RUSAL

ANNUAL REPORT 2021

REACHING BALANCE

DISCLAIMER

WARNING

The information presented in this Annual Report reflects the Company's position during the review period from 1 January 2021 to 31 December 2021 (the "**Review Period**") pursuant to the requirements of the HKSE Listing Rules and Companies Ordinance (Cap. 622 of the Laws of Hong Kong) (unless otherwise specified). Accordingly, all forward-looking statements, analyses, reviews, discussions, commentaries and risks presented in this Annual Report (save for this Warning, the sub-section headed "Material Events Since the End of the Year" in the "Management Discussion and Analysis" section, 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, as widely reported in the media, in late February and March 2022, certain countries and organizations announced new packages of sanctions against the public debt of the Russian Federation, Russia's central bank, a number of Russian banks and certain Russian-government related entities and institutions, as well as personal sanctions against a number of individual as well as certain other restrictions. Due to the growing geopolitical tensions since February 2022, there has been a significant increase in volatility on the securities and currency markets, as well as a significant depreciation of the ruble against the US dollar and the euro. It is expected that these events will affect the activities of Russian enterprises in various sectors of the economy. The quantitative effect of these events cannot be accurately estimated at the moment with any degree of confidence.

Due to all these circumstances, the Company may potentially face difficulties in supply of equipment, which may lead to the postponement of investment projects. Probable necessity to replace foreign currency credit facilities with debt denominated in RUB may have a negative impact on financial results of the Company due to high interest rates on the local RUB market caused by general instability and the key rate set by the Bank of Russia on 28 Feb 2022 and now the rate is 17%. Recently announced intention by the Russian Government to change regulation of domestic metals' sales prices may have an adverse effect on the Company's profitability.

On 1 March 2022, the Company has announced that due to unavoidable logistical and transport challenges on the Black Sea and the surrounding area, it has been obliged to temporarily halt production at the Nikolaev Alumina Refinery located in the Nikolaev region, Ukraine. 2021 output of this refinery amounted to 1.8 million tonnes of alumina. Also, on 20 March 2022, the Australian government imposed an immediate ban on exports of alumina and aluminum ores, including bauxite, to Russia. This action will affect, among other things, the alumina export from Australia. That is almost 20% of RUSAL demand.

Currently, the Company's management is evaluating the effect of all of the above and analyzing the possible impact of changing and uncertain micro- and macroeconomic conditions on the Company's future financial position and results of operations in 2022 and onwards, and will make further announcements if and when it is necessary or required.

Shareholders and potential investors should be aware that the information presented in this Annual Report (save for this Warning, the sub-section headed "Material Events Since the End of the Year" in the "Management Discussion and Analysis" section, and unless otherwise specified) does not take into account all these new developments or any potential impact which these may have on the Company or the Group. Accordingly, the information presented in this Annual Report (save for this Warning, the sub-section headed "Material Events Since the End of the Year" in the "Management Discussion and Analysis" section, 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 circumstances indicated above this matter is continually evolving. Shareholders and potential investors are therefore strongly advised to make reference to the latest announcements (i.e. announcements issued by the Company after 24 February 2022) issued by the Company and such other announcement(s) to be issued by the Company in accordance with the requirements of the HKSE Listing Rules as and when appropriate before dealing in the Shares.

Shareholders and potential investors should exercise caution when dealing in the Shares. If in doubt, they are advised to consult their stockbrokers, bank managers, solicitors and/or other professional advisers before dealing in the Shares.

CONTENTS

STICKING TO THE SUSTAINABILITY TRACK

01

Financial and production indicators

Financial and Production Indicators

USD million (unless otherwise specified)	2021	2020	2019	2018	2017
Revenue	11,994	8,566	9,711	10,280	9,969
Adjusted EBITDA	2,893	871	966	2,163	2,120
Adjusted EBITDA Margin	24.1%	10.2%	9.9%	21.0%	21.3%
EBIT	2,079	279	87	1,481	1,523
Share of Profits from Associates and Joint Ventures	1,807	976	1,669	955	620
Pre-Tax Profit	3,641	716	1,054	1,953	1,288
Profit	3,225	759	960	1,698	1,222
Profit Margin	26.9%	8.9%	9.9%	16.5%	12.3%
Adjusted Net Profit/(Loss)	1,536	60	(270)	856	1,077
Adjusted Net Profit/(Loss) Margin	12.8%	0.7%	(2.8%)	8.3%	10.8%
Recurring Net Profit	3,298	990	1,273	1,695	1,573
Basic Earnings Per Share (in USD)	0.212	0.050	0.063	0.112	0.080
Total Assets	20,906	17,378	17,814	15,777	15,774
Equity Attributable to Shareholders of the Company	10,524	6,543	6,747	5,209	4,444
Net Debt	4,749	5,563	6,466	7,442	7,648

02

General information on the company

GENERAL INFORMATION ON THE COMPANY

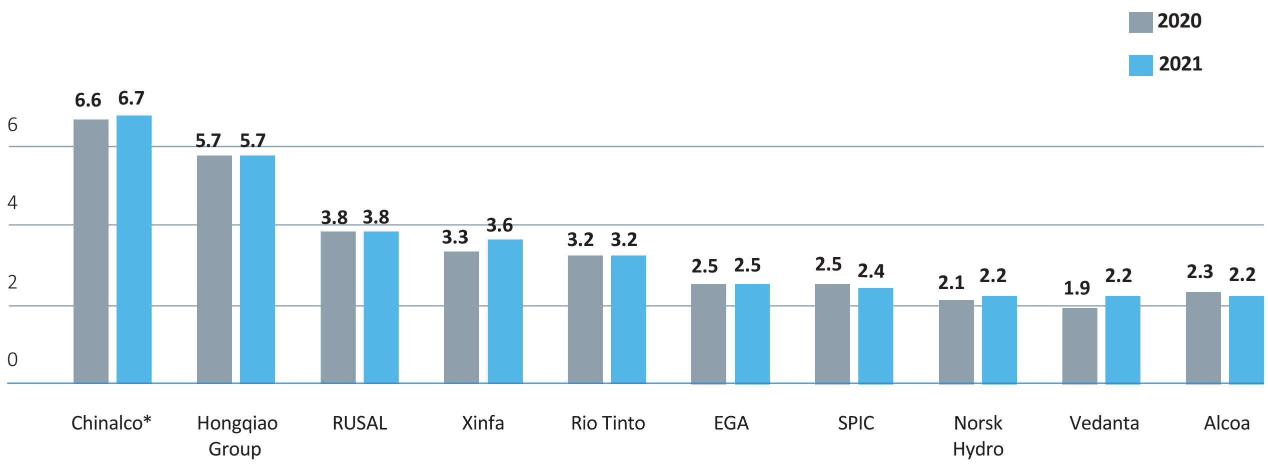
Company Position in the Industry

The main activity of the Company is holding activities related to participation in the authorized capital of business entities operating in the field of bauxite and nepheline mining, alumina production, electrolytic production of primary aluminum, value-added aluminum products, including those associated with the management of these companies, and also financial activities.

At the same time, the activities of the Group may have an impact on the activities of the Company and the performance of its obligations with respect to securities, and therefore the description of the information on the priority areas of business is given for the Group as a whole.

RUSAL is a low-cost, vertically integrated aluminium producer with core smelting operations located in Siberia, Russia. In 2021, RUSAL remained among the largest producers of primary aluminium and alloys globally.

RUSAL's production chain includes bauxite and nepheline ore mines, alumina refineries, aluminium smelters and casting houses, foil mills, packaging and wheels production centers.



* Since 2019, Chinalco is consolidating production of Chalco and Yunnan Aluminum Co., Ltd.
Source: Based on RUSAL's internal company report and peer companies' publicly available results, announcements, reports, and other information.

Secured Access to Green, Renewable Electricity

Electricity is a key component of the aluminium production process. RUSAL's core smelting operations are favorably located close to the Siberian hydropower plants sourcing approximately 93% of the Group's total electricity needs. The Company has long-term agreements with the region's hydropower energy suppliers. Using renewable and environmentally friendly hydro-generated electricity, RUSAL is targeting the lowest CO_2 footprint in the industry.

Captive Raw Material Supplies

RUSAL alumina production capacities are located in Russia and abroad. They cover approximately 100% of the Group's total alumina needs.

Our alumina refineries ore needs are covered by up to 77% with supplies from the Group's bauxite and nepheline mining operations. Our existing bauxite resource base is sufficient to supply for over 100 years of operations.

Efficient Midstream, in-House R&D and Internal Epcm Expertise

RUSAL aluminium smelting operations go through regular upgrades. RUSAL has developed its own in-house R&D, design and engineering centers and exploits RA-300, RA-400 and Green Soderberg smelting technologies. A new energy efficient and environmentally friendly RA-500 and RA-550 smelting technology has been designed, and currently RUSAL is testing it, targeting the best energy efficiency yields in the industry.

RUSAL is actively developing a ground-breaking inert anode technology. Introducing this state-of-the-art technology into the production process will lead to complete elimination of greenhouse gas and polyaromatic hydrocarbon emissions coupled with a 10% cut in operational costs through reducing anode and energy consumption and over a 30% cut in greenfield projects expenditure costs.

Cost Efficiency

The efficient smelting technologies together with low-cost input material and utilities mix secure the Company's global leadership on the cost curve.

Focus on Higher Margin Downstream Business

RUSAL has a diversified product mix with a strong share of VAP in the portfolio (2,034 thousand tonnes per annum out of 3,904 thousand tonnes of total sales in 2021).

Diversified Sales Geography

RUSAL's sales geography is represented by a diversified portfolio of regions. The Company delivers aluminium products to the domestic market and across all key global consuming regions (Europe, America and South East Asia).

Growth Potential of Rusal Platform

BEMO Project (RUSAL and RusHydro JV) includes the 3,000 megawatt BEMO HPP (the construction of which was completed in 2014) and Boguchansky aluminium smelter in the Krasnoyarsk region of Russia. In March 2019, the launch of the second part of the first stage brought the total production capacity to 292 thousand tonnes per annum.

One of RUSAL's other major projects is Taishet aluminium smelter in the Irkutsk region. The first stage of Taishet aluminium smelter was opened in the end of 2021. The production capacity of the first line is 428.5 thousand tonnes.

Implementing Environmental Initiatives

RUSAL was one of the first Russian companies that joined the UN Global Compact. By following its environmental policy and undertaking to regularly review and update its provisions, the Company is constantly developing and improving its environmental management system and implementing its principles at all production facilities.

Modernization Project

In June 2021, RUSAL announced an intention to implement the Modernization Project to create new production facilities on the sites of its existing workshops of aluminium smelters. The intention is to significantly improve the production technology and environmental sustainability of the plants.

As part of the Project, the Krasnoyarsk, Bratsk, Irkutsk and Novokuznetsk aluminum smelters will be partially replacing the electrolysis cells and infrastructure operating on Soderberg production technology with the pre-baked anode technology.

Diversification Through Investments

As at the Latest Practicable Date, RUSAL owns an effective 26.25% interest in Norilsk Nickel, the world's largest palladium producer, the largest high-grade nickel producer and one of the leading producers of platinum, copper and cobalt[1].

RUSAL's 50/50 LLP Bogatyr Komir coal joint venture in the Ekibastuz coal basin, one of the largest coal basins in the CIS, is an additional natural source of energy for RUSAL's enterprises.

1 Source: www.nornickel.com.

Key facts in 2021

RUSAL ACCOUNTED FOR

ASSETS THAT WERE OPERATING AS OF 31.12.2021 ONLY

ABOUT

5.6 %

OF THE WORLD'S ALUMINIUM OUTPUT

ABOUT

6.3 %

OF THE WORLD'S ALUMINA PRODUCTION

11

ALUMINIUM SMELTERS*, OF WHICH 9 ARE IN RUSSIA, 1 IN SWEDEN AND 1 IN NIGERIA

9

ALUMINA REFINERIES#, OF WHICH 4 ARE IN RUSSIA, 1 IN IRELAND, 1 IN UKRAINE, 1 IN JAMAICA, 1 IN ITALY AND 1 IN GUINEA

* 10 aluminium smelters in operation (Alscon in Nigeria is mothballed).

\# 8 alumina refineries in operation (Eurallumina in Italy is mothballed).

1

NEPHELINE MINE IN RUSSIA

4

FOIL MILLS, OF WHICH 3 ARE IN RUSSIA AND 1 IN ARMENIA

1

PLANT IN GERMANY PRODUCING FOUNDRY ALLOYS, SLUGS AND CARBON PRODUCTS

7

BAUXITE MINES, OF WHICH 2 ARE IN RUSSIA, 1 IN JAMAICA, 3 IN GUINEA AND 1 IN GUYANA

2

POWDER PLANTS, ALL OF WHICH ARE IN RUSSIA

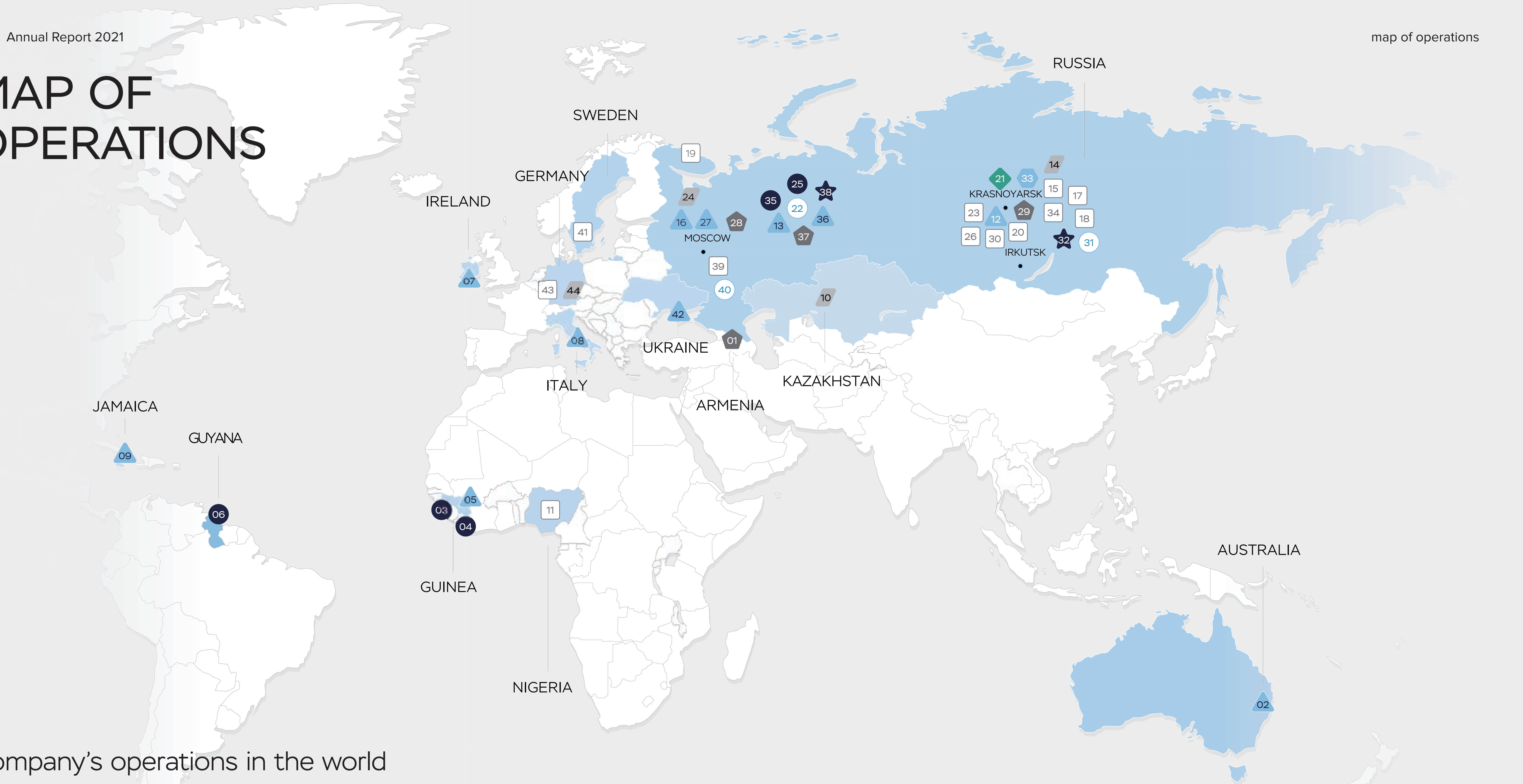
2

SILICON FACTORIES, ALL OF WHICH ARE IN RUSSIA

2

WHEELS FACTORIES SITUATED IN RUSSIA

MAP OF OPERATIONS



Company's operations in the world

ARMENIA
01 Armenal

AUSTRALIA
02 QAL

GUINEA
03 Compagnie des bauxites de Kindia (CBK)
04 Dian Dian Project
05 Friguia Bauxite & Alumina Complex

GUYANA
06 Bauxite Company of Guyana (BCGI)

IRELAND
07 Aughinish Alumina

ITALY
08 Eurallumina

JAMAICA
09 WindalcO

KAZAKHSTAN
10 LLP Bogatyr Komir

NIGERIA
11 ALSCON

RUSSIA
12 Achinsk Alumina Refinery
13 Bogoslovsky Alumina Refinery
14 Boguchanskaya HPP (BEMO)
15 Boguchansky Aluminium Smelter (BEMO)
16 Boksitogorsk Alumina Refinery
17 Bratsk Aluminium Smelter
18 Irkutsk Aluminium Smelter
19 Kandalaksha Aluminium Smelter
20 Khakas Aluminium Smelter
21 Kia-Shaltyr Nepheline Mine
22 Krasnoturyinsk Powder Metallurgy
23 Krasnoyarsk Aluminium Smelter
24 Nadvoitsy Aluminium Smelter
25 North Urals Bauxite Mine
26 Novokuznetsk Aluminium Smelter
27 Sayana Foil
28 PGLZ Alumina Refinery
29 SAYANAL
30 Sayanogorsk Aluminium Smelter
31 Shelekhov Powder Metallurgy
32 Silicon (ZAO Kremniy), Shelekhov
33 SKAD wheels factory
34 Taishet Aluminium Smelter (project)
35 Timan Bauxite
36 Urals Alumina Refinery
37 Urals Foil
38 Urals Silicon
39 Volgograd Aluminium Smelter
40 Volgograd Powder Metallurgy

SWEDEN
41 KUBAL

UKRAINE
42 Nikolaev Alumina Refinery

GERMANY
43 Aluminium Rheinfelden Alloys, Semis
44 Aluminium Rheinfelden Carbon

Aluminium
Alumina
Bauxite
Foil
Powders
Silicon
Nepheline ore
Other business
Wheels

USING CUTTING-EDGE TECHNOLOGY

03

Chairman's Statement

CHAIRMAN'S STATEMENT

Bernard Zonneveld

Chairman of the Board

Dear Shareholders,

This 2021 Annual Report is published at a time of unprecedented geopolitical and economic circumstances which are impacting everyone. Despite significant disruption in key raw materials sourcing and logistics, RUSAL is navigating the storm with control, responsiveness and resilience due to the continuous hard work of all of our people. We are determined to meet all of our commitments to customers and to support our employees across the world, particularly our colleagues in Ukraine who are constantly in our thoughts. With more than 60,000 employees operating all over the world, safety and well-being of our people have always been our primary focus.

It is clear that the world is facing new challenges and headwinds. It is not possible to fully assess the impact of current events on the Company, indeed on the whole global economy. We strongly believe that a peaceful resolution to the current crisis is necessary. We will find new strength and resilience to preserve what we have achieved over the years of hard work and we will continue our journey to lead the industry into a greener future.

RUSAL plays an essential role in the sustainable and reliable supply of aluminium worldwide. Last year the Company demonstrated a very solid performance, taking full advantage of the growing appetite for low-carbon aluminium. Demand for green metal will continue to increase and RUSAL is well positioned to meet this demand. The carbon footprint of RUSAL's products is already one of the lowest in the global aluminium industry, and by choosing our ALLOW brand customers can make active progress towards their net zero goals.

The beginning of 2021 saw RUSAL committing to achieve net zero emissions by 2050 and to reduce greenhouse gas emissions by at least 35% by 2030, and we will stick to these commitments despite the current difficulties. The ESG agenda remains our priority for now and will remain so for years to come. RUSAL continues to advance towards its own industry-leading carbon reduction goals, making its business more sustainable and reducing its impact on the environment. We believe, it is important to continue to keep moving forward on our climate change agenda even in times of new challenges.

As part of our journey to a carbon-neutral future, we began test shipments of an entirely new product, aluminium produced by a revolutionary technology using inert anodes which, when used in the electrolysis process, makes it possible to almost completely eliminate greenhouse gas emissions. RUSAL encourages existing and new customers to test aluminium products made with inert anode technology as part of their plans to reduce emissions in the future.

Throughout the year, we signed several strategic partnerships with multiple organizations looking to use low-carbon aluminium in their supply chains. This included the providers of sustainable aluminium packaging, a large-scale modern aluminium processing enterprise and a transport company. All of them successfully implemented ALLOW low-carbon aluminium in their operations.

RUSAL plays an essential role in sustainable and reliable supply of low-carbon aluminium worldwide. We are proud of the results achieved together with our partners. We also remain committed, as we always have been, to be a reliable supplier to our existing and new customers globally.

As RUSAL looks into 2022 and beyond, it is clear that the world is facing new challenges and headwinds. We strongly believe that a peaceful resolution to the current crisis is necessary and we will find the new strength and resilience that we need to continue our journey to lead our industry into a greener future.

I would like to express my gratitude to our employees for their determination, continued dedication and hard work. We continue to be a strong company even in these turbulent times due to the significant efforts of our employees, partners and customers.

Finally, I would like to thank our shareholders for their trust and ongoing support.

Bernard Zonneveld
Chairman of the Board

USING RENEWABLE ENERGY

04

General Director's Review

GENERAL DIRECTOR'S REVIEW

Evgenii Nikitin
General Director

Dear Shareholders,

The developments of recent months will have a significant impact on Russian companies across different sectors of the economy and we are assessing the impact of these changes that will define years to come. Today our focus is to ensure the safety of our employees – this is an absolute priority for us, and we will concentrate our efforts on supporting our team members around the world.

We will do everything in our power to maintain the necessary pace and production volumes, despite all of the challenges we may face. In light of the tragic events in Ukraine, we have been forced to temporarily halt production at the Nikolaev Alumina Refinery. The safety and well-being of our employees there and around the world is an absolute priority for us and we are doing everything we can to support our workers in the current circumstances.

Despite numerous challenges, in 2021 RUSAL managed to maintain its position as the world’s leading producer of low-carbon aluminium. During the COVID-19 pandemic we supported our customers, employees and communities and will continue to do so in the challenging times ahead.

RUSAL has always faced challenges with dignity and strength; our sustainable business and integrated business model bring stability and help give a measured outlook for the future in these unprecedented times. In 2021, we focused our efforts on implementing social aid programs. Since the beginning of the pandemic RUSAL has contributed over USD105 million to combat COVID-19, and more than 13,000 people have been treated in our regional medical centers deployed specifically for the purpose. We also secured vaccine deliveries to our hospitals abroad.

We have been consistently improving our existing production facilities and launched new ones in 2021. The inauguration of the Taishet Aluminium Smelter, the world’s most advanced low-carbon aluminium production plant, in December further demonstrated our commitment to decarbonizing Company’s operations and the value chains of our customers. The Taishet smelter is one of the most environmentally friendly in the world, operating on clean energy from Siberian hydropower plants, which in combination with cutting-edge gas treatment systems and a smelter-wide water recycling system keeps the smelter’s impact on the environment to a minimum. Its full scope CO_2 emissions will be one of the lowest in the industry.

Taishet will further serve as a model for the modernization of our Siberian smelters: in 2021, we announced the launch of a new project of ecological modernization of our key smelters in Krasnoyarsk, Bratsk, Irkutsk, and Novokuznetsk. The idea is to create a completely new generation of aluminium production sites, where all four smelters will be getting cutting-edge pre-baked anode reduction cells to replace the old potrooms. This highly complex and unprecedented project will mean that the total output of the new potrooms will amount up to 1.4 million tonnes of aluminium per year, a landmark for the global aluminium industry.

The pace of the modernization and development of existing production together with launching the Taishet Aluminium Smelter are a testimony of our commitment to decarbonization. Thanks to the environmental measures and initiatives implemented by RUSAL, the volume of emissions from the Company’s enterprises has decreased by almost 35%, industrial wastewater discharges have decreased by 60%, and consumption of fresh water has decreased by more than a third.

The year 2022 has already raised new challenges that we have never faced before. A key task for management will be assessing and minimizing the consequences of current events on the Company’s operations.

Evgenii Nikitin
General Director

05

Business overview

CREATING HIGH VALUE ADDED PRODUCTS

BUSINESS OVERVIEW

Priority Areas of Business

The main activity of the Company is holding activities related to participation in the authorized capital of business entities operating in the field of bauxite and nepheline mining, alumina production, electrolytic production of primary aluminum, value-added aluminum products, including those associated with the management of these companies, and also financial activities.

At the same time, the activities of the Group may have an impact on the activities of the Company and the performance of its obligations with respect to securities, and therefore the description of the information on the position in the industry is given for the Group as a whole.

Aluminium

RUSAL owns 11[2] aluminium smelters which are located in three countries: Russia (nine plants), Sweden (one plant) and Nigeria (one plant). Its core asset base is located in Siberia, Russia and accounts for approximately 93% of the Company's aluminium output in 2021. Among those, BrAZ and KrAZ together account for more than half of RUSAL's aluminium production. The Company owns 85% of a smelter located in Nigeria.

During 2021, RUSAL continued to implement the comprehensive program designed to control costs and optimize production process to strengthen the Company's position as one of the world's most cost-efficient aluminium producers.

The table below[3] provides an overview of RUSAL's aluminium smelters (including capacity) as of 31 December 2021.

Facility	Location	Share, %	Nominal capacity (approved casting capacity for 2021), thousand tonnes	Capacity utilization factor, %
Siberia				
Bratsk Aluminium Smelter	Russia	100%	1,009	100%
Krasnoyarsk Aluminium Smelter	Russia	100%	1,019	100%
Sayanogorsk Aluminium Smelter	Russia	100%	542	99%
Novokuznetsk Aluminium Smelter	Russia	100%	215	100%
Khakas Aluminium Smelter	Russia	100%	297	102%
Irkutsk Aluminium Smelter	Russia	100%	422	100%
Taishet Aluminium Smelter[4]	Russia	100%	428	0%
Russia (other than Siberia)				
Kandalaksha Aluminium Smelter	Russia	100%	76	83%
Volgograd Aluminium Smelter	Russia	100%	69	102%
Other countries				
KUBAL	Sweden	100%	128	97%
ALSCON	Nigeria	85%		
Total			4,205	90%

2 10 aluminium smelters in operation (Alscon is mothballed).

