group may be involved in legal proceedings. Where management considers that it more likely than not that proceedings will result in the Group compensating third parties a provision is recognised for the best estimate of the amount expected to be paid. Where management considers that it is more likely than not that proceedings will not result in the Group compensating third parties or where, in rare circumstances, it is not considered possible to provide a sufficiently reliable estimate of the amount expected to be paid, no provision is made for any potential liability under the litigation but the circumstances and uncertainties involved are disclosed as contingent liabilities.

The assessment of the likely outcome of legal proceedings and the amount of any potential liability involves significant judgement. As law and regulations in many of the countries in which the Group operates are continuing to evolve, particularly in the areas of taxation, sub-soil rights and protection

of the environment, uncertainties regarding litigation and regulation are greater than those typically found in countries with more developed legal and regulatory frameworks.

Provision for restoration and rehabilitation

The Group's accounting policy requires the recognition of provisions for the restoration and rehabilitation of each site when a legal or constructive obligation exists to dismantle the assets and restore the site. The provision recognised represents management's best estimate of the present value of the future costs required. Significant estimates and assumptions are made in determining the amount of restoration and rehabilitation provisions. Those estimates and assumptions deal with uncertainties such as: changes to the relevant legal and regulatory framework; the magnitude of possible contamination and the timing, extent and costs of required restoration and rehabilitation activity. These uncertainties may result in future actual expenditure differing from the amounts currently provided.

The provision recognised for each site is periodically reviewed and updated based on the facts and circumstances available at the time. Changes to the estimated future costs for operating sites are recognised in the statement of financial position by adjusting both the restoration and rehabilitation asset and provision. Such changes give rise to a change in future depreciation and interest charges. For closed sites, changes to estimated costs are recognised immediately in profit or loss.

Taxation

The Group's accounting policy for taxation requires management's judgement in assessing whether deferred tax assets and certain deferred tax liabilities are recognised on the statement of financial position. Deferred tax assets, including those arising from carried forward tax losses, capital losses and temporary differences, are recognised only where it is considered more likely than not that they will be recovered, which is dependent on the generation of sufficient future taxable profits. Deferred tax liabilities arising from temporary differences in investments, caused principally by retained earnings held in foreign tax jurisdictions, are recognised unless repatriation of retained earnings can be controlled and is not expected to occur in the foreseeable future.

Assumptions about the generation of future taxable profits and repatriation of retained earnings depend on management's estimates of future cash flows. These depend on estimates of future production and sales volumes, commodity prices, reserves, operating costs, restoration and rehabilitation costs, capital expenditure, dividends and other capital management transactions. Assumptions are also required about the application of income tax legislation. These estimates and assumptions are subject to risk and uncertainty, hence there is a possibility that changes in circumstances will alter expectations, which may impact the amount of deferred tax assets and deferred tax liabilities recognised on the statement of financial position and the amount of other tax losses and temporary differences not yet recognised. In such circumstances, some or all of the carrying amount of recognised deferred tax assets and liabilities may require adjustment, resulting in a corresponding credit or charge to profit or loss.

The Group generally provides for current tax based on positions taken (or expected to be taken) in its tax returns. Where it is more likely than not that upon examination by the tax authorities of the positions taken by the Group additional tax will be payable, the Group provides for its best estimate of the amount expected to be paid (including any interest and/or penalties) as part of the tax charge.

Reserve estimates

Reserves are estimates of the amount of product that can be economically and legally extracted from the Group's properties. In order to calculate reserves, estimates and assumptions are required about a range of geological, technical and economic factors, including quantities, grades, production

techniques, recovery rates, production costs, transport costs, commodity demand, commodity prices and exchange rates.

The Group determines ore reserves under the Australasian Code for Reporting of Mineral Resources and Ore Reserves September 1999, known as the JORC Code. The JORC Code requires the use of reasonable investment assumptions to calculate reserves.