3 The table presents total nameplate capacity of the plants, each being a subsidiary of the Group.

4 Pre-operation verifications and testing began in December 2021.

BEMO

BEMO Project involves construction of the 3,000 MW BEMO HPP and BEMO aluminium smelter in the Krasnoyarsk Territory in Siberia.

The construction of BEMO aluminium smelter is divided into two stages (each stage with a capacity of 298 thousand tonnes of aluminium per annum). The first part of the first stage (149 thousand tonnes of aluminium per annum, 168 pots) was launched in 2015; and the second part of the first stage – in March 2019. In May 2019, the first stage of the smelter reached its design capacity. In 2021, 292 thousand tonnes of aluminium and alloys were produced, which is 2 thousand tonnes more than in 2020.

The second stage of BEMO smelter is to be considered by a strategic partner, RusHydro, subject to market situation and availability of project financing.

Taishet aluminium smelter

Construction of Taishet aluminium smelter started in 2006. Due to unfavorable market conditions, RUSAL decided to suspend the project in 2009. After the economic recovery and market conditions improvement in 2016, the Board of Directors decided to resume the construction of LC-1 (first series) of Taishet smelter and approved the start of preliminary work. Actual construction of Taishet smelter resumed in 2017.

On 16 December 2021, the first electrolyzers were put into trial operation.

The project includes construction of an aluminium smelter in Taishet in the Irkutsk region (Eastern Siberia), with a design production capacity of LC-1 (first series) of 352 pots, or 428.5 thousand tonnes, per annum. Electricity consumed by LC-1 (first series) amounts to 6,370 million kWh.

Alumina

As of the end of 2021, nine alumina refineries are owned by the Group. RUSAL alumina refineries are located in six countries: Ireland (one refinery), Jamaica (two refineries, one legal entity), Ukraine (one refinery), Italy (one refinery), Russia (four refineries) and Guinea (one refinery). Besides, the Company owns a 20% share in the QAL alumina refinery located in Australia. Most of the Group’s alumina refineries have quality management systems certified according to ISO 9001. Achinsk Alumina Refinery, Nikolaev Alumina Refinery, Aughinish, EurAllumina, and QAL have their environment management systems certified according to ISO 14001; two refineries received their ISO 45001 certificates for health and safety management systems. Urals Aluminium Smelter, JSC “Boksit Timana” and Aughinish are certified according to the ASI Performance Standard and ASI Chain of Custody: Urals Aluminium Smelter and JSC “Boksit Timana” were certified in 2019, Aughinish successfully passed certification audits as per ASI standards in 2021, and in January 2022 Aughinish was added to the Company’s ASI certification scope. In 2021, Nikolaev Alumina Refinery and Achinsk Alumina Refinery underwent re-certification as per ISO 45001 and ensured compliance with high standards on workplace health and safety.

Availability of a sufficient volume of alumina capacities helps the Company to provide sufficient resources for a potential expansion of aluminium production capacities and allows RUSAL to use favorable market conditions when selling alumina to third parties.

The construction of the Tashet aluminium smelter

The table below gives an overview[5] of RUSAL alumina refineries (including capacity) as of 31 December 2021.

Facility	Location	Share, %	Nominal capacity, thousand tonnes	Capacity utilization factor, %
Achinsk Alumina Refinery	Russia	100%	1,069	85%
Bogoslovsk Alumina Refinery	Russia	100%	1,030	95%
Urals Alumina Refinery	Russia	100%	900	102%
PGLZ Alumina Refinery	Russia	100%	265	95%
Friguia Alumina Refinery	Guinea	100%	650	64%
QAL	Australia	20%	3,950	94%
Eurallumina	Italy	100%	1,085	0%
Aughinish Alumina Refinery	Ireland	100%	1,990	94%
Windalco	Jamaica	100%	1,210	37%
Nikolaev Alumina Refinery	Ukraine	100%	1,759	101%
Nominal capacity, total			**13,908**	**81%**
Capacity accounted for by RUSAL			**10,748**	**77%**

Bauxite

The Group manages seven bauxite mining facilities. RUSAL bauxite facilities are located in four countries: Russia (two facilities), Jamaica (one facility), Guyana (one facility) and Guinea (three facilities). The presence of a sufficient raw material base helps the Company to provide sufficient resources for a potential expansion of alumina capacities. Low amounts of bauxite will be sold to third parties.

The table below gives an overview of RUSAL bauxite facilities (including capacity) as of 31 December 2021.

Facility	Location	Share, %	Annual capacity, million tonnes	Capacity utilization factor, %
Boksit Timana	Russia	100%	3,300	103%
North Urals Bauxite Mine (SUBR)	Russia	100%	3,000	76%
Compagnie des Bauxites de Kindia	Guinea	100%	3,500	76%
Friguia Alumina Refinery	Guinea	100%	2,100	74%
Bauxite Company of Guyana Inc. [6]	Guyana	90%	1,700	0%
Windalco	Jamaica	100%	4,000	47%
Dian-Dian	Guinea	100%	3,000	110%
Nominal capacity, total			**20,600**	**73%**

Notes:

(1) Mineral resources:
- are recorded on an unattributable basis, equivalent to 100% ownership;
- are reported as dry weight (excluding moisture).

Mineral resources tonnages include ore reserve tonnages.

(2) Windalco resources include those under the license Kirkwine SML 161 of 38.1 million tonnes that was revoked by the Ministry of Transport and Mining of Jamaica in 2019. RUSAL considered these actions unlawful and challenged the legitimacy of the license revoke in court. The hearing took place in mid-2020. Court decision is in progress at the moment of the Report preparation.

[5] The calculation is based on the proportional share of the Group in the capital of respective alumina refineries (QAL).

[6] Mothballed in February 2020.

Energy assets

BEMO Project

BEMO HPP is the fourth step of the Angara hydroelectric power chain, the biggest major hydropower plant completed project in Russia. Construction of the power plant was suspended in Soviet times due to the lack of financing and resumed in May 2006 by RUSAL and RusHydro following the conclusion of their agreement to jointly implement BEMO Project comprising BEMO HPP (the average annual electricity output reaching 17.6 billion kWh) and an aluminium smelter capable of producing 600 thousand tonnes of metal per annum.

The Project's 79 m high and 2,587 m long composite gravity and rock-fill dam was completed at the end of 2011, and nine 333 MW hydropower units of BEMO HPP commenced operation during 2012 through 2014. A total installed capacity of all nine hydrounits in operation amounts to 2,997 MW.

The hydropower plant started commercial supplies to the wholesale electricity and capacity market on 1 December 2012. In 2021, the hydropower plant delivered 17.238 TWh to the wholesale electricity and capacity market, which is lower than in 2020 electricity output by 2.3%, or 0.4 TWh due to the current hydrological situation at the Angara-Yenisei HPP cascade.

Mining assets

RUSAL'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 long position in alumina capacity is supported by the Company's bauxite and nepheline syenite resource base.

The Company jointly operates two coal mines with Samruk-Energo, the energy division of Samruk-Kazyna under a 50/50 joint venture, Bogatyr Coal LLP.

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 44.63 million tonnes of coal in 2021, has approximately 1.61 billion tonnes of Proved and Probable Ore Reserves and has Measured Mineral Resources and Indicated Mineral Resources in aggregate of approximately 1.96 billion tonnes as of 31 December 2021 (by JORC according to the SRK report). Bogatyr Coal LLP generated sales of approximately USD243 million in 2020 and USD241 million in 2021. Russian and Kazakh customers contribute to approximately 30% and 70% of their sales.

Investment in Norilsk Nickel

Norilsk Nickel is the world's largest palladium producer, the largest high-grade nickel producer, and one of the leading producers of platinum, copper and cobalt. RUSAL held a 26.25% shareholding (nominal) stake in Norilsk Nickel as at the Latest Practicable Date. The cost of acquisition was USD13,230 million. The carrying value of investment in Norilsk Nickel comprises 16% of total consolidated assets of RUSAL as at 31 December 2021.

RUSAL's shareholding in Norilsk Nickel allows for significant diversification of earnings through Norilsk Nickel's exposure to PGMs[7] and non-ferrous metals (nickel, copper, cobalt) and broadens RUSAL's strategic opportunities. The Company's objective is to maximize the value of this investment for all Shareholders.

Company Profile and Financial Results[8]

Norilsk Nickel's resource base in Taimyr and Kola Peninsula as at 31 December 2020 consisted of 743 million tonnes of Proven and Probable Ore Reserves and 2,019 million tonnes of Measured and Indicated Mineral Resources. Its key assets are located in Russia (Norilsk region, Kola Peninsula, Trans-Baikal Territory) and in Finland (Norilsk Nickel Harjavalta).

In 2021, Norilsk Nickel produced 193 thousand tonnes of nickel (-18% compared to 2020), 407 thousand tonnes of copper (-16% compared to 2020), 2,616 thousand troy ounces of palladium (-7% compared to 2020) and 641 thousand troy ounces of platinum (-8% compared to 2020).

Metals production in 2021 (compared to 2020) decreased mainly due to the temporary suspension of mining operations at Oktyabrsky (recovered to full capacity in May 2021) and Taimyrsky (recovered to full capacity in December 2021) mines after the flooding caused by the inflow of underground water, as well as the temporary suspension of the Norilsk Concentrator and consequent repairs (fully recovered in December 2021).

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[7] PGMs means platinum group metals.

[8] Production, financial and operational data in this section are derived from https://www.nornickel.com/.

Provided production results do not include the production results of Nkomati. In the second quarter of 2021, Nkomati was placed on limited care and maintenance due to cessation of production activity.

Norilsk Nickel's metal sales are highly diversified:
(i) by regions: Europe, Asia, North and South America, Russia and the CIS;
(ii) by products: nickel, copper, palladium, platinum, semiproducts and other metals.

	Revenue from metal sales	
USD million	Year ended 31 December 2021	Year ended 31 December 2020
Europe	9,036	6,755
Asia	4,688	5,266
North and South America	2,647	2,400
Russia and the CIS	732	556
	17,103	**14,977**

	Revenue from metal sales	
USD million	Year ended 31 December 2021	Year ended 31 December 2020
Nickel	3,627	3,144
Copper	3,789	3,078
Palladium	6,665	6,365
Platinum	685	622
Rhodium	1,056	682
Gold	654	676
Other metals and semiproducts	627	410
	17,103	**14,977**

The market value of RUSAL investment in Norilsk Nickel amounted to USD12,395 million as at 31 December 2021, which decreased in comparison with the market value as at 31 December 2020 (USD14,123 million). Positive effect from metal prices increasing was offset by: (1) flooding of Oktyabrsky and Taimyrsky mines and accident at Norilsk Concentrator, (2) changes in legislation (temporary export duties and increasing of mineral extraction tax).

In addition, in 2021 as part of the Norilsk Nickel buyback program RUSAL disposed approximately 2.33% of the issued share capital of Norilsk Nickel for a total consideration of (approximately) USD1.4 billion. After cancelation of repurchased (treasury) shares by Norilsk Nickel, RUSAL's stake in Norilsk Nickel decreased from 27.82% to 26.25% of the total issued share capital of Norilsk Nickel.

According to IFRS for the year ended 31 December 2021, Norilsk Nickel has the following key financial indicators:

USD million (unless otherwise specified)	12M 2021	12M 2020	Change (2021/2020)
Revenue	17,852	15,545	+15%
EBITDA	10,512	7,651	+37%
EBITDA Margin (%)	59%	49%	10p.p.
Net Profit	6,974	3,634	+92%
Capital Expenditures	2,764	1,760	+57%
Net Working Capital[9]	1,269	712	+78%
Net Debt[10]	4,914	4,705	+4%
Net Debt/EBITDA (1x)	0.5x	0.6x	-0.1x

In 2021, the main controllable factors that negatively affected EBITDA were:

(1) Decrease in production due to flooding of Oktyabrsky and Taimyrsky mines and the accident at Norilsk Concentrator, as well as expenses on industrial incidents response.
(2) Accrual of social provisions related to agreements on social and economic development of Norilsk and the Krasnoyarsk region.
(3) Accrual of provision on the lawsuit of the Federal Agency for Fishery (Rosrybolovstvo) for compensation of damages to aquatic bioresources due to the accident at HPP-3 in May 2020.

In 2021, the main non-controllable factors that negatively affected EBITDA were (1) an increase in mineral extraction tax and (2) the implementation of temporary export duties.

CAPEX increased by 57% up to USD2,764 million (compared to 2020), which was driven by the growth of investments in key strategic projects (Sulfur Program, South Cluster and Talnakh Concentrator expansion), as well as by increasing of expenditures on capital repairs, improvement of industrial safety and modernization of core assets.

In 2021, Net Working Capital increased by 78%, up to USD1,269 million (compared to 2020), due to non-controllable factors (inflation, income tax receivables, cost factor of inventory growth due to the increase in mineral extraction tax and implementation of temporary export duties) and controllable factors (accumulation of inventories for future repairs), which was partly offset by an increase in account payables (export duties, investment and repair works, purchases of equipment and materials).

Company's Strategy and Key Investment Projects

On 29 November 2021, Norilsk Nickel presented an update of its new strategy, "Navigating the Transition to a Net Zero World", with the following strategic priorities.

(1) Sustainable development:

a. Maintaining the industry's lowest carbon footprint: reducing carbon intensity (-16%) and maintaining absolute emissions (~10 million tonnes of CO_2eq).
b. Sulfur Program 2.0 in Norilsk Division entered the active construction phase (staged sulfur dioxide emissions reduction in Polar Division: -45% in 2023, -90% in 2025, -95% in 2030+).
c. Clean-up and collection of legacy waste in Norilsk area: demolition of 467 abandoned buildings and structures, collection of 2+ million tonnes of waste and 600+ thousand tonnes of metal scrap.
d. Social: (1) investing into local communities and charity, (2) major renovation program for the city of Norilsk until 2035 (renovation/development of housing and social infrastructure, landscaping, utilities upgrade, etc.; RUB81 billion will be contributed by Norilsk Nickel).

9 Normalized on receivables from the Registrar on transfer of dividends to shareholders.
10 The calculation of Net Debt includes lease obligations: USD262 million in 2020 and USD235 million in 2021.

(2) Production development: (1) concentration facilities upgrade (Talnakh Concentrator: Phase 3, new Norilsk Concentrator), (2) expansion of Nadezhda smelter (new third furnace), (3) evolution of refining capacities (new copper refinery, expansion of Harjavalta Nickel Refinery).

(3) Infrastructure development: (1) expanded and accelerated energy infrastructure modernization, (2) logistics infrastructure development.

(4) Area for strategic consideration: targeting a substantial market share in the battery segment through supply agreements and deeper integration into the European battery value chain.

Settlement with Interros in Relation to Norilsk Nickel

On 10 December 2012, key shareholders of Norilsk Nickel entered into an agreement (the "**Agreement**") to improve the existing corporate governance and transparency of the Norilsk Nickel Group, maximize profitability and shareholder value, and settle the disagreements of RUSAL and Interros in relation to the Norilsk Nickel Group.

In 2015, Norilsk Nickel's commitments pertaining to special dividends were fulfilled in advance (special dividends were paid out during 2014 to 2015, including dividend pursuant to the Norilsk Nickel's shareholder resolution taken at the annual general meeting on 13 May 2015).

On 5 April 2016, the Company entered into the side letter with the parties to the Agreement pursuant to which the Agreement was further amended (the "**Amendments**"), among others, to the following effect on the dividend policy of Norilsk Nickel.

Dividend Policy of Norilsk Nickel

Starting in 2017 and each subsequent year, annual dividends payable by Norilsk Nickel shall be determined on the basis of the ratio of Norilsk Nickel's Net Debt to Norilsk Nickel's EBITDA as at 31 December of the preceding year as follows:

1) 60% of EBITDA, if the ratio is 1.8 and less;
2) 30% of EBITDA, if the ratio is 2.2 and more; and
3) if the ratio falls between 1.8 and 2.2, a percentage of EBITDA to be paid as dividends to be calculated as follows: X% = 60% – (Net Debt/EBITDA – 1.8)/0.4x30%.

Starting in 2018, the minimal amount of annual dividends payable by Norilsk Nickel shall be at least USD1 billion.

Norilsk Nickel's Buyback Program

On 9 April 2021, the Company entered into a side letter (the "**Side Letter**") with the parties to the Agreement pursuant to which the Agreement was amended among others, to the following effect:

(1) For the purpose of maintaining the sustainable development of Norilsk Nickel, the final cash dividend from Norilsk Nickel that due to the Company by application of the existing dividend formula will be reduced on a one-off basis for the amount of approximately USD354 million.
(2) Norilsk Nickel will implement a share repurchase program on market terms and in the amount of approximately USD2 billion in the second half of 2021 (the "**Buyback**"). The repurchased shares will be cancelled pursuant to Russian law (with the exception of 0.5% of the total issued shares of Norilsk Nickel which will be used for other corporate goals by Norilsk Nickel).

On 27 April 2021, the board of directors of Norilsk Nickel approved a buyback of its shares. On 29 June 2021, Norilsk Nickel completed acquisition of 5,382,079 ordinary shares at a purchase price of RUB27,780 per one share.

RUSAL disposed approximately 2.33% of the issued share capital of Norilsk Nickel for a total consideration of (approximately) USD1.4 billion. After cancelation of repurchased (treasury) shares by Norilsk Nickel, RUSAL's stake in Norilsk Nickel decreased from approximately 27.82% to 26.25% of the total issued share capital of Norilsk Nickel.

Flooding of Oktyabrsky and Taimyrsky Mines and Accident at Norilsk Concentrator

On 12 February 2021, during tunnelling operations, natural groundwater inflow was detected at the 350 meter depth mark in the mine headwall at Oktyabrsky mine. Due to the increased water inflow to the drainage systems of the mine, Norilsk Nickel partially suspended operations at the mine.

Operations at the Taimyrsky mine were also partially suspended, since there were connected underground workings between the two mines.

On 20 February 2021, an ore transfer point and adjacent walkway collapsed at Norilsk Concentrator as structural reinforcement repairs were carried out. The incident took the lives of three Norilsk Nickel's employees; five were injured.

Comprehensive Social and Economic Development Plan for the City of Norilsk

In February 2021, Norilsk Nickel entered into a four-party agreement with the Ministry for the Development of the Russian Far East and Arctic, the Krasnoyarsk Territory Government, and the Norilsk Municipality to implement large-scale social and economic development programs in Norilsk (the "**Comprehensive Plan**"). According to this agreement, the financial commitments of Norilsk Nickel from 2021 until 2035 amount to RUB81.3 billion.

The Comprehensive Plan covers housing renovation, the overhaul and modernization of the city's engineering and utilities infrastructure, construction, repair, reconstruction and development of social infrastructure facilities and resettlement of Norilsk and Dudinka citizens to areas with more favorable living conditions. In addition, the Comprehensive Plan provides for the preparation and subsequent update of the Norilsk development strategy with the city envisioned as a hub for the Taimyr Peninsula overall development, the regional tourism industry development concept and the roll-out of support programs for small and medium-sized businesses in Norilsk.

Accrual of Provision on the Lawsuit of the Federal Agency for Fishery (Rosrybolovstvo)

On 29 July 2021, Yenisei territorial administration of the Federal Agency for Fishery (Rosrybolovstvo) filed a lawsuit for compensation of damages to aquatic bioresources for the total amount of RUB58.65 billion (USD810 million).

On 3 September 2021 during the court hearing, the parties agreed to proceed with the dispute settlement by negotiating an amicable agreement, which would include compensation in kind of the damage caused to aquatic life. As of February 2022, the parties were at the final stage of negotiations regarding this agreement.

As of 31 December 2021, ecological provisions (due to the accident at HPP-3) were increased by USD176 million (due to the changes in estimate).

Corporate Strategy. Development Prospects

The key Company business activities are mining of bauxite and nepheline ore, alumina refining, primary aluminium smelting, as well as casting and production of value added and downstream aluminium products: rolling, extrusion, forging and foundry.

The main goal of the Company's 2030 Strategy is to develop RUSAL into the world's largest producer of low-carbon aluminum with a high share of high value-added products.

In order to achieve this goal, RUSAL implements the following strategic objectives:

1. develops and implements new projects in the field of primary aluminium smelting;

Low-carbon aluminium wire rode, Irkutsk aluminium smelter

2. builds-up VAP casting capacities;
3. develops downstream: modernization and expansion of casting and the wheel business;
4. implements projects in the field of aluminium recycling and increases sales of low carbon metal with the involvement of secondary aluminium;
5. continues ongoing improvement of RUSAL's production system with the goal to keep the position of one of the most efficient producers with the lowest cash cost;
6. ensures 100% of the needs of metallurgical production in raw materials, including alumina, anodes, coke, pitch and other components of the raw material basket;
7. merges innovations and the production process, develops new products and technologies, for instance, inert anode, high-voltage reduction cells, new alloys and additive technologies;
8. achieves carbon footprint reduction goals in accordance with the En+ decarbonization strategy: 35% reduction in GHG emissions by 2030, and to be net zero by 2050 through modernization of alumina and aluminium production facilities and compensating measures, including carbon capture and reforestation;
9. implements sustainable development projects in the ESG field.

Gas cleaning equipment at the Boguchansky aluminiuim smelter

Group-Wide Initiatives

Sustainable Development Strategy

RUSAL was one of the first Russian corporations who joined the UN Global Compact as early as 2002 and launched its non-financial reporting covering environmental, social and corporate governance performance as of 2005.

Our ESG strategy today, at a new stage of the Company's evolution, is about further business transformation aimed at creating a new class of assets in the aluminium sector – future fit to meet the low carbon and circular economy demands, carbon neutral by 2050 and reasonably well balanced between primary and secondary material sourcing, based on the sustainable value chain and progressive technological solutions.

ESG-transformation of the business is focused on a number of priority projects aimed at minimizing the Company operations' environmental footprint, social development and sustainable living in the territories where the Company operates, and further improvement of the corporate governance. Successful delivery of the priority projects addresses expectations of the key stakeholders who redefine material aspects for the Company's sustainability on a regular basis, and brings significant contribution to help achieving seven out of 17 UN Sustainable Development Goals, namely: SDG 3 "Good Health and Well-being", SDG 8 "Decent Work and Economic Growth", SDG 11 "Sustainable Cities and Communities", SDG 12 "Responsible Consumption and Production", SDG 13 "Climate Action", SDG 15 "Life on Land", and SDG 17 "Partnerships for the Goals".

Climate Goals

RUSAL adopted its first set of climate goals as early as 2007 within the framework of its Safe Future Strategy and, thanks to consecutive efforts to achieving those, brought overall direct greenhouse gases emissions from its aluminium production down to 53%.

In 2015, that marked the Paris Agreement on climate, the Company published a new set of climate goals, including the ambition to stop using fossil fuels by 2025, which has been already met with 99.1% of electricity for aluminium production sourced from either carbon-less or low-carbon energy (primarily, from hydro energy).

More than 10 year efforts on decarbonization let the Company launch by 2017 an own low carbon aluminium brand ALLOW on the global market (2.4 tonnes of CO_2 equivalent per tonne of aluminium[11], which is approximately 4 to 5 times lower than industry average).

[11] Scope 1 (direct emissions from electrolysis production) and 2 (non-direct energy emissions) according to 2020.

Carbon footprint of the ALLOW aluminium undergoes independent audit tracing back to every aluminium smelter on an annual basis. Between 2017 and 2021 such independent audits were conducted by reliable international organizations like British Standard Institute, KPMG, and TUV Austria.

The Company applies its internal carbon price (USD20 per tonne of CO_2 equivalent) to all newly developed projects as of 2017.

Beginning of 2021, En+ Group, RUSAL's major shareholder, has published its 2050 NetZero Strategy substantiated with Pathway to 2050 NetZero covering RUSAL operations.

Sustainability and Climate Performance Recognition

RUSAL aims to take an active part in international processes of sustainable development, and implement the best global practices and international standards bringing operations and production in line with the sustainable development principles.

RUSAL's sustainability and climate performance are widely recognized with reliable global and national ratings like e.g. CDP Climate (A-, highest across the aluminium sector, 2021), Forbes Russia's 2021 Top Employer Rating ("gold", highest across the mining and metallurgy sector), or EcoVadis Sustainability Rating ("silver", or top 25% of the global suppliers, 2021).

As of late 2015, RUSAL joined Aluminium Stewardship Initiative (ASI). ASI is a global non-profit standard setting and certification organization in the area of responsible management of aluminium production and use. ASI's main commitment is to maximize the contribution of aluminium to the sustainable development of society.

As part of its interaction and work with ASI, a number of RUSAL's representatives have joined the ASI Standards Committee and regularly participate in the working groups focused on the topics of Biodiversity and Ecosystem Services, Greenhouse Gases, Human Rights, and Supply Chain aiming at ASI Standards upgrade and update.

Implementing ASI Standards[12] that cover the entire value chain – from ore mining to aluminium production – is one of RUSAL's tools for adapting the best world practices of sustainable development. At the end of 2021, Kandalaksha aluminium smelter (Russia), two aluminium foil plants – Sayanal (Russia) and Armenal (Armenia), and Europe's largest alumina refinery Aughinish (Ireland) have been successfully audited against the ASI Performance Standard and ASI Chain of Custody Standard, bringing the total number of ASI certified production facilities in the RUSAL business up to 13[13].

Initiatives taken across the Group

Innovations and Scientific Projects

New Super High-Capacity Resource-saving Pots

The Company actively develops the area of environment-friendly and resource-saving pots. Super high-capacity pots RA-550 are successfully operated in the pilot potroom of Sayanogorsk aluminium smelter (SAZ) with high indicators of process stability, energy efficiency (the power consumption is less than 12,800 kWh/tonne), performance (the current efficiency is 96%), and environment-friendliness (the level of fluoride emissions is less than 0.15 kg/tonne). Several expert inspections (dry delining) confirmed their long service life. The condition of lining materials at disconnected pots showed a high resistance of the structure to arising deviations. To improve the environmental friendliness of the lining design, unshaped recyclable materials are tested at new RA-550 pots, which, in addition to 80% decrease in spent lining, reduce the quantity and cost of lining for new pots by 10-15%. For digital transformation of the control systems, tests were conducted and computer process control tools were implemented – a BigData-based autonomous parameter control system, a dynamic digital process twin (Virtual Pot) and others. The availability of proven unique design solutions for busbar and cathode makes it possible to achieve a high stability of the mass and energy balance for the process with a super-high current intensity and, accordingly, performance of pots.

Continuing the constant development of super high-capacity pots, to construct new facilities with the lowest CAPEX and OPEX indicators and the best environmental indicators, the Company commenced to develop the most powerful pot in the world, RA-800+. It developed conceptual design solutions and considers scenarios of tests.

[12] The ASI Performance Standard requirements cover 11 groups of criteria ranging from business ethics and corporate governance, environmental performance, human rights and social practices. The ASI Chain of Custody Standard was developed to support businesses in the aluminium value chain that aim to provide their customers and stakeholders with independent assurance behind the responsible production and sourcing of aluminium.

[13] Among those previously certified production facilities there are the largest aluminium smelters of the Company: Krasnoyarsk, Bratsk, Sayanogorsk, Irkutsk and Boguchansk.

Successful tests of engineering solutions for the RA-550 project are conversed for existing baked-anode pots of the Company. RUSAL's high-capacity pots in Sayanogorsk, Krasnoyarsk and Irkutsk were used to test and implement designs of energy-efficient and environment-friendly superstructures, which enabled not only reducing the electricity consumption by 500-800 kWh/tonne of Al, but also improving the gas removal efficiency with a 29-30% decrease in emissions into the potroom operating space.

The Company continues its program to switch existing pot structures to energy-efficient designs using environment-friendly lining with unshaped recyclable materials. Such energy-efficient designs have already been developed for 90% of pot structures applied in the Company, confirmation of the electricity consumption reduction by 600-900 kWh/tonne of Al at pilot groups is being completed, and they are being implemented on stage-by-stage basis. The world's highest indicators among analogues were confirmed for super high-capacity pots RA-300 by long-term tests, 12,560 kWh/tonne. Energy-saving designs of existing pots with an electricity consumption reduction have been developed and are being tested. At present, the Company has already switched more than 3,800 pots to energy-efficient designs and more than 2,650 pots to environment-friendly lining from unshaped materials. The implemented pots confirmed not only the environmental effect of their lining from unshaped materials (a 60-80% decrease in the alumosilicate part of spent lining, replacement of alumosilicate with recyclable carbon materials and their further recycling), but also their economic efficiency: a 20-30% reduction in the cost of pot cathode relining.

Environmental approach

The Green Soderberg included in the list of the best available technologies in the Russian Federation is being successfully developed and improved upon in all key areas. The Krasnoyarsk Aluminium Smelter (KrAZ), which was successfully switched to the Green Soderberg technology, is implementing new environmental solutions: a robotized video control system, cell depressurization computer vision that reduced the depressurization time two-fold, applies installs filters with a doubled gas catching surface, new designs of alumina recycling systems, improved designs of hoods for after-burning of CO in exhaust gases to the best level among existing structures with self-baking and baked anodes. The scope of switching other smelters of the Company to the Green Soderberg is more than 40%, the application of the developed after-burning and computer vision systems is expanding. The process further develop by improving the robotized system for monitoring of the superstructure surface and deviations in the molding and baking technology. To improve the design, raise the corrosion-resistance and decrease costs at RUSAL's iron casting facilities, the centralized production of a degassing system based on developed alloys and corrosion-resistant alloy casting technologies is being expanded to all smelters.

The Company continued installing at its aluminium smelters state-of-the art fume treatment centers designed by RUSAL. In 2021, 13 fume treatment centers are successfully operated, 4 of which were put into operation in the reporting year. RUSAL developed an innovative fume treatment system of its own design based on absorbtion of fluorides with alumina applying a unique absorber reactor, while providing the possibility to return catched fluoride into the aluminium reduction process, and implemented it in the production process of obtaining aluminium. In terms of its environmental indicators, such fume treatment center has no equal in the world, because pot gases are treated at two stages "dry + wet", which is the most efficient scheme in the world practice. The scheme allows catching not only fluorides, but also sulphur (SO_2). To avoid storage of catched sulphur, RUSAL developed a technology to produce an end product, soda sulphate mix. The quality indicators of this product made of catched sulphur were confirmed by several customers, it is passing certification, and delivery terms are being coordinated. In addition to the best environmental indicators, the new fume treatment technology has a high economic efficiency in terms of capital expenditures (more than 30% reduction of CAPEX for equipment) and operating expenditures (15% reduction of OPEX).

To ensure the raw materials security and confirm the status of the Green Soderberg as an environment-friendly technology, the developed technology of producing compound eco-pitch with oil ingredients and a low content of coke chemical products is being implemented together with partners for polyaromatic components of emissions. Sintering additives produced solely from petroleum products were developed and are being tested as pitch, where polyaromatic hydrocarbons are at the level of traces. There are no analogues of this technology in the world that significantly reduces the content of benzapyrene by fully replacing coke and coal pitch with petroleum ingredients.

New areas in reducing emissions of polyaromatic hydrocarbons are as follows: decreasing the anode surface temperature – cooling rib and increasing the anode column; reducing the level of binding carbon-containing additives in the anode paste, which makes it possible to prevent and significantly decrease emissions from the anode surface.

The large-scale application of all developed environmental technologies was continued at KrAZ and expanded at BrAZ. All understudy anode paste and partially main anode body paste at KrAZ pots were switched to eco-pitch.

The Company is making efforts to achieve the minimal carbon footprint. For this purpose, the Company continued tests of the industrial pot design with inert anodes at KrAZ pots, which will be used as a scalable pot based on achieved indicators. Additional equipment was installed in the casthouses and an inert anode plant was put into operation; the new inert anode plant has enough capacity to supply inert anodes not only for the experimental production area but at an industrial scale. Pilot pots with inert anodes successfully produce aluminium with the world's lowest carbon footprint, which is sold under the ALLOW brand. And the low-carbon aluminium is used to produce products from foil for aluminium cans to wheels for vehicles.

Product engineering

Tests of foundry alloy Al-Ca were successfully completed to die-cast drum spiders for washing machines. The alloy confirmed its high corrosion-resistance and strength indicators. The production of this alloy was launched at IrkAZ using the existing equipment. Following the tests, a manufacturer of home appliances placed an order for ingots to produce spiders for pilot operation in washing machines. Tests of alloys Nickalyn and Al-Ca with one of the leading Asian automakers are continued.

Lean-doped scandium containing alloy 1581 was included in the Russian Maritime Shipping Registry and foreign maritime registers. Alloy 1581 was implemented as the key design material in an innovative aluminium railcar to be certified in 2022.

In addition, alloy 1407ch in the form of plates was implemented in the design of a lightweight rail tank car for transportation of hazardous cargoes, including concentrated nitric acid. It became possible to reduce the weight of the tank boiler by more than 40% by applying the new material. Its certification is also scheduled for 2022.

Innovations and research projects in the alumina production

The development of a technology is underway to produce a fundamentally new product – scandium-containing alumina, which will reduce costs to lower than USD250 per kg (on scandium oxide basis) for industrial production. To confirm and optimize the technology of Sc-alumina production in industrial conditions, a large-scale laboratory full-cycle unit was created and is being operated at RUSAL Krasnoturyinsk, and test lots are being produced. Implementing this technology will also reduce CO_2 emissions by 20 thousand tonnes.

The next important stage was achieved in developing an innovative technology to raise the productivity of aluminate liquors. In 2021, pilot industrial tests were carried out with respect to the conditions of RUSAL Kamensk-Uralsky (UAZ) and RUSAL Krasnoturyinsk (BAZ). In 2022–2023, it is planned to create a prototype at UAZ and conduct pilot tests at other production facilities of the Company. The technology has prospects for applying at all alumina refineries of the Company using the Bayer method. The effect from its implementation will be a significant decrease in energy consumption, alkali consumption and an increase in production of alumina. In particular, for BAZ and UAZ, the total economic effect will be USD18 million per year, and the CO_2 emission reduction will be 90 thousand tonnes per year.

A technology was developed for desilication of solutions at the sintering line of BAZ. Such replacement of the autoclave desilication with the new technology will allow increasing the output of alumina by 6.1 thousand tonnes per year and save 77 thousand Gcal of steam per year. The economic effect will be USD1.75 million per year, while CO_2 emissions will be reduced by 11.3 thousand tonnes per year.

A technology was developed for beneficiation of non-standard high-carbonate bauxite at SUBR and pilot industrial tests were completed. Implementing this technology will make it possible to produce an additional quantity of up-to-specification bauxite – 305 thousand tonnes per year. The effect from lower costs of gross bauxite and lower consumption ratios at the Company's production facilities will be USD5.3 million.

The Company implemented a number of projects to boost the efficiency of its existing alumina refineries. Prototypes were implemented within projects to reduce the steam and fuel flow rates at the alumina refineries:

- a heat exchanger was developed and implemented to cool hydrate slurries as part of the process flow diagram at BAZ's precipitator train No. 8 with a 5°C reduction of the hydrate slurry temperature and a reduction of the direct steam consumption by 31,250 Gcal per year. It is planned to replicate this technology at 5 other trains of BAZ, which, in addition to the process effect, will reduce CO_2 emissions by 50 thousand tonnes per year;
- the equipment and process flow diagram at UAZ's evaporation train No. 3 was improved by implementing a three-fold self-evaporation technology. The train capacity was increased by 9%, while the steam consumption decreased by 8,500 Gcal per year. It is planned to replicate this solution to 2 more evaporation trains;

- BAZ developed and implemented a heat exchanger for spent liquor heating. The spent liquor temperature increased by 7.7°C, which reduced the steam consumption by 32,977 Gcal per year and decreased CO_2 emissions by 5.5 thousand tonnes per year;
- a sinter grinding system was developed and implemented/improved at UAZ. Losses of soda ash were reduced by 1.5 thousand tonnes per year;
- BAZ created a prototype of the autoclave train with a 20% higher capacity. Savings of steam achieved at one autoclave train are 14,500 Gcal per year. It is planned to implement the solution at 11 more autoclave trains.

These developments are expected to be implemented at the Company’s alumina refineries.

Pilot industrial tests of the PrecipExpert particle size control system were completed in the 3rd precipitation area of RUSAL Kamensk-Uralsky in 2021. This top-level automated system operates based on artificial neural networks. The updated PrecipExpert version applies a generative optimation search algorithm which makes it possible to confidently find a solution for optimal tasks with tens of non-linear parameters. PrecipExpert is integrated into the process computer control system of the production facility and sends recommendations on the process management to managerial personnel on daily basis. The developed system reduces the amplitude of fluctuations in the fractional composition of aluminium hydroxide and aluminium oxide, as well as increases the precipitation percentage of aluminate solution. In 2022, PrecipExpert will be tested in the 10th precipitation area of UAZ.

The decision support system (DSS) for managing the flows of the soda ash shop was developed and launched in test mode at the Achinsk Alumina Refinery. The SODA DSS automated the processes of data collecting and processing by the shop’s process computer control system, implemented an algorithm to calculate the output of products based on solubility diagrams of multi-component salt systems (N-K-CO_3-SO_4-temperature). Taking into account the chemical composition and volumes of solutions, as well as the availability of core equipment, the SODA DSS calculates the shop’s end-to-end mass balance, gives recommendations on equipment load and process conditions, as well as advises on introducing corrective additives of potash and soda sulphate mix.

Computational fluid dynamics (CFD) methods are actively introduced in developments, which allow for getting a picture of physical and chemical fields inside equipment units the analysis of which makes it possible to develop new designs with higher efficiency and less energy consumption. As part of the planned work to retrofit agitators at alumina refineries, a blade-type agitator was improved and tested at BAZ’s highly-abrasive crude slurry; designs of new agitators for hydrate and soda mixers of UAZ were developed in 2021. The upgraded discharge system of red mud thickeners was successfully tested at Ewarton – the discharge launder was never blocked during the entire working campaign.

Environmental upgrade of aluminium smelters

As part of the environmental upgrade strategy for the Company’s production facilities, the development of the Design Documents and Environmental Impact Assessment commenced for environmental upgrade projects of the Krasnoyarsk, Bratsk, Irkutsk and Novokuznetsk aluminium smelters. The planned environmental upgrade projects provide for switching from the Soderberg reduction process to the RA 550, RA 300 and RA 167 pre-baked anode technology (550kA, 300 kA and 167 kA technology developed by RUSAL):

- Krasnoyarsk Aluminium Smelter: 535 thousand tonnes/year (RA 550 technology);
- Bratsk Aluminium Smelter: 535 thousand tonnes/year (RA 550 technology);
- Irkutsk Aluminium Smelter: 235 thousand tonnes/year (RA 300 technology);
- Novokuznetsk Aluminium Smelter: 75 thousand tonnes/year (RA 167 technology).

The environmental upgrade concept does not provide for increasing the current capacity of the smelters, but prevents from losses of metal during construction and ensures that the existing facilities and infrastructure are used as much as possible.

Cutting costs and boosting production efficiency

A comprehensive program is continued to deploy the Green Soderberg production process across the aluminium smelters of the Company:

- all pots with self-baking anodes were switched to the new technology at KrAZ;
- retrofitting is underway in 11 potrooms of the Bratsk Aluminium Smelter (198 pots were retrofitted in 2021);
- the Irkutsk and Novokuznetsk aluminium smelters also switched from pilot areas to a large-scale implementation of the advanced technology in their potrooms. In 2021, IrkAZ retrofitted 88 pots, and NkAZ – 32 pots.

The deployment of the Green Soderberg process reduces emissions of contaminants into the atmosphere to levels compliant with environmental regulations, while reducing the consumption of electricity, significantly cutting the amount of work in progress and increasing the service life of reduction cells.

To reduce the power consumption and improve the performance of alumina refineries, a number of measures were taken in 2021:

- from June to September 2021, RUSAL Achinsk conducted pilot industrial tests of the spent liquor cooling unit (waste water after mud washing) in the agitation sinter digestion area. The construction of this unit made it possible to optimize the temperature mode of the digestion process and avoid undesirable reactions with the generation of insoluble compounds, such as sodium hydroalumosilicate and calcium hydrogarnets. The total effect of savings from operation of the cooling system in the pilot industrial testing period was 3.5 thousand tonnes of alumina;
- the Nikolaev Alumina Refinery (LLC NGZ) implemented the project "Increase in the Production Capacity of NGZ through Changing the Agitation Digestion System, ADS (+)". The process modes were fine-tuned. 42.9 thousand tonnes of alumina were additionally produced due to the capacity of ADS (+) in 2021. Commissioning of this facility increased the refinery capacity, while maintaining the key bauxite digestion indicators (temperature, digestion time, chemical yield) without decreasing the quality of alumina;
- the Bogoslovsky Aluminium Smelter of JSC RUSAL Krasnoturyinsk completed passing all required expert examinations for the "Cyclone Calciner Construction Completion" project in 2021. In December 2021, it obtained the construction permit and started the project implementation. Commissioning of the new cyclone calciner scheduled for the fourth quarter of 2023 will reduce the environmental and climate impact by decreasing dust, NOx and CO_2 emissions. Besides, it will cut costs of BAZ's alumina by reducing the gas flow rate and expenses for repairs;
- the Ural Aluminium Smelter of LLC RUSAL Kamensk-Uralsky completed retrofitting of its precipitation slurry continuous handling system at the precipitator train of area No. 6 in the precipitation and evaporation shop of the Finished Products Department. Such retrofitting of the precipitation area increased the degree of pregnant liquor precipitation and, accordingly, increased the output of alumina by 7 thousand tonnes per year and decreased the heat consumption.

To optimize the process modes, reduce the consumption of electricity and raw materials (alumina, anode paste, fluorides), a long-term program is being implemented to upgrade automated control systems at the aluminium smelters. In 2021, the outdated computer process control system was replaced with an advanced system in potroom 1 of the Krasnoyarsk Aluminium Smelter (KrAZ), the implementation of similar projects goes on in potrooms 7-10 of NkAZ, the development of design documents was started for potrooms 15-16 of KrAZ and 1-2 of KAZ.

Developing new product types demanded by the market

The Sayanogorsk Aluminium Smelter completed its project to purchase and install a new casting table with a set of 215 mm moulds ahead of schedule. Its implementation made it possible to produce billets with standard sizes demanded in the Asian and European markets.

The RUSAL Engineering and Technology Centre creates a new production for the Company – master alloys. Implementing this project will make it possible to produce products with added strontium, manganese, titanium and scandium for sales domestically and internationally.

AGK completed construction of the area to produce a high-margin product using a technology developed by RUSAL – Ekapiren fine precipitated aluminium hydroxide (FPAH) used as a flame retardant.

In 2021, construction and installation works for the building were completed, and the equipment was mounted. Commissioning works were completed. The area was fully staffed, and the personnel was trained. To fine-tune the process parameters, the pilot industrial operation of the area was started in the continuous mode. Work is underway to achieve the design performance indicators and the required quality of finished products.

The area will reach the annual productivity of 5 thousand tonnes in 2022.

In March 2021, the Engineering and Technology Centre completed creating the mould assembling and testing area with a production capacity of 60 moulds and 60 pallets per year. It also assembles and tests pilot designs to produce innovative products. For example, last year, a modular type mould was assembled and tested, which allows producing slabs of several sections.

As a result of this activity, the Company can now produce its own moulds for slabs, which eliminates the dependance on foreign suppliers.

Ecology

NGZ completed retrofitting of calciner No. 1 using technical solutions developed by experts of RUSAL ETC together with employees of NGZ. A detailed model was developed for the heat-and-mass balance, kinetics of chemical reactions, alumina abrasion and equipment operation. As a result of the retrofitting, full compliance was achieved with the new requirements for maximum allowance concentrations introduced in Ukraine since 2023. The replication of these technical solutions to other KS calciners was started, and it is planned to retrofit all calciners by 2023.

The search for ways to dispose of red mud continues. RUSAL Aughinish and RUSAL ETC are key participants in the European Removal project, within which we have developed a technology for reducing muds with a residual alkali content of 0.5%, suitable for creating products from red mud in various industries (materials for construction, production of Fe-Si alloys, cement additives, rare elements, mineral fillers and heat insulations). In 2021, as part of the project, industrial tests were carried out at Aughinish and Aluminium of Greece, the content of Na_2O was reduced from 4-5% to ≤ 0.5%, and the target process indicators were achieved: moisture ≤ 25%; lime consumption 160 kg. The produced batches of leached mud were sent to other participants of the REMOVAL project for testing.

A mud preparation technology was developed for NGZ and UAZ that allows mud to be used immediately (without additional processing) to construct barrier dams of own mud disposal areas. UAZ used about 860 thousand tonnes of mud for this purpose for 5 years.

The Compliance Policy

The Company has implemented and has been applying an internal compliance system designed to meet regulations and standards as well as to manage compliance risks effectively, including corruption control. The main elements of the system are as follows:

1. Internal regulations, including: the Code of Ethics, the Compliance Policy, the Anti-Corruption Policy, the Gifts and Hospitality Policy, the Charity and Sponsorship Policy and the Business Partner Code. These documents define the core values and basic principles of the compliance team, internal control procedures and functioning of the components of the compliance system.

2. The risk assessment system, including corruption risks, analyses the causes, sources, possible damage and risk probability, as well as develops risk mitigation measures.

3. Automated control procedures help to identify, reduce or prevent the impact of compliance risks at the corporate and process levels. The company implements KYC procedures in relation to absolutely all counterparties and controls all transactions of the Group as concerns key risk factors based on the Paydox electronic document system.

4. The Compliance Team arranges offline and online trainings for and communication with Local Compliance Officers and production employees. For information purposes, the Team has created a compliance portal. The Team holds contests and events to identify and prevent unethical business practices. The compliance culture is supported by the 'tone from the top' Management, controlled by the 'tone from the middle' by the Compliance Team and is delivered to Local Compliance Officers.

5. The "SignAL" trust line collects information about potential violations, including corruption and conflicts of interest, on a round-the-clock and confidential basis. Officers check, investigate and respond to every message received to prevent similar incidents.

6. Monitoring and reporting are regularly conducted at all levels of management and are submitted to the Board of Directors.

Occupational safety and health and environmental protection policies

RUSAL's activities to provide safe working conditions for employees and reduce occupational diseases and injuries are governed by the Corporate Occupational Health and Safety Policy, as well as by the Declaration on Industrial and Fire Safety Policy. The Company's efforts in this areas are integrated into the Occupational Health and Safety Management System, which is one of the crucial management systems within RUSAL's operations and is approved by DNV[14] as compliant with ISO45001-2018 standard.

The Company has the following health and safety objectives:

- to strive for zero injuries, zero emergencies and zero fires;
- to ensure the compliance of equipment and production processes with legal and regulatory requirements for occupational health, industrial and fire safety; and
- to ensure personnel safety and health in the workplace and improve workplace environment on an ongoing basis in order to increase the level of safety and to prevent occupational diseases.

[14] Det Norske Veritas (DNV GL), an international accredited registrar and classification organization.

The Occupational Health and Safety Management System is deployed at every production facility. It includes a risk management system, emergency response plans, budgeting of health and safety measures, personnel training based on national and corporate requirements, and a corporate e-learning system. Occupational health and fire safety measures are financed strictly on a timely basis to provide for identification of hazards and development of procedures to improve working conditions.

RUSAL pays special attention to maintaining constructive dialogue with state authorities and employees, business partners, the general public and expert organizations to jointly resolve health and safety issues.

The universally accepted health and safety management systems is a system based on the ISO 45001-2018 international standard. Regular audits of this system at RUSAL are strengthened by numerous regular internal audits which qualitatively and quantitatively assess key elements of the system, identify deficiencies and develop effective corrective measures to manage risks and prevent failures and injuries.

Environmental Protection Policy

Operating on five continents and being involved in the metal production and processing, mining and power generation industries, RUSAL shares responsibility for addressing regional and global environmental issues and finding innovative approaches to solving them. The Company sees its environmental protection activities as an inherent part of its business, as well as its contribution to sustainable development of the society.

Sayanagorsk aluminium smelter's green territory

Same as with other natural resources and mineral extraction and processing companies, the Company's operations are associated with hazardous and non-hazardous wastes, air emissions, water and soil effluents. The Company reviews and updates its environmental management practices and procedures regularly to ensure that they comply, or continue to comply, with best applicable international standards.

RUSAL's goal is to continuously improve its environmental performance, while taking into account practical possibilities and social and economic factors.

Key operating principles

Any management decisions at all levels across all of the Company's operations would systematically follow the core principles:

- *Risk Management:* define and assess environmental risks, set targets and plan work taking into account environmental risk management issues;
- *Compliance:* comply with environmental legislative requirements of the countries where RUSAL has operations, as well as comply with environmental covenants assumed by the Company;
- *Measurability and Evaluation:* establish, measure and evaluate environmental indicators and assess compliance with environmental legislation in the countries where RUSAL operates and with environmental covenants assumed by the Company;
- *Prevention:* apply the best available techniques and methods to prevent pollution, minimize risks of environmental accidents and other negative impacts on the environment;
- *Training:* train employees of the Company to meet the environmental requirements applicable to their business areas to give employees a better understanding of the environmental consequences should such requirements not be met;
- *Cooperation:* note the opinions and interests of related parties, establish environmental requirements when selecting suppliers and contractors and assist them in complying with those requirements;
- *Transparency:* openly demonstrate the Company's plans and results of its environmental activities, including through public reports issued by the Company.

Environmental strategy

Key goals of RUSAL's environmental strategy include:

- reducing emissions, including greenhouse gases;
- creating a closed-circuit water supply system for the main production processes of the Company's facilities;
- increasing the volume of treated and used waste products and their safe disposal;
- replacing and disposing of electrical equipment containing polychlorbiphenyls (PCBs);
- rehabilitating land which has been negatively impacted and assisting in the maintenance of biodiversity;
- creating corporate systems to manage environmental aspects and risks.

By following this environmental strategy and undertaking regular reviews and updates of its provisions, the Company has tasked itself to constantly developing and improving its environmental management system and implementing its principles at all production facilities, including all those operating and those still under construction.

As part of achieving its objectives of continuous development and improvement of the environmental management system, the Company pays special attention to certifying its production sites as compliant with ISO 14001-2015, the international standards for environmental management systems. All RUSAL's aluminium smelters are certified as ISO 14001-2015 compliant.

The Company has also taken steps to lessen the environmental impact of its operations and comply with all applicable environmental laws and regulations.

Social Investments and Charity

The purpose of the Company's social strategy is creating a favorable social environment for our operations through sustainable models of social investment in comprehensive socio-economic development of territories with broad stakeholder engagement. This way, the Company contributes to making cities and human settlements inclusive, safe, resilient and sustainable as defined by the UN Sustainable Development Goal 11.

Based on the results of comprehensive studies of the social sphere conducted as part of the above-mentioned Goal in Action, the following priority areas for the Company's social investment have been identified:

- contributing to build comfort urban environment by supporting the construction and reconstruction of social infrastructure facilities and up-to-date public and recreational spaces;
- enhancing corporate volunteerism to support corporate social and environmental programs, engaging wider groups of the Company's employees and local citizens to join the volunteer movement.

Achievement of social investment goals is based on a program-project approach, including, but not limited to, public-private partnership mechanisms, agreements for socio-economic collaboration between the Company's affiliates and municipal and regional authorities, and selection of the projects as part of the Company's social grant schemes.

In 2021, the Company followed four directions for social program implementation:

1. **"RUSAL's Territory" comprehensive socio-economic development program**

The program is aimed at providing support to and implementing the best projects for infrastructural upgrade either of a particular city or of a particular neighborhood, or of a multi-family house. 11 winning projects have been selected via the "RUSAL's Territory" competition in 2020 for further implementation through 2022 in the following municipalities:

- Achinsk (landscaping and infrastructure development of the Victory Park);
- Bratsk (improvement of the pedestrian and park area on Krupskaya Street);
- Kamensk-Uralsky ("Kamensk "Arbat" area improvement);
- Kandalaksha (improvement of Kirovskaya Alley Street);
- Krasnoturyinsk (improvement of the Turya River waterways);
- Sayanogorsk (recreational space of three squares);
- Severouralsk (creation of the "Cultural Environment" space);
- Shelekhov (landscaping and infrastructure development of the Children's Play Park);
- Taezhny (landscaping and infrastructure development of the "Dream" Recreation and Leisure Park);
- Taishet (landscaping and infrastructure development of the Central City Park);
- Volgograd (reconstruction of the "Tractor" Stadium).

Total budget of the projects amounted up to RUB826 million. It got possible thanks to the Company's financial support allocated for the project concept development, application preparation and further submission to the All-Russian Competition for the Best Projects creating Comfortable Urban Environment in Small Cities and Heritage Settlements, and in the Krasnoyarsk Regional Competition for the "Best Projects Creating Comfort Urban Environment".

In order to scale up this successful experience, a social project management sub-program **"RUSAL's Territory: New Tools for the Development of Urban Infrastructure"** was launched with the purpose of supporting municipal initiatives aimed at participating in government programs for communal, social and tourist infrastructure development.