Estimating the quantity and/or grade of reserves requires the size, shape and depth of ore bodies or fields to be determined by analysing geological data such as drilling samples. This process may require complex and difficult geological judgements and calculations to interpret the data.

Since economic assumptions used to estimate reserves change from period to period, and since additional geological data is generated during the course of operations, estimates of reserves may change from period to period.

Changes in reported reserves may affect the Group's financial results and financial position in a number of ways, including the following:

- Asset carrying values may be affected due to changes in estimated future cash flows.

• Depletion charged in profit or loss may change where such charges are determined by the units of production basis, or where the useful economic lives of assets change.

• Decommissioning, site restoration and environmental provisions may change where changes in estimated reserves affect expectations about the timing or cost of these activities.

Exploration and evaluation expenditure

The Group's accounting policy for exploration and evaluation expenditure results in certain items of expenditure being capitalised for an area of interest where it is considered likely to be recoverable by future exploitation or sale or where the activities have not reached a stage which permits a reasonable assessment of the existence of reserves. This policy requires management to make certain estimates and assumptions as to future events and circumstances, in particular whether an economically viable extraction operation can be established. Any such estimates and assumptions may change as new information becomes available. If, after having capitalised the expenditure under the policy, a judgement is made that recovery of the expenditure is unlikely, the relevant capitalised amount will be written off to profit or loss.

Development expenditure

Development activities commence after project sanctioning by the appropriate level of management. Judgement is applied by management in determining when a project has reached a stage at which economically recoverable reserves exist such that development may be sanctioned. In exercising this judgement, management is required to make certain estimates and assumptions similar to those described above for capitalised exploration and evaluation expenditure. Any such estimates and assumptions may change as new information becomes available. If, after having commenced the development activity, a judgement is made that a development asset is impaired, the appropriate amount will be written off to profit or loss.

Defined benefit retirement and other post retirement schemes

For defined benefit pension schemes, the cost of benefits charged to the profit or loss includes current and past service costs, interest costs on defined benefit obligations and the effect of any curtailments or settlements, net of expected returns on plan assets. An asset or liability is consequently recognised in the statement of financial position based on the present value of defined obligations, less any unrecognised past service costs and the fair value of plan assets.

The accounting policy requires management to make judgements as to the nature of benefits provided by each scheme and thereby determine the classification of each scheme. For defined benefit pension schemes, management is required to make annual estimates and assumptions about future returns on classes of scheme assets, future remuneration changes, employee attrition rates, administration costs, changes in benefits, inflation rates, exchange rates, life expectancy and expected remaining periods of service of employees. In making these estimates and assumptions, management considers advice provided by external advisers, such as actuaries. Where actual experience differs to these estimates, actuarial gains and losses are recognised directly in the statement of profit or loss and other comprehensive income.

27. Significant subsidiaries

The significant entities of the Group, included in these consolidated financial statements, are as follows:

Ownership and equity interest
31 December
Name
Place of incorporation
and operation
Principal
activities
2017
2016
UC RUSAL