RUSAL's financial support (providing up to RUB15 million per municipalities with less than 50 thousand people, and up to RUB30 million per municipalities with more than 50 thousand people) will be directed to help developing design and budget estimate documentation and architectural concepts for improvement projects, as well as to co-fund the project implementation.

2. "Helping is Easy" program for driving the corporate and citywide volunteer movement

The program provides for grant competitions and cross-regional volunteer projects. In 2021, as part of the program implementation, the following initiatives took place.

- **"Helping is Easy" grant competition for volunteer initiatives** with a total grant fund allocated exceeding RUB5.1 million and partnership co-funding at RUB4 million. As a result of the competition, the financial support was directed to 60 projects from 14 cities and areas where the Company operates.
- **"Green Wave" grant competition for environmental volunteering projects** with a total grant fund allocated exceeding RUB3.9 million. As a result of the competition, the financial support was granted to 44 projects from 22 settlements and areas where the Company operates.
- **A series of local fundraising events** like e.g. the Help-Games campaign (Novokuznetsk), the Global Jam campaign (Kamensk-Uralsky), etc. with participation of the Company's employees, local educational institutions, active citizens and business community.
- **"Green Wave" city environmental action** with involvement of approx. 600 corporate volunteers and active citizens who planted more than 1,300 trees in total.
- **"River Day" corporate environmental action** to have cleaned up riversides nearby 10 Russian cities and settlements (Achinsk, Kamensk-Uralsky, Krasnoturyinsk, Krasnoyarsk, Novokuznetsk, Sayanogorsk, Severouralsk, Shelekhov, Tayezhny, and Volgograd) and ensured separate collection of 4 tonnes of waste with further recycling of approx. 90% of those.
- **"Time to Help" corporate new year's action** that involved approx. 400 corporate volunteers (61 teams) who run 130 corporate charity events offline and online in social institutions under the Company's patronage in 15 cities of Russia, as well as online charity game.

On top of that, the concept of the corporate volunteering program has been updated during 2021; based on the Company volunteers' feedback, a program to upgrade their competencies, a special section on the RUSAL's internal portal, and the corporate identity of the "RUSAL Volunteer" brand are being developed.

3. "Leaders of Urban Change" Training and Development Program

The program provides for the training and development of urban change leaders in the field of social and business project management, corporate volunteering, urban environment development, as well as holding their cross-regional convents.

During 2021, five online modules were developed in the areas of Social Project Management, Social Entrepreneurship, Corporate Volunteering, Communities and Public Spaces, and the Time for Eco Actions. 712 students attended the online modules with 20 of them having passed final assessment and certified for advanced competencies.

The core event of the "Leaders of Urban Change" program has been Project Intensive "We create. We implement. We evaluate". In 2021, the intensive module was held online with attendance by the federal-level experts and top managers from both sides, expansion of the geography to 60 cities and towns, and coverage of 350 potential applicants for grant competitions representing all the Russian cities where the Company operates.

4. Targeted Charity Projects

In 2021, as part of the targeted projects, the assistance was provided to numerous infrastructure projects with a total amount of RUB356.6 million under the agreements on socio-economic cooperation, including but not limited to reconstruction of the Metallurgists Park in Bratsk, reconstruction of educational and cultural institutions in Khakassia, Achinsk, Kamensk-Uralsky and Novokuznetsk, creation of children's playgrounds in Novokuznetsk, Shelekhov and Sharypovo district of Krasnoyarsk territory, etc.

On top of this, following the decisions of the Company's Committee for Social Policy, support was offered to recipients in the areas of healthcare, culture and sports, ecology, social assistance and support, education and science.

The total amount of finance allocated by the Company for social investment and charitable projects exceeded USD45 million in 2021.

06

Management discussion and analysis

MANAGEMENT DISCUSSION AND ANALYSIS

Overview of Trends in the Aluminium Industry and Business Environment

Metals segment review

Current situation on the market is largely affected by various sanctions imposed. In present circumstances any forecast or outlook made or previously made may very rapidly become irrelevant due to ongoing developments on the market and therefore the stakeholders should exercise due caution when making their analysis or decision. The analysis below is reffering to the situation as of the end of 2021.

Global aluminium demand

In 2021, global primary aluminium demand grew by 8.8% year-on-year to 69.0 million tonnes. In the Rest of the World ("RoW") demand increased by 12.8% to 28.6 million tonnes, while demand in China increased by 6.1% to 40.4 million tonnes. Demand in China was suppressed in August to November due to power rationing policy, but rebounded strongly in December amid normalization of power supply.

Regardless, the global manufacturing sector ended 2021 on a positive note. The Global manufacturing PMI rose for three consecutive months and in December settled at a respectable 54.2.

Global aluminium demand in construction, the largest segments of aluminium end-use, grew in 2021 by 5% compared to the previous year and by 3% compared to pre-COVID 2019. The European construction sector has been supported by government stimulus packages and showed strength in late 2021 despite material supply issues. The US construction sector was supported by low mortgage rates, driving demand across the residential sector. In June, President Joe Biden signed a USD1.2 trillion infrastructure bill to be invested over the next eight years. China's construction sector showed a sharp decline in the second half of 2021. Pressure on developers to de-leverage-particularly from the government's Three Red Lines policy-has led to serious financial problems at Evergrande and other development companies.

Aluminium demand in the transportation sector, the second largest end-consuming segment, grew by 10% compared to 2020 levels, but at the same time remained 4% lower in comparison with 2019. Global semiconductors shortage forced OEM's to reduce their planned vehicle output in 2021. As per analyst consensus, approximately 8 million cars have not been produced or deferred in 2021 due to the semiconductor chip shortage. Many OEMs prioritized production of more expensive models, including EVs, in order to make up for material shortages and secure revenue. BEV and Plug-In-Hybrids global sales grew over 70% in 2021, while China electric vehicle sales surged 154%. The majority of global OEM's have committed to achieving carbon neutrality, increasing BEV and hybrids in their portfolios. This trend reinforces aluminium usage in automotive, boosting further lightweighting and implementing new applications such as the battery tray.

The aerospace sector has also shown clear signs of a recovery. Key aircraft manufacturers, namely Airbus and Boeing, released their annual orders and deliveries for 2021, showing strong growth in aircraft deliveries of 8% and 117%, respectively.

The packaging sector remains a bright spot in aluminium demand growth. Having not contracted in demand in 2020, the segment grew another 9% in 2021. Beverage brands continue to position new drinks in aluminium cans as environmentally friendly, targeting sustainability-conscious consumers as well as carbon neutrality. The growing demand in the aluminium packaging segment is also evidenced by the fact that the largest can manufacturers are actively investing in expanding production capacities across the world.

Finally, aluminium demand in the power sector grew by 7% compared to 2020. Global trends in decarbonization and the green energy transition has stimulated investment into renewable energy to address climate change. According to preliminary IEA data, additions of renewable power capacity set another annual record in 2021, adding almost 290GW, driven by solar PV. This is 3% higher than 2020's already exceptional growth. Solar PV alone accounts for more than half of all renewable power expansion in 2021, followed by wind and hydropower. The majority of solar panels are fitted with aluminium frames, which provide mounting attachment points and protection for the edges of the glass laminate. In rooftop and commercial applications, mounting systems for PV panels are also made of aluminium to ensure lightweight and durability.

Global aluminium supply, inventories and premiums

The worldwide supply of primary aluminium continued to grow in 2021, increasing by 3.9% year-on-year to 67.8 million tonnes. At the same time, RoW production increased by only 2.8% to 28.9 million tonnes. High gas prices in Europe have caused significant disruption to the aluminium smelting production due to smelters' negative cash margins. Nine European smelters with 1.46 million tonnes per annum capacity executed or announced ~ 720 thousand tonnes per annum of operating aluminium capacity cuts starting from the fourth quarter of 2021, which is equal to ~ 14.4% of total installed aluminium capacity in the region (~ 5.02 million tonnes per annum). This has triggered a strong growth in EU aluminium ingot premiums which rose by 33% on average over Nov-Dec 2021 period.

Regional premiums remained strong and elevated with Midwest Al premium reaching levels above 27.6 cents/lb and EU DU premium – above USD250/tonne. This growth occurred against the backdrop of sellers raising quotations on expectations that the premium will continue to climb in line with strong physical demand and in anticipation of possible further smelting disruptions in Europe following a significant rise in the cost of power.

Supply growth in China slowed significantly from 7.4% in nine month of 2021 to 4.7% for the full year 2021, and the resulting supply in China was 39.0 million tonnes. Despite easing of power supply tightness in China and a drop in domestic thermal coal prices, significant smelting capacity cuts are still in place due to power constraints in some provinces and dual control for decarbonization targets. As a results, Chinese primary aluminium production fell steadily since July 2021.

Chinese unwrought aluminium and semis exports continued to recover during the fourth quarter of 2021 and numbers for the full year 2021 demonstrate strong growth of 15.6% year-on year to 5.6 million tonnes. This result was largely due to attractive export arbitrage and rising overseas demand. At the same time Chinese import of unwrought aluminium and products, which include primary metal and unwrought, alloyed aluminium, was 3.2 million tonnes in 2021, a new record high and up from 2.7 million tonnes in 2020.

During 2021, aluminium inventories were mostly falling starting from March, with total LME stocks staying below 0.9 million tonnes at the end of the year. Metal held outside of LME warehouses (off-warrant reported stocks) fell to 447 thousand tonnes by the end of November 2021.

Overall, the global market recorded a deficit of 1.2 million tonnes in 2021 compared to 1.9 million tonnes of surplus observed during the same period of 2020.

RUSAL's Aluminium Production Results

The Group's primary aluminium production for the year ended 31 December 2021 was stable as compared to the previous year and totaled 3,764 thousand tonnes.

Production facility (thousand tonnes)	Share (%)	Year ended 31 December		Changes as compared to the previous year (%)
		2021	2020	
Russia (Siberia)				
Bratsk Aluminium Smelter	100%	1,009	1,004	0.5%
Krasnoyarsk Aluminium Smelter	100%	1,019	1,020	(0.2%)
Sayanogorsk Aluminium Smelter	100%	536	529	1.4%
Novokuznetsk Aluminium Smelter	100%	215	215	(0.1%)
Irkutsk Aluminium Smelter	100%	424	422	0.4%
Khakas Aluminium Smelter	100%	303	308	(1.3%)
Taishet Aluminium Smelter	100%	0	0	0.0%
Russia (other than Siberia)				
Kandalaksha Aluminium Smelter	100%	63	70	(10.1%)
Volgograd Aluminium Smelter	100%	70	70	0.8%
Nadvoitsy Aluminium Smelter	100%			
Other countries				
KUBAL (Sweden)	100%	124	117	5.8%
Total RUSAL		**3,764**	**3,755**	**0.2%**

Production

- BrAZ, NkAZ, IrkAZ and VgAZ continued pot retrofitting switching them to the Green Soderberg technology. 368 pots were switched to this technology in 2021. Totally, 1,009 pots were switched to the Green Soderberg.
- The Taishet Aluminium Smelter was opened in the mode of complex testing (the designed output of the first startup complex is 428.5 thousand tonnes per annum of aluminium).
- Anode baking furnace No. 3 with the designed capacity of 182.5 thousand tonnes per annum was put into operation after its full retrofitting in accordance with the RIEDHAMMER technology at JSC RUSAL Sayanogorsk in September 2021.
- Three dry gas treatment centers (2 at BrAZ, 1 at NkAZ) were commissioned in 2021. 16 dry GTCs were put into operation since the start of retrofitting.

Energy efficiency

- 119 energy efficient pots of various types were commissioned at smelters of the Aluminium Division in 2021.
- By implementing energy-saving actions at smelters of the Aluminium Division, the specific total energy consumption in 2021 reduced by 470 kWh/tonne as compared to 2013 (the year when the projects were initiated).

Mechanization and automation

- The Digitalization Program was continued: a uniform automated system of casting production management is being implemented at 4 smelters; RUSAL Taishet started

pilot operation of a new information and process system for the reduction area; RUSAL Sayanogorsk put into operation a new unified system for the chemical analysis laboratory, an operator control system is being implemented at power facilities, a unified comprehensive system of production control is being developed; RUSAL Anode Plant implements the Digital Factory project.
- The smelters implement an automated system of equipment maintenance and repair (TORO).

Health, safety and environment

- In 2021, a global transformation was commenced at the Siberian aluminium smelters (RUSAL Krasnoyarsk, RUSAL Bratsk, branch of RUSAL Bratsk in Shelekhov, and RUSAL Novokuznetsk), during which it is planned to create new productions using the baked anode technology and furnished with advanced and environment-friendly RA-550 pots developed by RUSAL. The project is planned for 10 years.
- Following the audits conducted by the certification body DNV-GL in 2021, the current environmental management system of the Aluminium Division's smelters was recognised compliant with the requirements of ISO 4001:2015.
- As part of the Aluminium Stewardship Initiative, RUSAL Kandalaksha was certified in accordance with the ASI Performance Standard and ASI Chain of Custody Standard in 2021; previously, such certification was successfully passed by the branch of RUSAL Bratsk in Shelekhov, RUSAL Bratsk, RUSAL Krasnoyarsk, RUSAL Sayanogorsk, Boguchany Aluminium Smelter and KUBAL. It is planned to certify other smelters by the end of 2024.
- In 2021, in accordance with the certification plan of RUSAL Krasnoyarsk, RUSAL Novokuznetsk, RUSAL Sayanogorsk and RUSAL Volgograd, the certification was confirmed for the health and safety management system in compliance with the updated version of international standard ISO 45001:2018.

Alumina Production Results

RUSAL's total alumina output was 8,182 thousand tonnes in 2020 and 8,304 thousand tonnes in 2021. The increase in the production output by 1.5% occurred due to PGLZ becoming a part of RUSAL and working for the entire reporting period, increase in Nikolaev Alumina Refinery production capacities, normalization of production processes at Achinsk Alumina Refinery, Urals Alumina Refinery and Queensland Alumina Ltd.

Calculated based on the proportional share of the Company (and its subsidiaries) in respective alumina refineries.

Asset (thousand tonnes)	Share (%)	Year ended 31 December		Change compared with the previous year (%)
		2021	2020	
Ireland				
Aughinish Alumina Refinery	100%	1,878	1,883	(0.2%)
Jamaica				
Windalco (Ewarton plant)	100%	448	523	(14.4%)
Ukraine				
Nikolaev Alumina Refinery	100%	1,769	1,725	2.6%
Italy				
Eurallumina	100%	–	–	–
Russia				
Bogoslovsky Alumina Refinery	100%	977	990	(1.4%)
Achinsk Alumina Refinery	100%	907	900	0.8%

Asset (thousand tonnes)	Share (%)	Year ended 31 December		Change compared with the previous year (%)
		2021	2020	
Urals Alumina Refinery	100%	917	916	0.1%
Boksitogorsk Alumina Refinery	100%	–	–	–
PGLZ Alumina Refinery	100%	253	67	279.3%
Guinea				
Friguia Alumina Refinery	100%	414	439	(5.7%)
Australia (JV)				
Queensland Alumina Ltd.[15]	20%	742	740	0.3%
Total production output		**8,304**	**8,182**	**1.5%**

Key factors that affected the Group's performance indicators:

- **Achinsk Alumina Refinery.** Various equipment efficiency and reliability improvement programs are being implemented at the facility. Procurement of a dismantling robot and high-pressure unit for cleaning of pipelines and tanks allowed to perform work in high-risk areas safely and to a high standard of quality. Optimization of work processes in most of areas, such as raw materials shop, sintering and hydrochemistry shop reduced risks of deviations from process indicators. At the end of 2021, an area for production of a high-dispersive precipitated aluminium hydroxide (VOGA) was launched at the plant where a technology is being elaborated to obtain a new product with a high added value.
- **Bogoslovsky Alumina Refinery.** To ensure the current level of alumina production, worn precipitation equipment is replaced by more efficient and modern equivalents – six new precipitators were commissioned in 2021. A project on the use of an active seed in the precipitation area was completed. The operation reliability of equipment at the unit of mud pumps and grinding mills was improved. Cooling of spent liquors improving efficiency of the precipitation process was implemented.
- **Urals Alumina Refinery.** A steam separation scheme was upgraded on autoclave train No. 4 from two- to three-fold by replacing the last autoclave by a separator. The project is ongoing as to arranging a closed-loop water circulation system, it is scheduled to be completed in 2022. Technical re-equipping of a boiler unit at the boiler and turbine shop was carried out. The operation efficiency of the coarse crushing unit, control filtration, seed filtration unit was improved. A project on improving the frequency of red mud washing at area No. 8 from 4 to 5 washers was implemented thus allowing to reduce specific consumption of soda products introduced into the process from 164 kg/t in 2020 to 153 kg/t.
- **Nikolaev Alumina Refinery.** In 2021, the hydrate slurry intermediate cooling was replaced. To reduce the emission of process dust into the atmosphere, the hardware-process scheme of fluidized bed calciner No. 1, which will be replicated in future on the remaining calciners, was reconstructed in the aluminium hydroxide calcination area. In the digestion area, the ingress of process effluents into the process was eliminated in order to optimize it and ensure efficient operation.
- **Aughinish Alumina Refinery.** Taking into account the cost of energy resources, as well as to reduce greenhouse gas emissions, a number of projects was implemented at the plant in 2021 to reduce energy consumption that allowed to cut specific energy consumption from 9.8 GJ/t in 2020 down to 9.4 GJ/t. Environmental projects were also being implemented at the plant enabling the reduction of the environmental impact of production. A program on replacing outdated electrical equipment at the plant was carried out.
- **Friguia Mine & Refinery.** To support the technology and stabilize the process, process equipment is being upgraded and repaired. In 2021, a capital overhaul of boiler No. 5 was completed, turbine generator No. 4 was replaced, electric filters of calciner No. 1 were reconstructed, a new evaporation train was put

[15] Proportional share in the production output attributed to RUSAL.

into operation. Unstable operation of the combined heat and power plant (CHP), as well as unsatisfactory technical condition of boilers Nos. 1 and 2 and grinding mills resulted in a decrease in production in 2021. Therefore, mills Nos. 1 and 2 were completely replaced by new ones, and boiler No. 1 was disconnected for capital overhaul. Capital overhauls of boilers Nos. 1 and 2 will be carried out in 2022–2023.

Windalco

- **Windalco.** To support and restore production capacities of the plant, the following measures were implemented: replacement of the main electrically-driven oil pump on turbine generator No. 3, replacement of an air heater of boiler No. 3, installation of a vibration monitoring system on turbine generator No. 1, capital overhaul of turbines Nos. 1 and 3, as well as boiler No. 2 was carried out. Long downtime of power-generating equipment for capital overhauls, as well as bauxite quality degradation from the design one caused a decrease in production in the reporting period.

Bauxite Production Results

Results of bauxite mining

RUSAL's total bauxite mining volume[16] in 2021 was 15,031 thousand tonnes compared to 14,838 thousand tonnes in 2020.

An increase in mining of own bauxites occurred due to the increased demand of end-users.

An insignificant reduction in mining volumes occurred only at CBK, the remaining facilities exceeded their indicators in the previous year.

A reduction in mining at CBK occurred due to a reduction in volumes of rail transportation due to an accident at the beginning of the year.

The most notable increase of the bauxite mining volumes occurred at Friguia and Dian-Dian mines.

The table below shows the contribution of each facility.

Bauxite mines (thousand tonnes of wet raw materials)	Share (%)	Year ended 31 December		Change compared with the previous year (%)
		2021	2020	
Jamaica				
Windalco (Ewarton)	100%	1,863	1,752	6.4%
Russia				
North Urals (SUBR)	100%	2,274	2,260	0.6%
Bauxite of Timan	100%	3,405	3,310	2.9%
Guinea				
Friguia	100%	1,544	1,423	8.5%
Kindia	100%	2,652	2,941	(9.8%)
Dian-Dian	100%	3,293	3,071	7.3%
Guyana				
Bauxite Company of Guyana Inc. (BCGI)	90%	0	81	(100.0%)
Total production		**15,031**	**14,838**	**1.3%**

16 Total bauxite mining volume:

- calculated based on the Company's proportional share in respective bauxite mines and mining complexes. Total production of a fully consolidated subsidiary of the Company – Bauxite Company of Guyana Inc. – was included in production indicators despite the fact that the minority share in each of such subsidiaries is owned by third parties;
- as wet weight (including moisture).

Key factors that affected the performance indicators:

- **Bauxite of Timan.** In 2020, an additional railway junction was built on the railway of Bauxite of Timan that allowed to increase monthly throughput of the railway branch. In April 2021, mining operations were started at quarry No. 4 of the Vezhayu-Vorykvinskoe deposit.
- **SUBR.** Underground start-up complexes at Kalyinskaya mine were constructed and commissioned:
  1. "Incline head minus 1,220 m (Stage II)";
  2. "Ore incline No. 2 from elevation minus 1,175 m to elevation minus 1,257 m with a dosing unit, ore cluster and sump pump station";
  3. Facility "MDK from level minus 1,040 m to level minus 1,250 m" was constructed and commissioned at Cheryemukhovskaya mine.
- **Dian-Dian.** An upgrade of a fleet of high-capacity dump trucks and procurement of new rail cars.
- All mines provided the demand rates of alumina refineries.
- Bauxite mining in Guyana was stopped at the end of 2019.

Ensuring the supply of high-quality bauxite in sufficient volumes and at competitive prices for alumina refineries is an important task for the Company. There is an exploration activity performed to find new bauxite deposits both at the Group's mining fields with bauxite deposits and at sites of new projects. Every mining asset of the Group is developed under one or more licenses.

As of 31 December 2021, the Group had bauxites in the amount of 1,897.9 million tonnes according to JORC (Mineral Resources and Ore Reserves, Australia), of which 584.5 million tonnes were measured, 714.5 million tonnes – identified reserves, and 598.9 million tonnes – indicated reserves.

Facility	Measured ore reserves, million tonnes	Identified ore reserves[1], million tonnes	Indicated ore reserves, million tonnes	Total ore reserves, million tonnes
Bauxite of Timan	9.6	152.4	6.4	168.5
North Urals Bauxite Mine (SUBR)	17.9	206.6	145.5	370.0
Compagnie des Bauxites de Kindia	30.2	35.8	20.4	86.3
Friguia Mine & Refinery	27.4	142.7	152.6	322.7
Bauxite Company of Guyana Inc.	0.0	38.0	44.2	82.2
Windalco[2]	46.8	36.4	0.0	83.2
Dian-Dian Project	452.6	102.6	229.8	785.0
Total	**584.5**	**714.5**	**598.9**	**1,897.9**

Notes:

(1) Mineral reserves:
- recorded on attributable basis in terms of 100% possession;
- accounted for on dry basis (without moisture).

The tonnage of mineral reserves includes the tonnage of ore reserves.

(2) Windalco resources include, in particular, 38.1 million tonnes under the license Kirkwine SML 161 that withdrawn by the Jamaican Ministry of Transport and Mining in 2019. RUSAL considered these actions illegal and challenged the withdrawal of license in court. The hearing took place in the middle of 2020. There are no changes in the status of the decision of the court so far.

Nepheline ore mining

RUSAL's total mining volume[17] of nepheline syenites in 2021 was 4,390 thousand tonnes compared to 4,599 thousand tonnes in 2020.

A reduction in mining volumes by minus 4.6% occurred due to the need for stabilizing the quality of ore shipped to the plant.

Nepheline mines (Achinsk) (thousand tonnes of wet raw materials)	Share (%)	Year ended on 31 December		Change compared with the previous year (%)
		2021	2020	
Kiya-Shaltyr Nepheline Mine	100%	4,390	4,599	(4.6%)
Total production		**4,390**	**4,599**	**(4.6%)**

Foil and packaging productions

In 2021, the Downstream Division produced 108.83 thousand tonnes of foil, which amounts to a 5.39 thousand tonnes or 5.2% increase from 2020. The domestic supply of plain foil, converted foil and tape increases by 19.37 thousand tonnes or 41.5 % due to the demand growth.

At the same time, the output of plain foil for export by the Downstream Division went down by 13.98 thousand tonnes or 24.6% compared with 2020, due to the redistribution of production capacities towards the domestic market.

Overall output of Ural Foil, Sayanal Foil and Sayanal grew by 6-17 % year-on-year as a result of equipment productivity and business processes efficiency improvement.

At the same time, Sayanal increased by 19.6% of high added value products – converted foil; the increase of high-margin plain thin foil output (thickness less than 9 μm) grew by 29% vs 2020.

The decrease of Armenal output by 1.99 thousand tonnes (5.5% vs 2020) is due to the more marginal thin foil share increase (average thickness went down by 0.6 μm or 4.3 % vs 2020). The latter is related to the diversification of sales markets.

Foil mills (thousand tonnes)	Interest	Year ended 31 December			Change year-on-year (%)
		2021	2020	dev.	
Domestic market (Russia and the CIS)		**66.02**	**46.65**	**19.37**	**41.5%**
Sayanal	100%	34.04	25.65	8.39	32.7%
including converted foil		12.68	10.60	2.08	19.6%
Ural Foil	100%	26.32	16.04	10.28	64.1%
Sayanal Foil	100%	5.66	4.96	0.70	14.1%
Export		**42.81**	**56.79**	**-13.98**	**-24.6%**
Sayanal	100%	5.22	11.38	-6.16	-54.2%
Ural Foil	100%	4.06	9.88	-5.82	-58.9%
Armenal	100%	33.54	35.53	-1.99	-5.6%
Total production		**108.83**	**103.44**	**5.39**	**5.2%**
including:					
Sayanal	100%	39.26	37.03	2.23	6.0%
Ural Foil	100%	30.38	25.92	4.46	17.2%
Sayana Foil	100%	5.66	4.96	0.70	14.1%
Armenal	100%	33.54	35.53	-1.99	-5.6%

17 Total production of nepheline syenites:

- specified as wet weight (including moisture).

Wheel business

Output, thousand wheels	Interest	Year ended 31 December			Change year-on-year, %
		2021	2020	dev	
Aluminium wheels		3,034	2,140	894	42%

After low base of 2020 wheel production increased by 42% in 2021 due to gradual recovery in new cars production and sales, as well as recovery in after-market demand for aluminium wheels

However, the impact of the COVID-19 pandemic on the industry remains significant, the global shortage of semiconductors led to temporary shutdowns of the main OEM-customers in Russia and redistribution of the wheels production structure towards after-market segment.

Other business

(thousand tonnes)	Year ended 31 December		Change year-on- year (%)
	2021	2020	
Secondary alloys	15.3	13.8	10.0%
Silicon	34.5	27.1	27.2%
Powders	30.3	22.4	34.9%
Coal (50%)	22,316	21,669	3.0%
Transport (50%) (thousand tonnes of transportation)	1,371	2,815	(51.3%)

Secondary alloys

The amount of dross and aluminium-containing waste that is converted into secondary aluminium increased in 2021 by 1.4 thousand tonnes or 10% from the previous year due to the growth of the volume of waste received for processing from the Company’s enterprises.