United Company RUSAL Plc Jersey Holding company 48.1% 48.1%
Compagnie Des Bauxites De Kindia
S.A.
Guinea Bauxite mining 100.0% 100.0%
Friguia Guinea Alumina 100.0% 100.0%
JSC RUSAL Achinsk Russian Federation Alumina 100.0% 100.0%
RUSAL Mykolaev Ltd Ukraine Alumina 100.0% 100.0%
JSC RUSAL Boxitogorsk Alumina Russian Federation Alumina 100.0% 100.0%
Eurallumina SpA Italy Alumina 100.0% 100.0%
OJSC RUSAL Bratsk Russian Federation Smelting 100.0% 100.0%
JSC RUSAL Krasnoyarsk Russian Federation Smelting 100.0% 100.0%
JSC RUSAL Novokuznetsk Russian Federation Smelting 100.0% 100.0%
JSC RUSAL Sayanogorsk Russian Federation Smelting 100.0% 100.0%
RUSAL Resal LLC Russian Federation Processing 100.0% 100.0%
JSC RUSAL SAYANAL Russian Federation Foil 100.0% 100.0%
CJSC RUSAL ARMENAL Armenia Foil 100.0% 100.0%
RUS-Engineering Ltd Russian Federation Repairs and
maintenance
100.0% 100.0%
JSC Russian Aluminium Russian Federation Holding company 100.0% 100.0%
Rusal Global Management B.V. Netherlands Management
company
100.0% 100.0%
JSC United Company RUSAL
Trading House
Russian Federation Trading 100.0% 100.0%
Rusal America Corp. USA Trading 100.0% 100.0%
RS International GmbH Switzerland Trading 100.0% 100.0%
Rusal Marketing GmbH Switzerland Trading 100.0% 100.0%
RTI Limited Jersey Trading 100.0% 100.0%
Alumina & Bauxite Company
Limited
British Virgin Islands Trading 100.0% 100.0%
JSC Komi Aluminii Russian Federation Alumina 100.0% 100.0%
JSC Bauxite-Timana Russian Federation Bauxite mining 100.0% 100.0%
JSC Severo-Uralsky Bauxite Mine Russian Federation Bauxite mining 100.0% 100.0%
JSC RUSAL URAL Russian Federation Primary aluminium
and alumina
production
100.0% 100.0%
SUAL-PM LLC Russian Federation Aluminium
powders
production
100.0% 100.0%
JSC Kremniy Russian Federation Silicon production 100.0% 100.0%
SUAL-Kremniy-Ural LLC Russian Federation Silicon production 100.0% 100.0%
UC RUSAL Alumina Jamaica
Limited
Jamaica Alumina 100.0% 100.0%
Kubikenborg Aluminium AB Sweden Smelting 100.0% 100.0%
RFCL Sarl Luxembourg Finance services 100.0% 100.0%
Aktivium B.V. Netherlands Holding and
investment
company
100.0% 100.0%
Aughinish Alumina Ltd Ireland Alumina 100.0% 100.0%
LLC RUSAL Energo Russian Federation Electric power 100.0% 100.0%
ENERGY
Eurosibenergo Plc Cyprus Holding company 100.0% 100.0%
JSC Eurosibenergo
Russian Federation
Management
company
100.0%
100.0%

Ownership and equity interest 31 December

Name	**Place of incorporation and operation**	**Principal activities**	**2017**	**2016**
JSC Krasnoyarsk Hydro-Power Plant (a)	Russian Federation	Energy generation	100.0%	100.0%
CJSC MAREM +	Russian Federation	Energy trading	99.9%	99.9%
PJSC Irkutskenergo	Russian Federation	Energy generation	92.5%	90.8%
OJSC Irkutsk Electric Grid Company	Russian Federation	Power transmission and distribution	52.2%	51.9%
LLC Eurosibenergo - Hydrogeneration	Russian Federation	Energy generation	100.0%	100.0%
LLC Avtozavodskaya TEC	Russian Federation	Energy generation	96.2%	95.3%
LLC Eurosibenergo-engineering	Russian Federation	Engineering services	100.0%	100.0%
LLC Kompaniya VostSibUgol	Russian Federation	Coal production	92.5%	90.8%
LLC KRAMZ	Russian Federation	Manufacturing of semi-finished products from primary aluminium	93.4%	91.7%
LLC Tyvinskaya Gornorudnaya Company	Russian Federation	Coal production	94.3%	93.0%
LLC Sorsk Mining and Metallurgical Complex	Russian Federation	Ore mining	100.0%	100.0%
LLC Sorsk Ferromolybdenum Plant	Russian Federation	Ore processing, ferromolybdenum production	100.0%	100.0%

(a) As at 31 December 2016, excluding squeeze out procedures Krasnoyarsk HPP nominal ownership is 98.6%.

The nominal ownerships indicated in the table above are the effective holdings, except for UC RUSAL shareholdings where 48.1% is held by the Parent Company.

Trading entities are engaged in the sale of products to and from the production entities.

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