Powder production

Powder production volumes in 2021 increased compared to 2020 due to the recovery of the European economy after the recession due to COVID-19 restrictions in 2020, as well as the increased use of aerated concrete in residential construction.

Downstream projects

One of the key activities of the Directorate for new projects is the search for, development and implementation of projects aimed at establishment of new productions in order to increase consumption of aluminium and alloys in upstream and other sectors. The key facilities for implementation of new projects are mothballed plants:

- Bogoslovsk Cable Plant LLC (BKZ) is a joint venture for the production of cable and wire products in Krasnoturinsk, founded in December 2016. Since April 2017, BKZ has been a resident of the priority social and economic development area.

In 2021, new types of cabling and wiring products were put into production: PARMA wire, ELKAPOWER wire and 90-degree temperature index oil-submersible cable.

- The implementation of the project for the manufacture of aluminium radiators for house heating is underway at the industrial site of the Nadvoitsy Aluminium Smelter. The project is implemented in the form of a joint venture with ELSO group of companies (50/50). The facility is the resident of the Priority Social and Economic Development Area in the Republic of Karelia.

  In 2021, 2050 thousand sections of finished product were manufactured (+45% compared to Actual 2020) in eight product ranges.

Coal production results

Coal production, which accounts for 50% of the Group's share in LLP Bogatyr Komir, increased by 2.99% to 22,316 thousand tonnes in 2021 from 21,669 thousand tonnes in 2020.

Transportation results

The volume of products transported by JV LLP Bogatyr Trans, in which the Company has a 50% share, decreased by 51.3% to 1,371 thousand tonnes in 2021 from 2,815 thousand tonnes in 2020 due to decrease in demand in Russia.

Information concerning usage of energy resources

The main activity of the Company is holding activities related to participation in the authorized capital of business entities operating in the field of bauxite and nepheline mining, alumina production, electrolytic production of primary aluminum, value-added aluminum products, including those associated with the management of these companies, and also financial activities.

Thus, due to the specifics of the Company's activities, it did not use energy resources in the reporting year.

At the same time, the activities of the Group companies may have an impact on the activities of the Company and the performance of its obligations with respect to securities, and therefore the description of the information on the usage of energy resources is given for the Group as a whole.

During the manufacture of products in 2021, RUSAL has used the following types of energy resources. As per the table below, the energy resources used in 2021 in physical and monetary terms are as follows:

	In physical terms	Tonnes of standard fuel	Cost, USD
Electrical energy, MWh	67,344,992.11	8,283,434.03	1,928,692,798.97
Heat energy, Gcal	812,418.76	116,062.14	13,985,505.89
Natural gas, thousand m^3	3,563,267.99	4,112,027.39	753,581,119.39
Motor petrol, tonnes	2,345.77	3,495.20	1,430,229.25
Kerosene, tonnes	136.15	200.14	78,841.61
Charcoal, tonnes	15,563.20	14,473.78	5,858,094.32
Diesel fuel, tonnes	99,496.84	144,270.42	74,012,918.49
Heating oil, tonnes	667,568.63	914,569.03	229,043,304.03
Coal, tonnes	3,556,837.66	2,303,896.10	88,152,151.45
Wood chips, tonnes	14,609.10	5,259.28	677,577.94
Liquefied propane and butane, tonnes	9,621.78	15,106.20	3,068,744.71
Coke, tonnes	17,695.16	17,518.21	3,536,072.65

Other energy sources such as atomic energy, electromagnetic energy, oil, oil shale, peat were not used by the Group as a whole.

FINANCIAL OVERVIEW

Revenue

	Year ended 31 December 2021			Year ended 31 December 2020		
	USD million	thousand tonnes	Average sales price (USD/tonne)	USD million	thousand tonnes	Average sales price (USD/tonne)
Sales of primary aluminium and alloys	9,966	3,904	2,553	7,088	3,926	1,805
Sales of alumina	610	1,677	364	533	1,729	308
Sales of foil and other aluminium products	515	–	–	381	–	–
Other revenue	903	–	–	564	–	–
Total revenue	**11,994**			**8,566**		

Total revenue increased by USD3,428 million or by 40.0% to USD11,994 million in 2021 compared to USD8,566 million in 2020.

	Six months ended 31 December		Change half-year on half-year, % (2H to 2H)	Six months ended 30 June 2021	Change half-year on half-year, % (2H to 1H)	Year ended 31 December		Change year-on-year, %
	2021 (unaudited)	2020 (unaudited)		(unaudited)		2021	2020	
Sales of primary aluminium and alloys								
USD million	5,392	3,770	43.0%	4,574	17.9%	9,966	7,088	40.6%
thousand tonnes	1,904	2,036	(6.5%)	2,000	(4.8%)	3,904	3,926	(0.6%)
Average sales price (USD/tonne)	2,832	1,852	52.9%	2,287	23.8%	2,553	1,805	41.4%
Sales of alumina								
USD million	334	291	14.8%	276	21.0%	610	533	14.4%
thousand tonnes	847	953	(11.1%)	830	2.0%	1,677	1,729	(3.0%)
Average sales price (USD/tonne)	394	305	29.2%	333	18.3%	364	308	18.2%
Sales of foil and other aluminium products (USD million)	283	203	39.4%	232	22.0%	515	381	35.2%
Other revenue (USD million)	536	287	86.8%	367	46.0%	903	564	60.1%
Total revenue (USD million)	**6,545**	**4,551**	**43.8%**	**5,449**	**20.1%**	**11,994**	**8,566**	**40.0%**

Revenue from sales of primary aluminium and alloys increased by USD2,878 million, or by 40.6%, to USD9,966 million in 2021, as compared to USD7,088 million in 2020, primarily due to 41.4% increase in the weighted-average realized aluminium price per tonne (to an average of USD2,553 per tonne in 2021 from USD1,805 per tonne in 2020) driven by an increase in the LME aluminium price (to an average of USD2,475 per tonne in 2021 from USD1,702 per tonne in 2020), while sales volumes remained almost flat in the compared periods.

Revenue from sales of alumina increased by 14.4% to USD610 million for the year ended 31 December 2021 from USD533 million for the year ended 31 December 2020 due a increase in the average sales price by 18.2% which was partially offset by a 3.0% decrease in the alumina sales volume.

Revenue from sales of foil and other aluminium products increased by USD134 million, or by 35.2%, to USD515 million in 2021, as compared to USD381 million in 2020, due to an increase in revenue from sales of aluminium wheels by 58.6% together with an increase in sales of foil by 28.3% between the comparable periods.

Revenue from other sales, including sales of other products, bauxite and energy services increased by 60.1% to USD903 million for the year ended 31 December 2021 as compared to USD564 million for the previous year, due to a 54.3% increase in sales of other materials that was a result both by the increase in sales volumes along with the increase in average sales price.

Cost of sales

The following table demonstrates the breakdown of RUSAL's cost of sales for the year ended 31 December 2021 and 2020, respectively:

(USD million)	Year ended 31 December		Change year-on-year, %	Share of costs, %
	2021	2020		
Cost of alumina	741	608	21.9%	9.0%
Cost of bauxite	506	447	13.2%	6.1%
Cost of other raw materials and other costs	3,387	2,298	47.4%	40.9%
Purchases of primary aluminium from JV	696	465	49.7%	8.4%
Energy costs	2,070	1,868	10.8%	25.0%
Depreciation and amortisation	572	542	5.5%	6.9%
Personnel expenses	618	512	20.7%	7.5%
Repairs and maintenance	407	381	6.8%	4.9%
Net change in provisions for inventories	28	(2)	NA	0.3%
Change in finished goods	(752)	(7)	10,642.9%	(9.0%)
Total cost of sales	**8,273**	**7,112**	**16.3%**	**100.0%**

Total cost of sales increased by USD1,161 million, or by 16.3%, to USD8,273 million for the year ended 31 December 2021, as compared to USD7,112 million for the year ended 31 December 2020. The dynamic was predominantly driven by the increase in alumina and other raw material prices, average electricity and transportation tariffs.

The finished goods mainly consist of primary aluminium and alloys (app.95%). The dynamic of change between the reporting periods was driven by the fluctuations of primary aluminium and alloys physical inventory between the reporting dates: 96.9% increase in 2021 and 2.6% increase in 2020.

Gross profit

As a result of the foregoing factors, RUSAL reports a gross profit of USD3,721 million for the year ended 31 December 2021 as compared to USD1,454 million for the year ended 31 December 2020, representing gross margins over the periods of 31.0% and 17.0%, respectively.

Adjusted EBITDA and Results from operating activities

(USD million)	Year ended 31 December		Change year-on-year, %
	2021	2020	
Reconciliation of Adjusted EBITDA			
Results from operating activities	2,079	279	645.2%
Add:			
Amortisation and depreciation	596	570	4.6%
Impairment of non-current assets	209	9	2,222.2%
Loss on disposal of property, plant and equipment	9	13	(30.8%)
Adjusted EBITDA	**2,893**	**871**	**232.1%**

Adjusted EBITDA, defined as results from operating activities adjusted for amortisation and depreciation, impairment charges and loss on disposal of property, plant and equipment, increased to USD2,893 million for the year ended 31 December 2021, as compared to USD871 million for the year ended 31 December 2020. The factors that contributed to the increase in Adjusted EBITDA margin were the same that influenced the operating results of the Company.

Finance income and expenses

(USD million)	Year ended 31 December		Change year-on-year, %
	2021	2020	
Finance income			
Interest income on third party loans and deposits	43	33	30.3%
Dividends from other investments	20	–	100.0%
Foreign exchange gain	–	118	(100.0%)
	63	**151**	**(58.3%)**
Finance expenses			
Interest expense on bank loans and company loans,	(359)	(450)	(20.2%)
bonds and other bank charges, including			
Interest expense	(329)	(417)	(21.1%)
Bank charges	(30)	(33)	(9.1%)
Change in fair value of derivative financial instruments, including:	(352)	(226)	55.8%
Change in fair value of embedded derivatives	21	(17)	NA
Change in other derivatives instruments	(373)	(209)	78.5%
Net foreign exchange loss	(29)	–	100.0%
Interest expense on provisions	(8)	(3)	166.7%
Revaluation of investments measured at fair value through profit and loss	(47)	–	100.0%
Other finance costs	–	(2)	(100.0%)
Lease interest cost	(5)	(9)	(44.4%)
	(800)	**(690)**	**15.9%**

Finance income decreased by USD88 million, or 58.3% to USD63 million for the year ended 31 December 2021 compared to USD151 million for the year ended 31 December 2020 primarily due to the net foreign exchange loss in 2021 as compared to the net foreign exchange gain in 2020.

Finance expenses increased by USD110 million or by 15.9% to USD800 million in 2021 as compared to USD690 million in 2020 primarily due to the reason described above as well as an increase in net loss from change in fair value of derivative financial instruments in 2021 due to strong appreciation in prices for the metal hedged which were offset by a 20.2% decrease of interest expense and other bank charges.

Share of profits of associates and joint ventures

(USD million)	Year ended 31 December		Change year-on-year, %
	2021	2020	
Share of profits of Norilsk Nickel,	1,762	930	89.5%
with Effective shareholding of	*26.39%*	*27.82%*	
Share of profits of associates	**1,762**	**930**	89.5%
Share of profits of joint ventures	**45**	**46**	(2.2%)

The Company's share in profits of associates for the years ended 31 December 2021 and 2020 amounted to USD1,762 million and USD930 million, respectively. Share in results of associates in both periods resulted primarily from the profit from the Company's investment in Norilsk Nickel.

The market value of the investment in Norilsk Nickel at 31 December 2021 was USD12,395 million as compared to USD14,123 million as at 31 December 2020.

Share of profits of joint ventures was USD45 million for the year ended 31 December 2021 as compared to USD46 million for the same period in 2020. This represents the Company's share of profits in joint ventures, namely BEMO, LLP Bogatyr Komir and Mega Business and Alliance (coal and transportation business in Kazakhstan).

Profit before income tax

RUSAL earned a profit before income tax in an amount of USD3,641 million for the year ended 31 December 2021, as compared to a profit before income tax in an amount of USD716 million for the year ended 31 December 2020 due to reasons set out above.

Income tax

The Company recognized income tax expense in amount of USD416 million in 2021 as compared to income tax credit in amount of USD43 million in 2020.

Income tax expense for the current period is driven by sharp appreciation of LME price through the year and consequent effect on taxable profits.

Income tax credit for the previous period was primarily driven by recognition of deferred tax asset on taxable losses incurred by various Group companies following the deterioration of market environment in the second quarter of 2020.

Current tax expenses increased by USD296 million, or 688.4%, to USD339 million for the year ended 31 December 2021, as compared to USD43 million for the previous year due to the reason mentioned above.

The Company recognized deferred tax expenses in amount of USD77 million in 2021 as compared to deferred tax benefit in amount USD86 million for the previous year primarily due to realisation of deferred tax asset related to tax losses incurred by various Group companies.

Profit for the period

As a result of the above, the Company recorded a profit of USD3,225 million in 2021, as compared to USD759 million in 2020.

Adjusted and Recurring Net Profit

(USD million)	Six months ended 31 December 2021 (unaudited)	Six months ended 31 December 2020 (unaudited)	Change half-year on half-year, % (2H to 2H)	Six months ended 30 June 2021 (unaudited)	Change half-year on half-year, % 2H to 1H)	Year ended 31 December 2021	Year ended 31 December 2020	Change year-on-year, %
Reconciliation of Adjusted Net Profit								
Net profit for the period	1,207	883	36.7%	2,018	(40.2%)	3,225	759	324.9%
Adjusted for:								
Share of profits and other gains and losses attributable to Norilsk Nickel, net of tax effect	(638)	(943)	(32.3%)	(1,124)	(43.2%)	(1,762)	(930)	89.5%
Change in the fair value of derivative financial liabilities, net of tax (20%)	134	225	(40.4%)	222	(39.6%)	356	222	60.4%
Impairment/(reversal of impairment)/ of non-current assets, net of tax	154	(42)	NA	55	180.0%	209	9	2,222.2%
Gain from partial disposal of investment in associate	**–**	**–**	**0.0%**	**(492)**	**(100.0%)**	**(492)**	**–**	**100.0%**
Adjusted Net Profit	**857**	**123**	**596.7%**	**679**	**26.2%**	**1,536**	**60**	**2,460.0%**
Add back:								
Share of profits of Norilsk Nickel, net of tax	638	943	(32.3%)	1,124	(43.2%)	1,762	930	89.5%
Recurring Net Profit	**1,495**	**1,066**	**40.2%**	**1,803**	**(17.1%)**	**3,298**	**990**	**233.1%**

Adjusted Net Profit/(Loss) for any period is defined as the net profit/(loss) 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 non-current assets impairment. Recurring Net Profit/(Loss) for any period is defined as Adjusted Net Profit/(Loss) plus the Company's net effective share in Norilsk Nickel results.

Assets and liabilities

RUSAL's total assets increased by USD3,528 million, or 20.3%, to USD20,906 million as at 31 December 2021 as compared to USD17,378 million as at 31 December 2020. The increase in total assets was driven primarily by the increase in property, plant and equipment, inventories, trade and other receivables and advances paid and dividends receivable.

Total liabilities decreased by USD453 million, or 4.2%, to USD10,382 million as at 31 December 2021 as compared to USD10,835 million as at 31 December 2020 mainly due to the decrease in the Company's outstanding financial debts.

Cash flows

The Company generated net cash from operating activities of USD1,146 million for the year ended 31 December 2021 as compared to USD1,091 million for the previous year driven by the same factors that led to the increase in Adjusted EBITDA between the comparable periods.

The Company generated USD490 million net cash from investing activities for the year ended 31 December 2021 as compared to USD128 million in the previous year primarily due to a proceeds from partial disposal of associate in amount USD1,421 million in 2021 as well as an increase by USD295 million in an acquisition of property, plant and equipment and an acquisition of intangible and a decrease by USD550 million of dividends from associates and joint ventures between the comparable periods.

Increase in the financing cash outflow to USD1,891 million for the year ended 31 December 2021 as compared to USD694 million for 2020 was primarily driven by an increase in net debt repayments in 2021.

Segment reporting

The Group has four reportable segments, as described in the Annual Report, which are the Group's strategic business units: Aluminium, Alumina, Energy and Mining and Metals. These business units are managed separately and results of their operations are reviewed by the General Director on a regular basis.

The core segments are Aluminium and Alumina.

(USD million)	Year ended 31 December			
	2021		2020	
	Aluminium	Alumina	Aluminium	Alumina
Segment revenue				
thousand tonnes	*3,590*	*7,554*	*3,702*	*7,844*
USD million	*9,102*	*2,649*	*6,666*	*2,310*
Segment result	2,817	(72)	733	(106)
Segment result margin	31.0%	(2.7%)	11.0%	(4.6%)
Segment EBITDA[18]	3,139	113	1,068	48
Segment EBITDA margin	34.5%	4.3%	16.0%	2.1%
Total capital expenditure	**(700)**	**(234)**	**(611)**	**(238)**

Key drivers for the increase in margin in the aluminium segment are disclosed in "Revenue", "Cost of sales" and "Adjusted EBITDA and results from operating activities" sections above. Detailed segment reporting can be found in the consolidated financial statements for the year ended 31 December 2021.

Capital expenditure

RUSAL recorded a total capital expenditure of USD1,192 million for the year ended 31 December 2021. RUSAL's capital expenditure in 2021 was aimed at maintaining existing production facilities.

(USD million)	Year ended 31 December	
	2021	2020
Development capex	399	398
Maintenance		
Pot rebuilds costs	143	120
Re-equipment	650	379
Total capital expenditure	**1,192**	**897**

[18] Segment EBITDA for any period is defined as segment result adjusted for amortisation and depreciation for the segment.

The BEMO project companies utilise the project financing proceeds to make necessary contributions to the ongoing construction projects and do not require contributions from the joint ventures partners at this time.

Consolidated financial statements

The following section contains the audited consolidated financial statements of RUSAL for the year ended 31 December 2021 which were reviewed by the Audit Committee, preliminary reviewed and noted by the Board of Directors of RUSAL (the "**Directors**") on 29 March 2022 and recommended for the shareholders' approval.

The full set of audited consolidated financial statements of RUSAL, together with the report of the independent auditor is available on RUSAL's website at: http://www.rusal.ru/en/investors/financial_stat.aspx.

Purchase, sale or redemption of RUSAL's listed securities

Neither the Company nor any of its subsidiaries repurchased, sold or redeemed any of their securities during the financial year ended 31 December 2021.

Code of Corporate Governance Practices

RUSAL adopted a corporate code of ethics that sets out RUSAL's values and principles for many of its areas of operations.

The Directors adopted a corporate governance code which is based on the Code on Corporate Governance Practices as set out in Appendix 14 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**Hong Kong Listing Rules**"). The Directors consider that save for code provision C.5.7* (physical board meetings at which Directors have material interests) and C.1.6* (attendance of Directors at annual general meeting), for reasons set out below and also on pages 91 to 92 of RUSAL's interim report for the six months ended 30 June 2021, RUSAL has complied with the provisions as set out in the Corporate Governance Code and Corporate Governance Report in Appendix 14 to the Hong Kong Listing Rules during the period from 1 January 2021 to 31 December 2021.

The Board of Directors of the Company (the "**Board**") endeavoured throughout the twelve-month period ended 31 December 2021 to ensure that it did not deal with business by the way of written resolution where a substantial shareholder of the Company or a Director had disclosed an interest in a matter to be considered by the Board which the Board determined to be material. As a result, there were only 2 occurrences (out of the 17 written resolutions the Board passed during the period) when urgent business was dealt with by the Board by way of written resolution where a material interest of a Director was stated to have been disclosed. In those instances, the material interest of the Director was a potential conflict of interest by virtue of the fact that the Directors also held offices in companies in the same group as the entities contracting with the Group.

On those occurrences, the written resolutions were passed by the requisite majority excluding the materially interested Directors.

Of the 6 Board meetings held in the twelve-month period ended 31 December 2021 where one or more Directors had disclosed a material interest, all the independent non-executive Directors were present at all 5 of the Board meetings held.

Of the 12 Board meetings held, there were 6 occasions where non-executive Directors might have a material interest in the transaction. On such occurrences, those non-executive Directors abstained from voting and the resolutions approving entry into such transactions were passed by the requisite majority excluding those non-executive Directors who might have a material interest.

Certain executive directors, non-executive directors and independent non-executive directors were unable to attend the Company's annual general meeting of shareholders and Company's extraordinary general meetings of shareholders held in 2021 due to conflicting business schedules.

Audit Committee

The Board established an Audit Committee to assist it in providing an independent view of the effectiveness of the Company's financial reporting process, risk management and internal control systems, and internal audit function, to oversee the audit process and to perform other duties and responsibilities as are assigned to the Audit Committee

* Note: The code provisions have been redesignated with effect from 1 January 2022.

by the Board. The Audit Committee is assisted by the Company's internal audit function which undertakes both regular and ad hoc reviews of risk management, internal controls and procedures, the results of which are reported to the Audit Committee. The Audit Committee consists of independent non-executive Directors. The members are as follows: Mr. Kevin Parker (chairman of the committee, independent non-executive Director), Ms. Anna Vasilenko (independent non-executive Director), Mr. Dmitry Vasiliev (independent non-executive Director) and Mr. Bernard Zonneveld (independent non-executive Director).

On 25 March 2022, the Audit Committee has reviewed the financial results of the Company for the year ended 31 December 2021.

Material Events Since the End of the Year

19 January 2022	Four additional production sites of RUSAL (The Kandalaksha aluminium smelter, two aluminium foil plants Sayanal and Armenal (Armenia) and Europe's largest alumina refinery Aughinish (Ireland)) achieved Aluminium Stewardship Initiative (ASI) certification. ASI certification aims at fostering better sustainability practices across the whole supply chain.
09 February 2022	RUSAL announced fourth quarter and full year 2021 operating results
10 February 2022	RUSAL introduced a new aluminium alloy for anodising. The Company developed an optimised 5xxx series aluminium alloy for further anodising. Production has now started at the Bratsk Aluminium Smelter (BrAZ).
17 February 2022	RUSAL completed the scheduled repayment of Eurobonds in the amount of USD512 million out of its own funds.
01 March 2022	RUSAL announced that due to unavoidable logistical and transport challenges on the Black Sea and surrounding area, it has been obliged to temporarily halt production at the Nikolaev Alumina Refinery located in Nikolaev Region, Ukraine.
20 March 2022	The Company noted that on 20 March 2022 the Australian government imposed an immediate ban on exports of alumina and aluminum ores, including bauxite, to Russia.
30 March 2022	RUSAL announced results for the year ended 31 December 2021.
8 April 2022	RUSAL disagreed that the operations of its subsidiary, Alumina & Bauxite Company Ltd (ABC), do not presently comply with the Australian Government's sanctions and disagreed with the decision made by QAL management that "step-in arrangements" under the joint venture terms have been triggered or that they are necessary.

Loans and Borrowings

The nominal value of the Group's loans and borrowings was USD4,266 million as at 31 December 2021, not including bonds, which amounted to an additional USD2,434 million.

Below is an overview of certain key terms of the selected facilities in the Group's loan portfolio as at 31 December 2021:

Facility/Lender	Principal amount outstanding as at 31 December 2021	Tenor/Repayment schedule	Pricing
Syndicated facilities			
PXF Facility 2019	USD995 million	Up to USD1.085 billion syndicated aluminium pre-export finance term facility – until November 2024 equal quarterly repayments starting from January 2022	3 month LIBOR plus 2.1% p.a.
PXF Facility 2021	USD200 million	Up to USD200 million syndicated aluminium pre-export finance term facility – until January 2024 equal quarterly repayments starting from April 2022	3 month LIBOR plus 1.7% p.a.
Taishet project financing	RUB23 billion	Up to RUB45 billion syndicated project finance facility – until December 2035, quarterly repayments starting from March 2023	Key rate of the Bank of Russia plus 3.15% p.a.

Facility/Lender	Principal amount outstanding as at 31 December 2021	Tenor/Repayment schedule	Pricing
Bilateral loans			
Bank Loan	USD375 million	2 tranches, the last repayment in November 2022, bullet repayment at final maturity date	2.15% – 2.25% p.a.
Bank Loan	USD2.1 billion RUB17.9 billion	December 2027, quarterly repayments starting from September 2024	3 month LIBOR plus 3.0% p.a. Key rate of the Bank of Russia plus 1.9% p.a.
Bonds			
Eurobond	USD512[1] million	February 2022, repayment at final redemption date	5.125% p.a.
Eurobond	USD482 million	May 2023, repayment at final redemption date	5.3% p.a.
Eurobond	USD498 million	February 2023, repayment at final redemption date	4.85% p.a.
RUB bonds	RUB70 billion, swapped into USD, for equivalent USD1.1 billion (after cross-currency swaps)	5 tranches, the last repayment is May 2030, repayments at final redemption dates, subject to bondholders' put option exercisable within 3.0-3.5 years	2.9% – 4.69% p.a. (after cross-currency swaps)

(1) In February 2022, Rusal completed the scheduled repayment of Eurobonds in the amount of USD512 million out of its own funds.

The average maturity of the Group's debt as at 31 December 2021 was 2.8 years.

Security

As of the date of this Annual Report, the Group's debt (save for several unsecured loans and bonds) is secured, among others, by assignment of receivables under specified contracts, certain pledges of shares and interest of a number of the Group's subsidiaries, designated accounts, shares in Norilsk Nickel (representing 25% +1 share of Norilsk Nickel's total nominal issued share capital).

Key events

On 28 January 2021, RUSAL signed the sustainability-linked pre-export finance facility for an amount of up to USD200 million. Following the success of the first Russian sustainability-linked syndicated pre-export finance facility arranged in 2019 by international and Russian banks, RUSAL continues to pursue its ambitious decarbonization goals. The group of international banks continues to support the Company in its aim to develop low-carbon aluminium technologies and sustainable aluminium production. The interest rate under the facility is subject to a sustainability discount or premium depending on the Company's fulfillment of the applicable key performance indicators which will be further agreed between the parties. The proceeds were used to refinance more expensive debt.

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 the total assets, as at 31 December 2021 was 32.2% (as at 31 December 2020 – 44.8% as at 31 December 2019 – 46.3%, as at 31 December 2018 – 52.5%, as at 31 December 2017 – 53.8%).

Return on Equity

The Group's return on equity, which is the amount of net profit as a percentage of total equity, as at 31 December 2021 was 30.6% (as at 31 December 2020 – 11.6%, as at 31 December 2019 – 14.2%, as at 31 December 2018 – 32.6%, as at 31 December 2017 – 27.5%).

Interest Coverage Ratio

The Group's interest coverage ratio, which is the ratio of earnings before interest and taxes to net interest (excluding bank costs and interest expense on provision), for the year ended 31 December 2021 was 13.5 (for the year ended 31 December 2020 – 2.8, for the year ended 31 December 2019 – 3.2, for the year ended 31 December 2018 – 5.6, for the year ended 31 December 2017 – 3.8)

Environmental Performance and Safety

Environmental charges for air emissions and discharges of liquids and other substances amounted to USD7.7 million in 2019, USD13.1 million[19] in 2020, and USD12.6 million[20] in 2021.

No material environmental pollution incidents registered at any of the Company's sites or facilities during the year ended 31 December 2021.

Occupational Health and Safety Performance

In 2021, the LTIFR was 0.18, which is a decrease as compared to the same indicator in 2020 (0.20) and does not exceed the global average for the aluminium industry (according to the International Aluminium Institute, 2020).

Employees

The table below presents information about the number of employees (full time equivalent) in each Division of the Group as of 31 December 2020 and 2021.

Division	As of 31 December 2020	As of 31 December 2021
Aluminium	19,950	20,520
Alumina	22,512	24,923
Engineering and Construction	1,483	1,479
Energy	22	19
Packaging	4,532	4,694
Management Company	642	713
Technical Directorate	1,390	1,788
Other	3,445	3,797
Total	**53,976**	**57,933**

[19] The increase in environmental fees (payments) in 2020 and 2021 against the 2019 baseline is due to changes in the environmental legislation of the Russian Federation in terms of the coefficients used to calculating environmental payments.

[20] The assessment of environmental payments for 2021 is preliminary, since the deadline for submitting a Declaration of Payment for negative environmental impact in the Russian Federation is 10 March 2022 (clause 8 of Article 16.4 of the Federal Law No.7- FZ "On Environmental Protection").

Remuneration and benefit policies

The fundamental principle of RUSAL Remuneration Policy is creating a remuneration structure to ensure that a highly professional team is formed and efficiently works, which contributes to the dynamic development of the Company and achievement of its strategic goals.

Remuneration structure:

1. Remuneration for work

The Company has built a comprehensive personnel incentive system, the main component of which is a monetary remuneration for work. Such monetary remuneration for work is defined depending of the employee's skills, complexity, quantity, quality and conditions of the work performed, regional and industrial specifics, it comprises compensation and incentive components.

1.1 The key purposes of the Company's personnel incentive system:

- Encouraging employees to achieve the Company's goals;
- Raising the labour productivity, improving the quality of produced products;
- Continuous improvement of the production and business processes and systems, promoting innovations;
- Compliance with the internal corporate regulations, performance discipline, standards and requirements in the field of health, occupational and fire safety;
- Recruiting and retaining key and highly-skilled employees;
- Developing the potential of employees, professional and personal competencies;
- Providing financial stability for employees of the Company and their families.

1.2 When managing the employee remuneration, the Company adheres to the following principles:

- Full compliance with the applicable laws of the regions where the Company operates;
- Impartiality and fairness of any decisions made;
- Clarity and transparency of any applied tools and systems;
- Dependence of the remuneration on individual and collective performance;
- Competitiveness of the remuneration structure and amount in the regions where the Company operates;
- Focus on the best market practices.

2. Benefits and compensations

2.1 RUSAL, being a socially oriented Company, together with mandatory compensations (prescribed by the applicable laws), also provides its employees with a wide list of additional benefits and compensations, being guided by the following key principles:

- Connection of the benefits with the social priorities of the Company: social stability and protection of employees, opportunities for personal and professional development, healthy lifestyle;
- Targeted nature of the benefits (the Company provides an employee with a benefit, not a cash compensation);
- Loyalty to internal corporate suppliers of services and products;
- Competitiveness of the benefits in the regions where the Company operates;
- Focus on the best market practices.

2.2 Out of the most significant benefits in the Company's social package, there are the following benefits provided in addition to those prescribed by the laws:

- Shift/daily meal allowance that provides an employee with a hot three-course lunch during a business day;
- Possibility to engage in sports and participate in sporting events free of charge;
- Free of charge corporate medical services based on LLC RUSAL Medical Centre;
- Subsidised vouchers for health resort treatment and rehabilitation in health centres located in the Russian Federation;
- Possibility to purchase voluntary medical insurance policies at subsidised prices both for employees and their family members;
- Festivals devoted to anniversaries of production facilities and the professional holiday, Metal Industry Day. There are annual New Year celebrations for children of employees, where each child is presented with a gift from the Company;
- Financial aid to pensioners, who worked at the Company's production facilities before and are registered with charity foundations, as well as to WWII Veterans, Survivors of Siege, Prisoners and Home Front Workers.
- Corporate housing programme that enable employees to purchase housing on subsidised conditions.

3. Bonuses based on results of the year

3.1 For employees of the White Collar Workers (WCW) category:

The main tool to manage the performance of WCW is the System applicable in the Company for setting personal key performance indicators for employees and assessing their achievement.

3.2 For employees of the Workers category:

Bonuses are paid to Workers for fulfillment of the production programme pro rata to the time worked in the year (including the absence in regular vacations and business travels).

Creating a new generation of highly-skilled personnel (forming and developing the external talent pool)

In 2021, active work continued on training and development of external and internal talent pool, career guidance of students and implementation of special projects related to promotion of the RUSAL brand as an attractive employer.

Number of students learning under the Target Recruitment Programme:

Educational institutions	Number of people			
	2018	2019	2020	2021
Siberian Federal University (students from Krasnoyarsk, Sayanogorsk, Achinsk, and Bratsk)	14	19	12	9
Irkutsk State Technical University (students from Bratsk and Irkutsk)	8	9	2	1
Ural Federal University (students from Krasnoturyinsk, Mikhailovsk, and Kamensk-Uralsky)	12	2	2	14
Kamensk-Uralsky branch of Ural Federal University (students from Kamensk-Uralsky)	–	8	8	–
Ural State Mining University (students from Severouralsk, Mikhailovsk, and Kamensk-Uralsky)	20	18	12	11
Kamensk-Uralsky Polytechnical College (students from Kamensk-Uralsky)	19	18	14	18
Russian State Professional and Pedagogy University	5	5	3	–
Krasnoyarsk Industrial Metallurgical College (students from Krasnoyarsk)	11	15	22	16
Divnogorsk Hydroenergy Technical School (students from Divnogorsk)	–	11	3	2
Volgograd State Technical University (students from Volgograd)	1	8	5	–
Volgograd Management and New Technologies College	25	20	18	–
Achinsk College of Industrial Technologies and Business	–	–	–	49
Peter the Great Saint Petersburg Polytechnic University	–	–	–	3
Total	**122**	**127**	**101**	**121**

An internship programme named ‘**New Generation**’ was started in 2017 as part of the external talent pool development. The programme mainly aims to rejuvenate the Company’s workforce by attracting young experts with a high potential. Participants were selected from among the best graduates of the target educational institutions with high average marks (at least 4.5 for white-collar personnel), English language skills, readiness to relocate etc. For each intern, a mentor is appointed, s/he then develops an individual development plan and helps the intern adapt to a new environment, and set and achieve professional goals. The internship lasts from 6 to 12 months during which participants work on interesting and sophisticated projects and then defend them in front of their office and the head of the HR. Provided the defence is successful, a decision may be made to offer full-time employment. 213 interns were employed under the internship programme in 2021.

In 2021, the Company continued to implement the **RUSAL Laboratory** project in the online format. The new season of the RUSAL Laboratory contest was started on November 1, 2021. The contest is held in five areas: reduction production; casting technologies and innovative alloys; production process modeling; environment and safety; and aluminium processing technologies. Participants of the contest will be around 200 students from leading engineering universities, colleges, technical and vocational schools of Russia. In each area, expert support is provided by leading scientists and engineers of RUSAL.

In 2021, **RUSAL Classes** were also continued online. To increase efficiency, the following changes were introduced: expansion of the presence geography, the project digitalisation using the current online tools, a multiple increase in the target audience with an SNE preparation course of 868 participants; a Basic National Examination preparation course of 719 participants. As part of the project, students of the 9th and 11th forms study vocation-related subjects in depth: physics, chemistry, mathematics. Sixty lessons (20 for each subject) were developed for each course. Each lesson consists of a video lesson, lecture material, and self-assessment assignments. To analyse and solve problems of special complexity, online webinars are held with teachers and students where students can directly ask their questions to our teachers. The academic staff of the Irkutsk National Research Technical University and of the Siberian Federal University were involved in preparation of teaching aids and lecture materials.

In 2021, the **Alchemy of the Future Students' Olympiad**, the general partner of which is RUSAL, continued its expansion. 64 schools and 5 universities with the 'partner' status were engaged to hold the Olympiad. For the qualifying stage, 4,665 students of the 5-11th forms of general education institutions were registered. The territorial coverage is over 200 localities in 70 regions of the Russian Federation. An active information campaign is carried out in 15 target municipalities (the municipalities where RUSAL is present): posting on social networks; search advertising; placement of interactive posters on the official websites of schools, mass media, continuing education institutions, and development centres for school students.

Foreign students

As part of the Company's engineering personnel training programme for the African companies in 2021, 75 students from Guinea and Jamaica continued their undergraduate studies. 24 Jamaican students started to learn Russian at preparatory courses and plan to enter the Siberian Federal University for specialised areas of education in 2022.

Forming and developing the internal talent pool

According to the new approach to the Candidate Pool creation process and the updated model of competencies, the list of candidate positions was approved and the pool of successors was formed in 2021:

- pool for the top management level – 96 successors,
- pool for the middle management level – 677 successors,
- pool for the line management level – 3,473 successors.

All successors (4,246 people) passes the assessment of managerial competencies through online testing for the middle line management pool and individual assessment centres for the top management pool.

The training of the talent pool is diversified by management levels.

1,023 employees were trained under the candidate pool development programmes in 2021:

- pool for the top management level – 58 employees;
- pool for the middle management level – 423 employees;
- pool for the line management level – 542 employees.

The candidates improve such competencies as Motivation and Team-Building, Systemic and Strategic Thinking, Persistent Communication, Performance Management, etc.

As part of the BS250 programme, 142 successors were trained in 2021. 85 people from among employees passed this programme were appointed to higher positions in 2021.

Totally, the Company made 585 appointments, and 434 out of them were from the candidate pool.

Training personnel within functional academies

Functional academies became one of the Company's employee development programmes updated in 2021. The purpose of the functional academies at RUSAL is a systemic approach to training and development, accumulation of professional expert knowledge from internal and external sources, creation of centres of expertise in each area. Programmes for the development of professional competencies are structured according to professional profiles, the needs of the function and the current situation of the employees' development are analysed during the preparation. Training is preceded by comprehensive assessment of professional competencies using the Technical Qualifying Examinations (specially designed tests). Based on the results of the assessment, a training programme is developed together with the key managers of the function. To do this, the knowledge and skills required for the job are analysed. When preparing the programme, a module approach is laid and intermodule work is planned to consolidate the education result. Functional academies are formed under the principle of continuity within the function, the approach of transferring expertise with the help of internal instructors is used to cascade knowledge. Comprehensive development of the employees' professional competencies takes place in accordance with the Company's goals and strategy.

In 2021, the following training programmes were developed (including, without limitation):

Area	Table of contents	Number of trainees
Commercial Office	Economics and Company Management Project Programme Management Quality Management Logistics Company Economics Leadership under Uncertainty Team Management Communication and Negotiation	943
Resource Protection Directorate Service	Information Security Environment Safety Occupational Health and Safety Economic Security Commercial Security	15
HR Service	HR Management Human Resources Management	403
HSE Service	Occupational Safety Industrial Safety Impact on People, Equipment, Environment Environment: Basic Statutory Requirements Environment Management System ISO 14000	93
Theory of inventive problem solving (TIPS)	Improved Production with TIPS Tools	209
Quality Management System	Quality Tools: SPC, APQP, FMEA, MSA, 8D International Quality Standards: ISO, IATF Production Process Audit Internal Quality Standards	2,085
Internal Instructors	Training under the 'Institute of Internal Instructors' project	72

Training process personnel at production facilities

Special programs and personnel development projects were implemented at production facilities in the following areas (including, without limitation):

- Safe railway operation certification;
- Industrial safety certification;
- Industrial safety certification at the territorial certification commission;
- Certification of managers and professionals of entities operating thermal power plants and electrical plants;
- Certification of managers and professionals responsible for safe crane operations;
- Welders' certification PB 03-273-99;
- Certification of level II-III welders;
- Certification of level IV welders;
- Certification of level III NDI professionals;
- Certification of level I-II NDI professionals;
- Certification of level I welders;
- Certification to assess knowledge of regulations in the field of railway transport;
- Qualification. Integrity system of industrial buildings and structures. Structural defects and their remedies;
- B10.2 Industrial safety requirements during transportation of hazardous substances;
- Safe elevated work methods and techniques;
- Environment safety briefing;
- AMRC;
- Mining rescue operations as part of auxiliary mining rescue crews: training of AMRC members;
- Sanitary education and training of citizens, professional sanitary training of officials and employees of entities;
- Civil defence and emergencies;
- Civil defence and natural and man-made emergency protection;
- State secret protection;

- Self-contained breathing devices;
- Surveying support for safe mining and rationing;
- Metrological support of production;
- Mobilisation training;
- Non-public railway operation safety;
- Ensuring environment safety by managers and professionals of environment services and environment control systems;
- Environment safety in hazardous waste management;
- Environment safety in hazardous waste management of hazard classes 1-4;
- Environment safety when handling hazardous waste. Once every 2 years;
- Environment safety when handling hazardous waste. Once every 5 years;
- Ensuring environment safety by managers and professionals of environment services and environment control systems;
- Occupational safety training and knowledge assessment of managers, certification commission members and professionals;
- Training of employed population in the field of civil defence and emergency protection;
- Training. Integrity system of industrial buildings and structures. Structural defects and their remedies;
- Handling of dangerous goods on railway transport;
- Occupational health and safety. Once every 3 years;
- Occupational health and safety. Once a year;
- Assessment of knowledge of the white-collar personnel of production units;
- Transportation of dangerous goods;
- Transportation of dangerous goods. Basic course;
- Transportation of dangerous goods. High consequence dangerous goods;
- Transportation of dangerous goods. Tanks;
- Verification and calibration of measurement instruments for heating values;
- Verification, calibration of measurement instruments for geometric values;
- Verification, calibration of mass measurement instruments;
- Verification and calibration of measurement instruments for physical and chemical values;
- Verification, calibration of electrical measurement instruments;
- Training of drivers of vehicles transporting dangerous goods by road;
- Training of professionals responsible for safe transportation of dangerous goods by road. Once every 3 years;
- Training of professionals responsible for safe transportation of dangerous goods by road. Every year;
- ‘Hoisting devices. B.9.31. Operation of hazardous production facilities where hoisting devices intended for lifting and moving cargo are used’;
- Fire and technical qualification course;
- Occupational safety rules for operation of electrical plants. Once every 3 years;
- Occupational safety rules for operation of electrical plants. Every year;
- Operating rules for oxygen booster compressors;
- Regulations of technical operation of railways of the Russian Federation;
- Chairpersons and members of business continuity commissions;
- Pre-examination training in thermal power engineering;
- Production and consumption of air products;
- Surveying and subsoil protection;
- Industrial safety;
- Professional sanitary training of officials and employees of entities;
- Elevated work, group 1;
- Elevated work, group 2;
- Elevated work, group 3;
- Radiation safety at entities operating in the field of nuclear energy use;
- Radiation safety in the operation of ionising radiation sources;
- Managers of civil defence and emergency protection classes at the entity;
- Managers and professionals of dispatching services;
- Related professions (slingsman, lift operator, crane operator);
- Related professions (slingsman, lift operator, elevated work, forklift and electric car driver);
- Advanced survey techniques;
- Pressure vessels;
- Special requirements of vehicle factories;
- Operation of buildings and structures;
- Specifications for placement and fastening of goods in railway rolling stock;
- Technical qualification course concerning quality service regulations;
- GOST ISO requirements;
- Requirements for accredited laboratories;
- Design and safe operation of thermal power plants and networks;
- Physical protection of radiation sources, radioactive substances, and storage points;
- Environment. Hazardous waste management;
- Environment. Environment management system;
- Operation of hoisting structures of hazardous industrial objects;
- Electrical safety;
- Electrical safety (electrical personnel).

Educating the Company's employees in higher educational institutions according to bachelor, master and postgraduate programmes

- The Company implements modular programmes for mandatory training of employees and clerks to obtain bachelor's diplomas in branches of the Ural Federal University, Siberian Federal University, M. Reshetnev Siberian State Airspace University and Volgograd Technical University in the following areas: metallurgy, process machinery and equipment, power machinery engineering, process and production automation, standardisation and metrology, automatic control systems. As of 2021, over 120 employees of RUSAL are continuing their bachelor studies.
- The Company's managers continue their education to obtain master's diplomas at the Ural State Mining University, Siberian Federal University and Irkutsk National Research Technical University in metallurgy, thermal power and thermal equipment, materials science and materials technologies, and mechanical engineering. As of 2021, 123 employees of RUSAL are continuing their master studies.
- 30 employees continue to raise the level of their education to obtain specialist's diplomas at the Ural State Mining University, Saint Petersburg Mining University and Irkutsk National Research Technical University in mining and customs.
- During the year, the basic department of the Irkutsk National Research Technical University (IRNRTU) in Shelekhov and the basic department of the Siberian Federal University in Bratsk and of the Ural State Mining University in Severouralsk operated successfully.

Work is underway under the Company's Youth Policy and Regulations on Work with Youth and Organisation of the Company's Youth Councils. Within the framework of the regulations, action plans were prepared for each facility, they were implemented during the year. The budget to implement the measures amounted to RUB7,500 thousand. The Youth Rally was organised and held together with En+ in 2021, which was attended by 120 young specialists of RUSAL and 80 young specialists of En+.

Distance Learning System (DLS)

The training courses were audited and connected employees were inspected in the distance learning system.

Description	2015	2016	2017	2018	2019	2020	2021
Number of production facilities and business units using DLS	54	62	67	69	57	58	59
Number of trainees using the DLS	16,693	57,257	33,649	90,806	36,835	25,571	69,650
Number of computer trainings (courses)	over 300	over 400	over 500	528	over 550	over 560	over 670

Business Risks

The Company gives particular emphasis to implementation and development of an effective risk management system in order to mitigate negative impact of potential risks and to ensure stable sustainable development of the business.

Risk identification and risk analysis performed by the owners of the Company's business processes as well as development, implementation and monitoring of risk mitigation actions are the key elements of the risk management system.

The Directorate for Control, Internal Audit, and Business Coordination (hereinafter 'the Control Directorate') is responsible for methodological support to the risk management system, consolidation and analysis of the Company' risk portfolio.

Key internal documents governing the risk management system:

- A risk management and internal control policy, which generally defines the concept, roles and responsibilities of the Company's employees at each management level and regulates risk management process, key risk assessment tools and techniques, procedures to evaluate risk mitigation effectiveness and to report risks.

Key actions and procedures to ensure effective and efficient risk management

- Independent risk audits of the Company's production facilities is regularly conducted by Willis Group and IPJSC Ingosstrakh's Engineering Centre to analyze risks and leverage the Company's insurance programme;

- quarterly monitoring of the Company's risk portfolio by risk owners and update of the corporate risk map and risk register;
- enhancement of the automated risk management system;
- quarterly review of the most significant risks by the Audit Committee of the Board of Directors;
- regular training in risk management principles and procedures for employees and management of the Company.

Monitoring, reporting and evaluation of the risk management system

The Control Directorate provides quarterly reports on the most significant risks to the Audit Committee. Such reports provide an overview of the Company's consolidated risk portfolio, the most significant realized risks, recently identified risks as well as the progress of risk mitigation actions.

The Audit Committee oversees the effectiveness of the Company's risk management system and over compliance with the Company's risk management policies and procedures.

In 2021, the Company determined the following most important risk factors that mostly are inherent to the industry and nature of its business operations:

1. The Company operates in a cyclical industry, the volatility of prices and demand, which has increased especially at the moment and may increase in the future, taking into account the current unstable geopolitical situation and the associated significant volatility of commodity, currency and securities markets. Such volatility, which has and may continue to have a significant negative impact on the efficiency and financial results of the Company.
2. Stronger control and growing attention from the authorities and the public to the environmental safety issues, including stricter control over compliance with and possible revision of emission and discharge regulations or operational waste storage and disposal rules and conditions, as well as uncertainty surrounding the introduction of carbon tax on the Company's products and pathway to green power generation.
3. Hard-to-predict demand dynamics of primary metal and alloys, risks of output restrictions caused by reduced attendance among operating and other staff engaged in the Company's activities, risks of failure to meet obligations under metal supply contracts amid market volatility driven by COVID-19 pandemic. Hard-to-predict change in demand for primary metals and alloys, the risks of reducing consumption production due to the imposed sanctions and trade restrictions against the economy, the Central Bank, the Ministry of Finance, the National Welfare Fund of the Russian Federation, a number of industries, individual enterprises and individuals of the Russian Federation, as well as uncertainty regarding the introduction of additional restrictive and sanctions measures, risks of a decrease in production volumes as a result of a decrease in the turnout number of production and other personnel, the risks of non-fulfillment of obligations under metal supply contracts due to the volatile market during the COVID-19 pandemic or other infection (virus).
4. The Company's competitive position in the global aluminium sector depends to a great extent on unrestricted access to uninterrupted power supply and on long-term power supply contracts, in particular. Growing power prices as well as power supply interruptions may have substantial negative impact on the business, financial position and performance results of the Company.
5. The Company relies on uninterrupted transportation services and access to infrastructure necessary to transport its raw materials, consumables and finished products over long distances, which is outside the Company's control; the Company is dependent on prices for such services (rail tariffs, freight rates), which may increase taking into account the ongoing crisis of global logistics chains, as well as sanctions restrictions imposed by a number of countries on Russian ships and vehicles.
6. Provisions of the credit facilities impose certain limits on capital expenditures and dividends paid by the Company. Failure by the Company to comply with such provisions may have serious implications for the Company and its shareholders.
7. The Company is exposed to exchange rate fluctuations, which may have influence on its financial results.
8. Negative media coverage, claims and other public statements may significantly affect the share price in a harmful manner.
9. The Company's business operations may be affected by manpower problems, lack of qualified workforce, and labour cost inflation.
10. The Company relies on third party vendors for some raw materials and consumables.
11. Equipment breakdowns, other industrial accidents or technological emergencies may result in decline of production or business interruption.
12. The Company is required to follow certain Russian anti-monopoly regulations.
13. The Company operates in an industry with distinctive inherent risks of environmental and public health damage.

14. Data on ore and mineral reserves is approximate and, by definition, uncertain, and such reserves of ore and minerals may be depleted sooner than expected.
15. The Company's ore exploration and mining licenses and concessions may be suspended, modified, or terminated prior to their expiry, or may not be extended.
16. The Company is exposed to the risks from regulatory, social, legal, tax and political environments in a number of jurisdictions where the Company operates.

Contingencies

The Board has reviewed and considered the contingent liabilities of the Company and disclosed information concerning such contingent liabilities in note 24 to the consolidated financial statements. Accordingly, for detailed information about contingent liabilities, please refer to note 24 to the consolidated financial statements. Details of the amounts of provisions are also disclosed in note 20 to the consolidated financial statements.

Tax contingencies

The controlled foreign company ("**CFC**") rules have been introduced in Russia starting from 1 January 2015. The rules apply to undistributed profits of non-Russian CFC controlled by Russian tax-resident Shareholders. Although the Company has become a Russian tax-resident in 2020 as part of its Continuance, it qualifies for an exemption from the CFC rules for public international companies until 1 January 2029. Hence, the CFC rules shall not directly apply to the Group in relation to any of its non-Russian affiliates. The CFC rules may apply to Russian tax-resident controlling Shareholders of the Company, where such Shareholder controls more than 25% or 10% where all Russian tax-resident Shareholders together control more than 50%. The rules also introduce certain reporting requirements for such Russian tax-resident controlling Shareholders of the Company in relation to non-Russian affiliates of the Group where such Shareholders directly or indirectly control more than 10% of those affiliates.

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 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 (refer to note 20 of the consolidated financial statements). As at 31 December 2021 the amount of claims, where management assesses outflow as possible approximates USD21 million (31 December 2020: USD21 million).

07

Profiles of the Board Members, the General Director and Senior Management

PROFILES OF THE BOARD MEMBERS, THE GENERAL DIRECTOR AND SENIOR MANAGEMENT

Profiles of the Board Members

Profiles of Directors

Executive Directors

Evgenii Nikitin, aged 56 (General Director, Executive Director)

Year of birth: 1966

Mr. Nikitin was appointed as an executive Director on 28 June 2018. Mr. Nikitin was appointed as the Chief Executive Officer of the Company in November 2018 and became the General Director with effect from 25 September 2020. Mr. Nikitin has also been the General Director of JSC “RUSAL Management” since 2019. Before that, he held position of acting CEO of the Company since May 2018 and RUSAL’s Head of Aluminium Division since January 2014. Prior to that, he held positions of director of Aluminium Division East since October 2013. Prior to that appointment Mr. Nikitin was the managing director of KrAZ, one of the world’s largest aluminium production facilities. From 2008 to 2010, he was managing director of SAZ after beginning his career with the Group as a pot operator in 1993.

Mr. Nikitin was born on 11 March 1966. He graduated from the Moscow State Technical University of Civil Aviation in 1989 and from Lomonosov Moscow State University with a master’s degree in business management (MBA) – production systems in 2009.

Mr. Nikitin was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Nikitin does not directly or indirectly own the Company’s Shares. Mr. Nikitin did not conclude any transactions with the Company’s Shares throughout 2021.

Evgeny Kuryanov, aged 41 (Executive Director)

Year of birth: 1980

Mr. Kuryanov was appointed as an executive Director with effect from 14 February 2019. Mr. Kuryanov was born on 10 June 1980. He graduated from Irkutsk State Technical University with Metallurgy of Non-Ferrous Metals (cum laude). From February 2000 to May 2004, Mr. Kuryanov was the salt operator and calcination operator of RUSAL Bratsk. From August 2004 to November 2005, he was the salt operator of the reduction area of RUSAL Krasnoyarsk. From November 2005 to August 2010, he was the potline supervisor/senior potline supervisor of RUSAL Krasnoyarsk. From June 2010 to December 2015, he was the head of reduction area of RUSAL Krasnoyarsk. From December 2015 to August 2016, he was the general director of Shelekhov branch of RUSAL Bratsk, since September 2016 he has served as the managing director of RUSAL Krasnoyarsk.

Mr. Kuryanov was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Kuryanov does not directly or indirectly own the Company’s Shares. Mr. Kuryanov did not conclude any transactions with the Company’s Shares throughout 2021.

Evgenii Vavilov, aged 37 (Executive Director)

Year of birth: 1984

Mr. Vavilov was appointed as an executive Director on 28 June 2018. Mr. Vavilov graduated from the Siberian Federal University, program of study "Machines and technologies of foundry production". Since November 2013, Mr. Vavilov has been the senior master of the foundry directorate of JSC "RUSAL Krasnoyarsk". From September 2010 to November 2013, Mr. Vavilov was the master of production technology of the foundry directorate of JSC "RUSAL Krasnoyarsk". Mr. Vavilov was the master of DplP shift of the foundry directorate of JSC "RUSAL Krasnoyarsk" from November 2009 to August 2010, the acting master of the shift of the foundry directorate of JSC "RUSAL Krasnoyarsk" from April 2009 to October 2009, and the foundry man of non-ferrous metals of the foundry directorate of JSC "RUSAL Krasnoyarsk" from August 2007 to March 2009. Under the leadership of Mr. Vavilov, projects such as "Reducing the formation of process waste from aircraft No. 16 in LO No. 1 at JSC "RUSAL Krasnoyarsk" and "Increasing the release of alloys during the overhaul of the M10 mixer from 3 to 4 melts" were launched and implemented.

Mr. Vavilov was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Vavilov does not directly or indirectly own the Company's Shares. Mr. Vavilov did not conclude any transactions with the Company's Shares throughout 2021.

Non-executive Directors

Vladimir Kolmogorov, aged 68 (Non-executive Director)

Year of birth: 1953

Mr. Kolmogorov was appointed as a non-executive Director with effect from 18 May 2019. Mr. Kolmogorov is the First Deputy CEO for Technical Policy and executive officer of International limited liability company En+ Holding (former En+ Holding Limited) since 2019 and was appointed Deputy CEO – executive officer of En+ in 2019.

Since 2016 Mr. Kolmogorov has been the Head of Technical Supervision of JSC "EuroSibEnergo". Mr. Kolmogorov started his career as a foremaster at Krasnoyarsk HPP in 1975, which was later followed by his employment with Sayano-Shushenskaya HPP as Deputy Head (for Automated Control Systems) of Electrical Shop, and Chief Engineer of Taymyr HPP Cascade since 1982. During 1983 to 2014 Mr. Kolmogorov held senior management positions with various energy sector companies. In 2013 he was a First Deputy General Director of PJSC "IDGC of Siberia". During 2011 to 2012 he served as a Chairman of CJSC Distributed Energy. In 2009 to 2011 Mr. Kolmogorov was a General Director of JSC "OGK-3". During 1989 to 2006 he occupied position of General Director of such companies as EuroSibEnergo-engineering LLC, JSC Irkutskenergo, Siberian Energy Company LLC, Krasnoyarskenergo JSC, JSC Krasnoyarsk HPP and also the position of chief engineer of SibirEnergo representative office of PJSC RAO UES.

Mr. Kolmogorov graduated from the Novosibirsk Electrotechnical Institute, Electrical Energy Industry Faculty, in 1975. He received his Doctor of Business Administration from the Russian Presidential Academy of National Economy and Public Administration in 2007. Mr. Kolmogorov has a PhD in Economics and PhD in Electrical Engineering. He was awarded the titles of the "Honoured Energy Industry Worker of the Russian Federation", "Honoured Energy Industry Worker" and "Merited Worker of Fuel and Energy Complex".

Save as disclosed in this Annual Report, Mr. Kolmogorov was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Kolmogorov does not directly or indirectly own the Company's Shares. Mr. Kolmogorov did not conclude any transactions with the Company's Shares throughout 2021.

Marco Musetti, aged 52 (Non-executive Director)

Year of birth: 1969

Mr. Musetti was appointed as a member of the Board with effect from 15 December 2016.

Mr. Musetti served as a member of the board of directors of Sulzer AG from 2011 to April 2021. Mr. Musetti became a board member of Medmix AG from 30 September 2021.

From 2013 until April 2019, Mr. Musetti was a member of the board of directors of Schmolz + Bickenbach AG. From 2007 until April 2018, Mr. Musetti was managing director investments at Renova Management AG, based in Zurich, Switzerland. Mr. Musetti was a member of the board of directors of CIFC Corp. from January 2014 to November 2016. Mr. Musetti was chief operating officer and deputy chief executive officer of Aluminium Silicon marketing (Sual Group) from 2000 to 2007, head of metals and structured finance desk for Banque Cantonale Vaudoise from 1998 to 2000, and deputy head of metals desk for Banque Bruxelles Lambert from 1992 to 1998.

Mr. Musetti holds a Master of Science in Accounting and Finance from the London School of Economics and Political Science, United Kingdom, and a Major degree in Economics from University of Lausanne, Switzerland.

Save as disclosed in this Annual Report, Mr. Musetti was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Musetti does not directly or indirectly own the Company's Shares. Mr. Musetti did not conclude any transactions with the Company's Shares throughout 2021.

Vyacheslav Solomin, aged 46 (Non-executive Director)

Year of birth: 1975

Mr. Solomin was appointed as a non-executive Director on 28 June 2018. Mr. Solomin holds the position of the chief operating officer of En+ since November 2018. Mr. Solomin has also been serving as a chief operating officer of International limited liability company En+ Holding (former En+ Holding Limited) since 2018. Mr. Solomin has also been a member of the board of directors of PJSC "MMC "NORILSK NICKEL" since 2019. Mr. Solomin holds the position of the deputy CEO – operating officer of the Moscow branch of International limited liability company En+ Holding since 2020. Between June 2018 and November 2018, Mr. Solomin also served as chief executive officer of En+. Between June 2014 and November 2018, Mr. Solomin has also held the position of chief executive officer of JSC "EuroSibEnergo" (Russia). At JSC "EuroSibEnergo", Mr. Solomin was responsible for achieving both current and long term targets for efficiency of the power business, and the development and execution of the company's strategy as producer of clean energy. From 2007 to 2014, he held various director positions within the En+ Group, and also served as first deputy chief executive officer and chief financial officer at JSC "EuroSibEnergo" where he was responsible for all aspects of the financial performance of the company, corporate finance and for overseeing the human resources and legal departments. Prior to joining En+ Group, from 2006 to 2007, Mr. Solomin held various senior positions with the financial departments of INTERRAO UES Power Generating Company. Between 1996 and 2005, Mr. Solomin held various managing positions at PricewaterhouseCoopers.

Mr. Solomin graduated Summa Cum Laude from the Far Eastern State University Vladivostok with a Diploma in International Economic Relations and Summa Cum Laude from the University of Maryland University College with a Bachelor of Science.

Save as disclosed in this Annual Report, Mr. Solomin was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Solomin does not directly or indirectly own the Company's Shares. Mr. Solomin did not conclude any transactions with the Company's Shares throughout 2021.

Independent Non-executive Directors

Christopher Burnham, aged 65 (Independent non-executive Director)

Year of birth: 1956

Mr. Burnham was appointed as a member of the Board with effect from 14 February 2019.

Mr. Burnham has served as a member of the board of directors of En+ since 28 January 2019 as an independent director. Mr. Burnham has been the senior independent director of En+ from 2019 until March 2022. Mr. Burnham was elected as the chairman of the board of directors of En+ effective from 25 March 2022.

Since 2013 Mr. Burnham has been the chairman and chief executive officer of Cambridge Global Capital, and chairman of its affiliated strategic advisory firm, Cambridge Global Advisors, headquartered in Washington, D.C. He cofounded Cambridge after a distinguished career in government, diplomacy, banking and private equity. He has served as Under Secretary General for Management of the United Nations, Under Secretary of State for Management (acting), Assistant Secretary of State for Resource Management and chief financial officer of the U.S. Department of State, Treasurer of the State of Connecticut, and a three-term Member of the Connecticut House of Representatives where he was elected by his colleagues as Assistant Minority Leader after only one-term. In addition, Mr. Burnham served as Vice Chairman of Deutsche Bank Asset Management, global co-head of private equity, and served as a member of the asset management Global Operating Committee and chairman of the Global Governance Committee. Earlier in his career he served as chief executive officer of PIMCO's largest equity subsidiary, Columbus Circle Investors, and International Vice Chairman of PIMCO Funds Distribution Company.

Mr. Burnham led reforms of the Connecticut Treasury including turning around the worst performing state pension system in the nation, eliminating the USD7 billion unfunded liability within the Connecticut workers compensation system, and modernization of the financial and reporting systems.

At the U.S. Department of State, he built and led the implementation of performance measures down to the mission level while modernizing the global reporting system across 270 offices in 170 countries. As the chief operating officer of the United Nations and a member of the cabinet of Kofi Annan, he instituted sweeping governance reforms including the establishment of the first United Nations Ethics Office, the first United Nations Independent Audit Advisory Committee, the adoption of new International Public Sector Accounting Standards, the first comprehensive consolidated annual report in the history of the United Nations and a new whistleblower protection policy that received independent recognition as the "gold standard." He also implemented best-in-class financial disclosure reporting by senior United Nations officials and staff based on the U.S. government model, a first ever sexual harassment policy and initiated a taskforce to investigate corruption within United Nations procurement that led to prosecutions and convictions by the U.S. District Attorney's office of the Southern District of New York.

Mr. Burnham has been confirmed twice by the United States Senate.

From 2006 to December 2012, Mr. Burnham was the vice chairman and managing director of Deutsche Asset Management where he co-founded and led Deutsche Bank's direct private equity group, RREEF Capital Partners, the bank's reentry into private equity after an eight-year absence. He also chaired Deutsche Bank's asset management governance committee in Germany. Mr. Burnham is a globally recognized expert in the implementation of accountability and transparency, and the implementation of best practice in government, corporations, and inter-governmental organizations. Earlier in his career he worked as an investment banker in the public power and corporate group of First Boston, and at Advest, Inc.

A combat veteran of the United States Marine Corps (Reserve) who retired at the rank of Lieutenant Colonel, Mr. Burnham volunteered for active duty in 1990 and served as an infantry platoon commander in the Gulf War. He and his men were part of the lead Allied forces to reach and liberate Kuwait City.

Mr. Burnham is a senior advisor at the Center for Strategic and International Studies where he has served on the development assistance reform committee, he has been a board member of the Marine Corps Law Enforcement Foundation since 1995, and an advisory board member of the Rothermere American Institute at Oxford University. He is a past member of the advisory committee of the World Bank Global Emerging Market Local Currency Bond program (GEMLOC), Treasurer and board member of the Meridian International Center, member of the Council on Foreign Relations, and numerous other volunteer and philanthropic boards. In addition, since 2017 Mr. Burnham has served on the board of Blue Water Defense located in Puerto Rico, a textile manufacturing firm.

Mr. Burnham studied national security policy at Georgetown University graduate program in National Security Studies, and is a graduate of Washington and Lee University and earned a M.P.A. from Harvard University in 1990.

Mr. Burnham was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Burnham does not directly or indirectly own the Company's Shares. Mr. Burnham did not conclude any transactions with the Company's Shares throughout 2021.

Nicholas Jordan, aged 62 (Independent non-executive Director)

Year of birth: 1959

Mr. Jordan was appointed as a member of the Board with effect from 14 February 2019.

Mr. Jordan served as a member of the board of directors of En+ from 28 January 2019 to 26 May 2021 as an independent director. Mr. Jordan has more than 30 years' experience in senior positions in leading global financial institutions. He was executive chairman of Big Un Limited from 28 May 2018 until October 2018 and served as its non-executive chairman from 22 March 2018 until 28 May 2018. He stepped up to executive chairman to help restructuring the business given a series of reporting and accounting issues which eventually led to the company being placed in administration.

Previously, he served as chairman of supervisory board at 4finance Group S.A. (part of the Finstar Group) having earlier been the chief executive officer at Finstar Financial Group (another subsidiary) from 2015 to 2017.

Earlier, he was the co-chief executive officer of Goldman Russia at Goldman Sachs until 2015. Prior to this, he served as the chief executive officer of Russia & the Commonwealth of Independent States at UBS Group AG from June 2010.

Before this, he worked briefly for Lehman Brothers and Nomura and focused on emerging markets.

He worked for more than 10 years with Deutsche Bank eventually becoming Vice Chairman and Head of Emerging Markets. Prior to that, Mr. Jordan was the CEO of Morgan Grenfell Securities Russia, responsible for all securities trading, capital markets and investment banking.

He joined Manufacturers Hanover in 1985 and developed an international career in the firm that was first acquired by Chemical Bank.

He then moved to London where he became the Vice President in the London office and Head of the Emerging Markets Fixed Income Trading. Shortly after the firm was acquired by Chase, he left to join Deutsche Bank.

Mr. Jordan started his banking career in the Management Training Program at Bank of New York. Mr. Jordan graduated from Boston University with a BA in political science.

Mr. Jordan was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Jordan does not directly or indirectly own the Company's Shares. Mr. Jordan did not conclude any transactions with the Company's Shares throughout 2021.

Elsie Leung Oi-sie (Independent non-executive Director) (Ceased to be an Independent non-executive Director with effect from 24 June 2021)

Dr. Leung ceased to be a Director with effect from 24 June 2021. Reference may be made to her profile information in the Company's annual report for the financial year ended 31 December 2020.

Kevin Parker, aged 62 (Independent non-executive Director)

Year of birth: 1959

Mr. Parker was appointed as a member of the Board with effect from 14 February 2019.

Mr. Parker is the managing partner of Sustainable Insight Capital Management, the New York based global asset management firm that launched in 2013. Mr. Parker has over 35 years of investment experience. Prior to that, Mr. Parker was a member of the management board of Deutsche Bank for 10 years and the former global head of Deutsche Asset Management from 2004 to 2012.

He is also the owner of Chateau Maris, named one of the five most environmentally friendly wineries in the world by Wine Spectator Magazine.

Mr. Parker received a BS Finance from New York University in 1981. After attending New York University, he joined EF Hutton and later Morgan Stanley where he was appointed head of the firm's equity derivatives business in Japan and Asia in 1988, based in Tokyo. He became a managing director in 1991 and held a variety of positions including head of Asian derivatives, global head of equity derivatives trading and chief information officer. He joined Deutsche Bank in June of 1997, serving in a variety of roles before moving to Deutsche Asset Management as its head in 2004.

Mr. Parker was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Parker does not directly or indirectly own the Company's Shares. Mr. Parker did not conclude any transactions with the Company's Shares throughout 2021.

Randolph N. Reynolds, aged 80 (Independent non-executive Director)

Year of birth: 1941

Mr. Reynolds was appointed as a member of the Board with effect from 14 February 2019.

Mr. Reynolds is a co-founder and principal of Reynolds Development.

Mr. Reynolds served as a vice chairman and executive officer and was a member of the board of directors of Reynolds Metals Company. He was also a member of the office of the chief executive and served on Reynolds Metals Company's strategic guidance committee and on the boards of directors of a number of subsidiary companies.

Mr. Reynolds currently serves as a trustee of the Richard S. Reynolds Foundation and as its vice president/treasurer.

In 1969, Mr. Reynolds joined Reynolds Metals Company as a salesman in the metal field sales department in Louisville, Kentucky. In 1972, he began his career as national accounts manager for the chemical sales division. He was assigned the additional responsibility of worldwide sales in 1974 and was named general manager of the division in 1977. He was elected president of Reynolds International, Inc. in 1980. Mr. Reynolds previously served on the boards of First

Union National Bank, Ma'aden Aluminium Company and Novolipetsk Steel (NLMK). Mr. Reynolds graduated from Bellarmine University.

Mr. Reynolds was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Reynolds does not directly or indirectly own the Company's Shares. Mr. Reynolds did not conclude any transactions with the Company's Shares throughout 2021.

Evgeny Shvarts, aged 63 (Independent non-executive Director)

Year of birth: 1958

Dr. Shvarts was appointed as a member of the Board with effect from 20 April 2020.

Dr. Shvarts is an independent non-executive director of PJSC "MMC "NORILSK NICKEL" since 2019 and was a member of its Strategy Committee till 27 May 2020 and is a member of its Corporate Governance, Nomination and Remuneration Committee. Dr. Shvarts is a member of the board of the Charity Foundation, Biodiversity Conservation Centre (BCC) since 1993 and is a Lead Scientist of Institute of Geography, the Russian Academy of Sciences (RAS) in Moscow and a Head of Center for responsible use of natural resources, Institute of Geography, RAS in Moscow since 2021 and J. William Fulbright Foreign Scholarship Fellow (2019-2020) in University of Washington (Seattle, WA) and in Bowdoin College (ME). Dr. Shvarts is a former director of Conservation/director of Conservation Policy of WWF-Russia (1998-2019). He holds a PhD degree (1987) and a Habilitation degree (Doctor of Sciences, 2003). Dr. Shvarts was Senior Fellow and Member of the Academic Board of the Institute of Geography, RAS (1990-1998) and he was elected to the Academic Board of the Institute of Geography, RAS in 2021, chairman of the board of the Biodiversity Conservation Center (1992-1998), manager of the Protected Areas Component of the GEF/WB "RF Biodiversity Conservation Project" (1996-1998).

Dr. Shvarts has authored 5 books and 120 articles, and was awarded the Title "Emeritus Ecologist", granted by President of Russian Federation and Distinguished (Honorary) public figure of Nature Conservation, Ministry of Nature Resources (2006).

Dr. Shvarts was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Dr. Shvarts does not directly or indirectly own the Company's Shares. Dr. Shvarts did not conclude any transactions with the Company's Shares throughout 2021.

Anna Vasilenko, aged 48 (Independent non-executive Director)

Year of birth: 1973

Ms. Vasilenko was appointed as a member of the Board with effect from 24 June 2021.

Ms. Vasilenko is an independent director of PJSC "Russian Aquaculture" from 30 June 2021. Ms. Vasilenko is the Chief Executive Officer of EM (a strategic advisory and communications firm) from April 2021. She worked at the Moscow Exchange since 2014 until 2020 and was the Managing Director, Head of Primary Markets & Client Service Development. She was largely responsible for primary market activity and Moscow IPOs and helped bring more companies to the Moscow Exchange. Ms. Vasilenko has been credited as being a key player in the effort to end the notion that Russian companies needed a foreign share listing when going public, and during her time at the Moscow Exchange more companies sought a sole listing on Russia's main stock exchange.

From 2006 to 2012, Ms. Vasilenko was the Head of Equity Finance, director, Chief Operations Officer, business manager of equity structure products group of Renaissance Capital in Moscow. From 2003 to 2006, she was the Deputy Head of Securities Department, Associate Director and Deputy Head of Investor Relations Department of Lukoil, Moscow. Ms. Vasilenko was the Head of Operations of Credit Suisse, Moscow from 1997 to 2003.

Ms. Vasilenko completed an EMBA at the Moscow School of Management Skolkovo, and obtained a Master degree in economy from Lomonosov Moscow State University.

Ms. Vasilenko was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Ms. Vasilenko does not directly or indirectly own the Company's Shares. Ms. Vasilenko did not conclude any transactions with the Company's Shares throughout 2021.

Dmitry Vasiliev, aged 59 (Independent non-executive Director)

Year of birth: 1962

Mr. Vasiliev was appointed as a member of the Board with effect from 26 June 2015. He is currently the managing director of the Institute of Corporate Law and Corporate Governance (Moscow, Russia) and serves on the supervisory board of the Non-Commercial Partnership "National Pension Association". He previously served as a member of the board of directors of more than 20 Russian and foreign companies and funds, including JSC "Avtokran" (2010-2013), JSC "Mosenergo" (2003-2006), JSC "Gazprom" (1994-1995) and Investment Fund "SICAF-SIF BPT ARISTA S.A." (Luxembourg) (2009).

Mr. Vasiliev has been the managing director of the Institute of Corporate Law and Corporate Governance since April 2009. Mr. Vasiliev has served on the supervisory board of the Non-Commercial Partnership "National Pension Association" since December 2013. He served on the board of directors of the U.S.-Russia Foundation for Economic Advancement and the Rule of Law (USRF) from 13 January 2012 until 4 December 2015. He served as independent non-executive director of the supervisory board of JSC "RKS – Management" from 28 June 2013 until 31 December 2015 and again from 22 November 2017 until 28 April 2018, and served as independent non-executive director of the supervisory board of the LLC "RKS – Holding" from 28 June 2013 until 28 April 2018. Mr. Vasiliev served on the supervisory board of JSC Bank "Financial Corporation Otkrytie" as Independent Non-Executive Director since February 2013 till 22 December 2017.

From January 2007 to April 2009, Mr. Vasiliev was the managing director of JP Morgan PLC (London, UK) (investment banking for Russia/CIS countries). From 2002 to 2007, he was the first deputy of general director (CEO) on Strategy and Corporate Governance of JSC "Mosenergo" (Moscow, Russia). From 2001 to 2003, he was a senior researcher in the area of state governance and anticorruption measures (in particular, research on risks of corruption and conflict of interest during bankruptcy proceedings in Russia) of Carnegy Center (Moscow). From 1999 to 2003, he was the chairman of the board of directors of the Association for Protection for the Investors Rights (API) (Moscow, Russia). From 2000 to 2002, he was the executive director of the Institute of Corporate Law and Corporate Governance (Moscow, Russia). From 1994 to 1996, he was first the deputy chairman and executive director of the Federal Commission for the Securities Market of the Russian Federation (FCSM) and then the chairman from 1996 to 2000. From 1991 to 1994, he was the deputy chairman of the Russian Federation State Property Committee (Ministry of Privatization). In 1991, he was the deputy chairman of St-Petersburg's Property Fund (St-Petersburg, Russia). From 1990 to 1991, he was the director of the Privatization Department of the Committee of the Economic Reform of St. Petersburg, Mayor Office. From 1985 to 1990 he was a junior researcher of the Academy of Science of USSR (Leningrad, USSR).

Mr. Vasiliev graduated from the Leningrad Institute for Finance and Economics (Leningrad, USSR) in 1984. He also completed the International Institute for Securities Market Development: the program of comprehensive professional panels and workshops regarding the development and regulation of securities market (Washington, DC, USA) in 1994. In 2007, he obtained the status of "FSA approved person for Investment Advisory" by passing the exam of the Securities & Investment Institute (London, UK). Mr. Vasiliev has two state awards of the Russian Federation: the Medal "For the Service to the Motherland", level II (1995) and the Medal "To 850 years of Moscow" (1997).

Mr. Vasiliev was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Vasiliev does not directly or indirectly own the Company's Shares. Mr. Vasiliev did not conclude any transactions with the Company's Shares throughout 2021.

Bernard Zonneveld, aged 65 (Independent non-executive Director, Chairman)

Year of birth: 1956

Mr. Zonneveld was appointed as a member of the Board with effect from 24 June 2016 and was appointed as Chairman of the Board with effect from 6 March 2019.

Since February 2017, Mr. Zonneveld has been non-executive partner of Capitalmind, a corporate finance advisory firm of the Netherlands.

From August 2014 until 1 January 2015, Mr. Zonneveld served as the head of ING Eurasia at ING Bank's Commercial banking division in Amsterdam. In May 2007, Mr. Zonneveld was appointed as managing director/global head of structured metals & energy finance at ING Bank's Commercial banking division in Amsterdam. Mr. Zonneveld joined ING Group in 1993 and since then he has held various senior positions, including managing director/global co-Head of commodities group, managing director/global head of structured commodity finance and product development and director/head of structured commodity & export finance. He has served as chairman of the Netherlands-Russian Council for Trade Promotion, a member of the Dutch Trade Board, a member of the Russian committee and a member of the board of the Netherlands-Ukraine Council for Trade Promotion. He holds a master's degree in business law from Erasmus University in Rotterdam.

Mr. Zonneveld was an independent non-executive director of Vimetco N.V., a company whose global depositary receipts are listed on the London Stock Exchange, from July 2007 to June 2013.

Mr. Zonneveld was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Zonneveld does not directly or indirectly own the Company's Shares. Mr. Zonneveld did not conclude any transactions with the Company's Shares throughout 2021.

The table below provides membership information of the committees on which each Board member serves.

Board Committee Directors	Audit Committee	Corporate Governance & Nomination Committee	Remuneration Committee	Health, Safety and Environmental Committee*	Compliance Committee
Mr. Christopher Burnham		X			C
Mr. Nicholas Jordan			C	X	X
Mr. Kevin Parker	C			C	X
Mr. Randolph N. Reynolds		X	X		
Dr. Evgeny Shvarts				X	
Ms. Anna Vasilenko	X		X		
Mr. Dmitry Vasiliev	X	C	X	X	
Mr. Bernard Zonneveld	X	X			X
Mr. Vladimir Kolmogorov					
Mr. Marco Musetti					
Mr. Vyacheslav Solomin				X	
Mr. Evgeny Kuryanov					
Mr. Evgenii Nikitin					
Mr. Evgenii Vavilov					

Notes:–
C – Chairman
X – member
* – This Board committee also consist of non-Board members

General Director (sole executive body)

Evgenii Nikitin, aged 56 (General Director, Executive Director)

Year of birth: 1966

Mr. Nikitin was appointed as an executive Director on 28 June 2018. Mr. Nikitin was appointed as the Chief Executive Officer of the Company in November 2018 and became the General Director with effect from 25 September 2020. Mr. Nikitin has also been the General Director of JSC "RUSAL Management" since 2019. Before that, he held position of acting CEO of the Company since May 2018 and RUSAL's Head of Aluminium Division since January 2014. Prior to that, he held positions of director of Aluminium Division East since October 2013. Prior to that appointment Mr. Nikitin was the managing director of KrAZ, one of the world's largest aluminium production facilities. From 2008 to 2010, he was managing director of SAZ after beginning his career with the Group as a pot operator in 1993.

Mr. Nikitin was born on 11 March 1966. He graduated from the Moscow State Technical University of Civil Aviation in 1989 and from Lomonosov Moscow State University with a master's degree in business management (MBA) – production systems in 2009.

Mr. Nikitin was independent from and not related to any other Directors, members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Mr. Nikitin does not directly or indirectly own the Company's Shares. Mr. Nikitin did not conclude any transactions with the Company's Shares throughout 2021.

The collective executive body in the Company has not been formed in accordance with the Company's Charter.

Senior Management of the Group

Alexandr Popov, aged 51 (Chief Financial Officer)

Year of birth: 1971

Alexandr Popov was appointed as RUSAL's CFO since January 2020. He is responsible for the financial planning, auditing and preparation of financial reports and the execution of the Company's investment programs.

Prior to that appointment Mr. Popov was Independent consultant for business turnaround and bankruptcy procedures. From 2007 till 2017 Mr. Popov held CFO positions in companies such as En+ Group, Kolmar coal company, NIAEP-ASE, Freight Link.

Between April 2008 and November 2011 Mr. Popov was a member of the Board of the Company.

From 2000 till 2006 Mr. Popov worked at PJSC LUKOIL, Moscow, Russia as a Head of US GAAP consolidated corporate reporting.

From 1994 till 2000 he was audit manager at PricewaterhouseCoopers, Moscow, Russia.

Mr. Popov graduated from the Bauman Moscow Technical University, Moscow, Russia, with Engineer for robots and automation qualification.

In 1994 he graduated from the Togliatty Politechnical University, Togliatty, Russia with degree Master of Science: Automobile engineer.

In 1996 Mr. Popov received a degree of Bachelor of Arts: Accounting and Audit in Saratov academy of economics, Saratov, Russia.

Mr. Popov is a member of American Institute of Certified Public Accountants (AICPA), USA.

He was ranked among the top 100 Russian CFOs in 2017 by Kommersant.

Save as disclosed in this Annual Report, Mr. Popov was independent from and not related to the Directors, any other members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Alexey Arnautov, aged 47 (Deputy General Director on New Projects)

Year of birth: 1974

Alexey Arnautov was appointed as Deputy General Director on New Projects in June 2019. From June 2020 until December 2020 Alexey Arnautov has been granted the overlapping of his position as Director of Moscow Branch of the Company. From January 2014 until May 2019 Alexey Arnautov was the Head of New Projects Directorate.

Prior to that appointment Mr. Arnautov held an office of Director of the Aluminium Division West since July 2010. From March 2007 until July 2010 Mr. Arnautov assumed the role of Director of the Department of the Aluminium Division of the Moscow Branch of RUSAL Global Management B.V. Prior to that appointment, Mr. Arnautov held the same position at Financial department of the Aluminium Division of RUSAL-UK LLC from April 2006. From September 2005 to March 2006, he was employed by the Financial department of RUS-Engineering LLC as Director of the Department. In May 2005 Mr. Arnautov worked at the same position in Engineering Construction Company LLC, where he worked part-time from November 2004 to April 2005. From February 2003 to April 2005, he held the position of General Director at Russian Aluminium Finance LLC. From June 2000 to January 2003, he was employed by RUSSIAN ALUMINIUM OJSC. From 1998 to 2000, he held leading specialist position in the financial services in Sibneft Oil Company. He began his professional career in 1996, in Noyabrskneftegaz in the Far North of Russia in 1996.

Born in 1974, Mr. Arnautov graduated from the Donbass State Academy of Construction and Architecture with a degree in engineering and construction in 1996. He received a degree with honors from the International Academy of Entrepreneurship in 1998 and an MBA in Economics at California State University in 2005. In 2016, he completed the Corporate Entrepreneurship Program at Stanford University. In 2020, he completed the LEAD program in Stanford University.

Mr. Arnautov was independent from and not related to the Directors, any other members of senior management, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Vladimir Berstenev, aged 72 (Deputy General Director for Operations)

Year of birth: 1950

Vladimir Berstenev was appointed as Deputy General Director for Operations in April 2019. Mr. Vladimir Berstenev has been Deputy General Director for Operations at Moscow Branch of the Company since June 2020. Mr. Vladimir Berstenev was also appointed as Director for Security and Protection of State Secrets of JSC "RUSAL Management" in October 2020.

Mr. Vladimir Berstenev started his career as an operator in Krasnoyarsk smelter and represents a true example of promotion from within along all stages of professional growth within the Company.

From 2016 to 2019 Mr. Vladimir Berstenev was the Advisor of Aluminium Division of RUSAL. Mr. Berstenev was responsible for expert advice to division management on complex production and management issues.

In 2011-2015 Mr. Vladimir Berstenev successfully performed as the CEO of Irkutsk aluminium plant.

In 2007-2011 Mr. Vladimir Berstenev was in a role of Production Director at RUSAL Global Management B.V.

Before that, since 2002, Mr. Vladimir Berstenev worked as CEO of Bratsk aluminium smelter.

Mr. Vladimir Berstenev has the professional degree as an engineer in metallurgy, graduated from Siberian Metallurgical Institute.

Mr. Vladimir Berstenev was born in 1950.

Mr. Berstenev was independent from and not related to the Directors, any other members of senior management, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Pavel Ovchinnikov, aged 46 (Head of Downstream Business)

Year of birth: 1975

Pavel Ovchinnikov was appointed as head of the downstream business at RUSAL in July 2020. He is responsible for running the group of business units focused on value-added aluminium products manufacturing. The Downstream Division includes the foil, packaging, aluminium powders and wheels production facilities.

From 2012 to 2020, Pavel Ovchinnikov was the General Director of UK RM Rail LLC.

Prior to joining UK RM Rail LLC, Pavel Ovchinnikov held the position of the commercial director at RUSAL Global Management B.V. from 2010 to 2012. From 2007 to 2010, he served as the head of the alumina business at the Alumina Division of Alumina Management LLC. From 2006 to 2007, Pavel Ovchinnikov was the General Director of Alumina Management LLC.

In 2005, he was appointed as managing director of OJSC "Achinsk Alumina Refinary" and he held this position until 2006.

From March to October 2005, Pavel Ovchinnikov led the finance department at Alumina Management LLC.

From March 2004 to February 2005, Pavel Ovchinnikov held the office of CFO of RUSAL Managing Company LLC.

From January 2003 to February 2004, he was the head of the finance unit of the Friguia project run by the Procurement Directorate of OJSC "Russian Aluminium Management". Prior to that, from March 2001 to January 2003, he worked as deputy head of the Corporate Finance Department at the CFO's office at OJSC "Russian Aluminium Management".

Pavel Ovchinnikov was born in Moscow in 1975.

In 1997, he graduated from the Lomonosov Moscow State University, department of computational mathematics and cybernetics. In 1999, he completed his postgraduate studies at the Lomonosov Moscow State University, department of economics, and received a degree in economics.

Pavel Ovchinnikov was independent from and not related to the Directors, any other members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Anton Egorov, aged 48 (General Counsel)

Year of birth: 1973

Anton Egorov joined RUSAL as general counsel in July 2018.

Generally, his responsibilities in the office include coordination of legal functions of the Group and also overall management of the Company's legal team.

Before Mr. Egorov joined the Group, he was the vice-president, legal affairs in the multinational metallurgy company EVRAZ. Prior to that, he held the position of deputy chief executive officer, legal, corporate, international affairs of the Russian Post.

Before joining Russian Post, Mr. Egorov spent 5 years with RUSAL in his role as the head of Russian and CIS legal affairs.

Anton Egorov graduated from the Moscow State University as physicist and as a lawyer, holds a graduate studies diploma from the Institute of State and Law of the Russian Academy of Sciences and an Executive MBA diploma from IE Business School.

Mr. Egorov was independent from and not related to the Directors, any other members of senior management, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Aleksey Gordymov, aged 50 (Head of Supply Chain)

Year of birth: 1972

Aleksey Gordymov was appointed as RUSAL's Head of Business Support in November 2017. In this position, Aleksey Gordymov supervises supplies of RUSAL's operations and support of the sales team through streamlining logistics and transportation as well as deliveries of key raw materials and consumables. Aleksey Gordymov has also been Director for business support at Moscow Branch of the Company since June 2020.

Aleksey Gordymov worked as Deputy Head of Alumina Division from 2014 to 2017. From 2008 to 2014, he was the Head of Bauxite & Alumina Supply Department.

Between 2005 and 2008, Mr. Gordymov ran Alumina Company of Guinea in West Africa, Bauxite Company of Guyana and RUSAL Jamaica.

Aleksey Gordymov studied and majored in transportation, metals & mining and economics.

Mr. Gordymov was independent from and not related to the Directors, any other members of senior management, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Yakov Itskov, aged 55 (Head of Alumina Division)

Year of birth: 1966

Yakov Itskov was appointed as RUSAL's head of Alumina Division in September 2014.

From December 2012 until September 2014, Mr. Itskov was the Deputy Branch Director for business support of the Branch of RUSAL Global Management B.V.

Prior to that, Yakov Itskov worked as a head of RUSAL's International Alumina Division from February 2010. The International Alumina Division included the western bauxite mining and alumina production facilities: the Guineabased Friguia Alumina Refinery and Compagnie des Bauxites de Kindia, the Bauxite Company of Guyana, Aughinish Alumina in Ireland, Eurallumina in Italy, Alpart and Windalco in Jamaica and Queensland Alumina in Australia. The key objective of the International Alumina Division was the mining of bauxite and production of high quality alumina for the Company's smelters and sales in the global market. This required considerable flexibility and an ability to meet each customer's specific demands.

Yakov Itskov became the first vice president of RussNeft in 2009 and held that position until 2010. From 2008 to 2009, he was general director of BazelDorStroy LLC and between 2007 and 2008 he was the general director of the project and construction company Transstroy LLC. He was also the managing director of Basic Element LLC from 2006 until 2007 and, prior to this, he was the general director of Soyuzmetallresurs CJSC from 2001 to 2006.

From 2000 to 2001, Mr. Itskov was the deputy commercial director of JSC Russian Aluminium.

Yakov Itskov holds a degree in Mining Machines and Complexes from Moscow State Mining University. He also holds a PhD in Economics.

Mr. Itskov was independent from and not related to the Directors, any other members of senior management, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Victor Mann, aged 63 (Technical Director)

Year of birth: 1958

Victor Mann has been technical director of the Company since 2005, in charge of research and development, engineering, design, process management, technical development and modernization of production facilities, and start-up and commissioning of green-field and upgraded capacities.

From 2002 to 2005, Victor Mann was head of RUSAL's Engineering and Technology Center.

From 1998 to 2002, he was deputy technical director of the Krasnoyarsk smelter.

From 1991 to 1998, Victor Mann was promoted from design engineer to head of automation at the Krasnoyarsk smelter.

Victor Mann was awarded the Order of Merit for the Fatherland and is on the list of Honorable Metallurgists of Russia.

Victor Mann graduated from Krasnoyarsk State University, Applied Mathematics Faculty.

Mr. Mann was independent from and not related to the Directors, any other members of senior management, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Natalia Albrekht, aged 49 (Deputy General Director for Human Resources)

Year of birth: 1972

Natalia Albrekht was appointed as Deputy General Director for Human Resources at RUSAL in June 2020. From October 2019 to May 2020 she was Human Resources Advisor to the General Director at RUSAL.

From September 2019 till now Natalia Albrekht is Deputy General Director for Human Resources at International limited liability company En+ Holding (former En+ Holding Limited).

From 2013 to 2019, she was Executive Vice President for Organisational Development and Human Resources at PJSC VimpelCom.

From 2012 to 2013, Natalia Albrekht held the position of Vice President of PJSC Rostelecom.

From 2009 to 2012 she was Deputy General Director for Organisational Development, Human Resources and Administrative Issues in STS Media holding.

In 2002, Ms Albrekht served as Director of the Subscription Services Department at OJSC NTV Plus, later Deputy Director General for Sales and Development of the Federal Sales Center CJSC (part of IES Holding), and General Director of Integrated Settlement Center LLC.

Ms Albrekht graduated from Bauman Moscow State Technical University, majoring in Dynamics and Strength of Machines.

Natalia Albrekht has an international CIPD certification in HR management.

Save as disclosed in this Annual Report, Ms Albrekht was independent from and not related to the Directors, any other members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Andrey Sidorov aged 50 (Head of Public Relations)

Year of birth: 1971

Andrey Sidorov was appointed as Head of Public Relations at RUSAL in April 2020.

Prior to joining RUSAL, he headed the PR of PJSC Uralkali from 2015 to 2020.

From 2011 to 2014, he was involved in supporting a number of investment projects in West Africa (Guinea).

From 2000 to 2011, Andrey Sidorov was a director of International Public Relations at Rumelko in the company of the principal shareholder of Novolipetsk Steel (NLMK) group.

From 2005 to 2011, Andrey Sidorov was a General Director of ANO Editorial Office of the Daily Gazeta; from 2006 to 2011 he was a member of the board of directors of RUMEDIA Media Holding (Radio Business FM, bfm.ru, Radio Chocolate, newspaper Gazeta, portal GZT.ru).

From 2008 to 2011, Andrey Sidorov was PR director of the Russian Shooting Union and from 2009 to 2011, he was appointed as a Chairman of the Press and Promotion Committee of the European Shooting Confederation.

In 1996 Andrey Sidorov graduated from the Higher School of Economics with a master's degree in economic theory, and in 2000 he completed his postgraduate studies there.

Mr. Sidorov was independent from and not related to the Directors, any other members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Alexey Grenkov, aged 46 (Head of Corporate Finance)

Year of birth: 1976

Alexey Grenkov joined RUSAL Group in March 2021. Mr. Grenkov holds the position of Head of Corporate Finance of the Company.

From March 2021 till now Mr. Grenkov is Head of Corporate Finance in EN+ Holding.

Mr Grenkov is responsible for the Company's capital markets strategy, optimization of the cost and structure of debt; cooperation with banks, state development institutions and financial institutions.

Mr Grenkov has over 20 years of experience in the financial sector – prior to joining the Group, he worked for over 10 years at PJSC Sberbank, where he held the position of Vice President, Head of Key Client Coverage.

Prior to joining PJSC Sberbank, since 2000, Mr. Grenkov held various positions in the Unicredit banking group.

In 1997, Mr. Grenkov graduated from the Faculty of Economics of Lomonosov Moscow State University (MSU). In 2015, he completed an Executive MBA programme at London Business School (UK).

Save as disclosed in this Annual Report, Mr. Grenkov was independent from and not related to the Directors, any other members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Steve Hodgson, Aged 55 (Head of Sales And Marketing)

Year of birth: 1966

Steve Hodgson was appointed as Head of Sales and Marketing in May 2021. He is responsible for developing Company's positions in the key aluminium markets, building and strengthening the Company's global customer relations.

In 2019, Mr. Hodgson joined the board of Noble Group, the leading Hong Kong based commodity trading firm, as senior independent director for a period of two years.

From June 2010 until September 2012 Mr. Hodgson was Director for International Sales for RUSAL and between 2012 and 2018 was responsible for the company's global sales.

Before taking up that role, from 2007 until 2010 Mr Hodgson was CEO and President of the Bauxite and Alumina Division of Rio Tinto Alcan. During that period he also held the post of President of the Australian Aluminium Council. Prior to that, he was the Managing Director of Rio Tinto's Diamond Division.

From 2004 to 2006, he was Managing Director of RUSAL's Alumina Division following a successful two years with RUSAL as its Head of Sales, based in Moscow.

Mr Hodgson started his career with Comalco (later to become Rio Tinto Aluminium) in New Zealand as a process engineer and rose to become the manager of the Metal Products Division, and subsequently the head of Sales and Marketing, based in Brisbane.

Steve Hodgson holds an honors degree from the School of Engineering, Auckland University, New Zealand.

Mr. Hodgson was independent from and not related to the Directors, any other members of senior management of the Group, Substantial Shareholders or Controlling Shareholders of the Company as at the end of the financial year.

Irina Bakhtina, aged 46 (Chief Sustainability Officer)

Year of birth: 1975

Irina Bakhtina joined RUSAL as its Chief Sustainability Officer in July 2021 who is responsible for corporate sustainability strategy development and implementation and leads the areas of environment, climate regulation, labour, industrial and fire safety, social policy, non-financial reporting, and overall ESG transformation of the business.

Before Mrs. Bakhtina joined the Group, she served as Deputy Prime Minister of the Komi Republic being accountable for the development and implementation of social-economic development strategy, investment, industrial and environment policies for the region.

Before the public service she spent a total of 20 years in international companies of the consumer goods sector – Philip Morris International Russia and Belarus and Unilever NAMET RUB.

Mrs. Bakhtina graduated from the Far-Eastern State University with a specialty of a journalist ("foreign affairs reporter") in 1992, as well as completed her graduate studies in strategic management from INSEAD Business School in 2016. She has post-graduate studies in economics from the Graduate School of Management under the Saint Petersburg State University (2019).

Mrs. Bakhtina was independent from and not related to the Directors, any other members of senior management, Substantial Shareholders or Controlling Shareholders of the Group as at the end of the financial year.

Corporate Secretary

Sergey Bazanov, aged 42 (Corporate Secretary)

Year of birth: 1980

With effect from September 25, 2020 Sergey Bazanov was appointed as Corporate Secretary of the Company, before that he held the position of Secretary of the Board of Directors of the Company since 2017.

Sergey Bazanov joined RUSAL in 2007. From 2007 to 2020, he consecutively held the positions of a manager, head of direction and head of the Board relations and coordination department, and was responsible, among other things, for the development and control of corporate governance procedures, information and organizational support for the work of the Company's management bodies, including the Board of Directors.

Prior to joining RUSAL, Sergey Bazanov held the positions of a consultant and senior consultant at IBM Business Consulting Services, as well as a consultant in the management consulting department of IBS.

Sergey Bazanov graduated from the London School of Economics and Political Science with a Bachelor's degree in Economics in 2002.

Sergey Bazanov does not directly or indirectly own the Company's Shares. Sergey Bazanov did not conclude any transactions with the Company's Shares throughout 2021.

08

Report of the Board of Directors

AIMING
FOR ROBUST
RESULTS

REPORT OF THE BOARD OF DIRECTORS

The Board of Directors are pleased to present the 2021 Annual Report and the audited consolidated financial statements of United Company RUSAL, international public joint-stock company for the year ended 31 December 2021.

1. Principal activities

The principal activities of the Group are the production and sale of aluminium (including alloys and value-added products, such as aluminium sheet, ingot, wire rod, foundry aluminium alloy, aluminium billet and others). Within its upstream business, the Group has secured substantial supplies of bauxite and has the capacity to refine bauxite into alumina, key raw material for aluminium production. The Company also holds strategic investments, including its investment in Norilsk Nickel and coal business. There has been no significant change in those activities throughout the financial year.

2. Financial summary

The results of the Group for the year ended 31 December 2021 are set out in the consolidated financial statements on pages 151 to 227.

3. Business review

Please refer to the section headed "Business Overview" and "Management Discussion and Analysis" on pages 24 to 71 for further information on the review of the Group's business.

4. Dividends

Under the requirements of the Charter, the Shareholders may resolve to distribute (declare) dividends upon recommendation of the Board of Directors.

No dividends were declared and paid by the Company during the year ended 31 December 2021.

5. Reserves

The transfer of USD2,368 million to reserves is proposed to be made within the meaning of Schedule 4 to the Hong Kong Companies Ordinance (Chapter 622 of the Laws of Hong Kong). The amount of the reserves available for distribution to Shareholders as at 31 December 2021 was USD18,896 million.

6. Fixed assets

Information relating to significant changes in the fixed assets of the Company or of any of its subsidiaries that have occurred during the financial year is set out in note 13 to the consolidated financial statements.

7. Share capital

Share repurchases

Neither the Company nor any of its subsidiaries repurchased, sold or redeemed any of their securities during the financial year ended 31 December 2021.

Share issues

No Shares were issued/allotted by the Company during the financial year ended 31 December 2021.

8. General mandate granted to the Directors in respect of the issuance of Shares

There was no general mandate granted to the Directors to issue Shares in effect during the financial year.

The Board of Directors is authorized according to the Charter to approve the increase in the Company's share capital through the placement by the Company of additional ordinary shares within the limits of the number and categories (types) of authorised shares or issue-grade securities convertible into ordinary shares by public offering (if the number of securities is 25% or less of the corresponding previously placed shares). In case the amount of increase or issue-grade exceeds 25% of the previously placed shares such increase shall be approved by the GSM.

9. Shareholders' agreements

(a) Shareholders' Agreement with the Company

The principal terms of this agreement are described in Appendix A.

At the time of entering into the Shareholders' Agreement with the Company, the parties to the agreement included the Major Shareholders, namely En+, SUAL Partners, Glencore and Onexim.

The impact of the Shareholding Changes in 2018 and the Shareholding Changes in 2019 to the Shareholders' Agreement with the Company is described in Appendix A.

(b) Shareholders' Agreement between Major Shareholders only

The Shareholders' Agreement between Major Shareholders only, which has not been amended since the Listing Date, only sets out certain agreed matters between the Major Shareholders in relation to Board appointments, Board committees, voting, transfers of Shares and certain other matters. The principal terms of the Shareholders' Agreement between Major Shareholders only are described in Appendix B.

The impact of the Shareholding Changes in 2018 and the Shareholding Changes in 2019 to the Shareholders' Agreement among Major Shareholders only is described in Appendix B.

10. Management contracts

Other than the full-time employment contacts, the Company has not entered into any contract with any individual, firm or body corporate to manage or administer the whole or any substantial part of any business of the Company during the year 2021.

11. Connected transactions

The transactions and arrangements summarised below were entered into by members of the Group with its connected persons (including their respective associates) prior to and during the financial year ended 31 December 2021, and are required to be disclosed by the Company in compliance with Rules 14A.49, 14A.71 and 14A.72 of the HKSE Listing Rules and, where applicable, were disclosed by the Company in accordance with the requirements of Chapter 14A of the HKSE Listing Rules.

Continuing connected transactions disclosed in the Report of the Board of Directors section of the annual report differ from the related party transaction disclosures included in note 5, note 6 and note 25 of the consolidation financial statements. Differences arise as the definition of continuing connected transactions does not include operations with Glencore, save as disclosed below under "Aluminium Sales Contract with Glencore", or operations with associates of the Group, while these transactions are treated as related party transactions in the consolidated financial statements of the Group. Additionally, transactions that are considered immaterial and meet the definition of de minimis are not included in the disclosure of continuing connected transactions.

The independent non-executive Directors consider that each of the transactions below have been entered into and are conducted:

(a) in the ordinary and usual course of business of the Group;

(b) on normal commercial terms or better; and

(c) in accordance with the relevant agreement governing them on terms that are fair and reasonable in the interests of the Company and its shareholders as a whole.

The Company's auditors were engaged to report on the Group's continuing connected transactions for the year ended 31 December 2021 in accordance with the Hong Kong Standard on Assurance Engagements 3000 "*Assurance Engagements Other Than Audits or Reviews of Historical Financial Information*" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The Board confirmed that auditors have issued an unqualified letter in accordance with Rule 14A.56, containing their confirmation that nothing has come to their attention that caused them to believe that the continuing connected transactions as disclosed by the Group in the annual report (i) have not been approved by the Board; (ii) were not, in all material respects, in accordance with the pricing policies of the Group if the transactions involve the provision of goods or services by the Group; (iii) were not entered into, in all material respects, in accordance with the relevant agreement governing the transactions; and (iv) have exceeded the cap.

A Electricity and Capacity Supply Contracts

En+ is the Controlling Shareholder of the Company. Accordingly, the electricity and capacity supply and transmission contracts between members of the Group and companies controlled by En+ referred to below constituted continuing connected transactions for the Company under the HKSE Listing Rules.

Long-term electricity and capacity supply contracts

The Group through its three wholly-owned subsidiaries, KrAZ, BrAZ and RUSAL Ural JSC (formerly JSC “SUAL”) entered into three long-term electricity and capacity supply contracts on 4 December 2009, 1 December 2009 and 15 November 2009 respectively. Under each of these contracts, 50% of the price must be paid before the 15th day of the month of supply and the remaining 50% of the price must be paid before the 25th day of the month of supply. The amount to be paid is satisfied in cash via wire transfer and is based on the estimated consumption of the Group as mutually agreed between the parties. The final settlement is made by the parties in the month following the month of supply. RUSAL Ural JSC and BrAZ each concluded the contracts with JSC “Irkutskenergo” for the period from 2010 to 2018. On 31 December 2014, RUSAL Ural JSC, BrAZ and JSC Irkutskenergo entered into an addendum pursuant to which all rights and obligations under the contract dated 15 November 2009 were transferred from JSC “RUSAL Ural” to BrAZ. KrAZ concluded the contract with Krasnoyarskaya HPP for the period from 2010 to 2020. The cost of electricity supplied by JSC “Irkutskenergo” and Krasnoyarskaya HPP is based on a fixed formula which is tied to the market prices of electricity and the prices of aluminium quoted on the LME. For details of the formula, please refer to the Company’s circular dated 13 December 2013. As mentioned in the announcement dated 19 November 2014, Krasnoyarskaya HPP suspended the supply of electricity in the amount required by KrAZ under the contract since October 2014.

As mentioned in the Company’s circular dated 11 October 2016, certain members of the Group entered into three new long-term electricity supply agreements to replace the abovementioned long-term electricity and capacity supply contracts. The cost of electricity to be supplied is based on a formula which is tied to the market prices of electricity at discount. For details of the formula, please refer to the Company’s circular dated 11 October 2016. One of the three new long-term electricity supply agreements, the one between RUSAL Energo Limited Liability Company (“**RUSAL Energo**”) and EuroSibEnergo Joint Stock Company dated 28 October 2016, took effect from 1 November 2016.

As mentioned in the announcement dated 29 November 2017, as part of a reorganization of the En+ group companies and for the purpose of replacing Irkutskenergo in the original contracts with another subsidiary of En+ for that reorganization, on 28 November 2017, the original contracts with Irkutskenergo have been terminated and new replacement E&C Contracts have been entered into between the respective members of the Group which were parties to the original contracts and LLC “EuroSibEnergo-Hydrogeneration” (“EuroSibEnergoHydrogeneration”, a wholly-owned subsidiary of En+), as the seller. The term of the new contracts will cover the remaining term of the original contracts. All other material terms and conditions under the new contacts remain the same as the material terms and conditions under the original contracts after the replacement, including those as set out in the circular dated 11 October 2016 such as the pricing formula, annual contractual amount of electricity to be supplied and payment timeframe, guarantee arrangements and the annual caps.

The actual monetary value of electricity and capacity purchased for the year ended 31 December 2021 under the contract between BrAZ and JSC “Irkutskenergo”/ EuroSibEnergo-Hydrogeneration (which replaced JSC “Irkutskenergo”) was USD172.8 million.

The actual monetary value of electricity and capacity purchased for the year ended 31 December 2021 under the contract between BrAZ (which replaced JSC “RUSAL Ural” (formerly JSC “SUAL”) pursuant to an addendum dated 31 December 2014) and JSC “Irkutskenergo”/EuroSibEnergo-Hydrogeneration (which replaced JSC “Irkutskenergo”) was USD57.3 million.

The actual monetary value of electricity and capacity purchased for the year ended 31 December 2021 under the contract between KrAZ and Krasnoyarskaya HPP was nil.

The actual monetary value of electricity purchased for the year ended 31 December 2021 under the contract between RUSAL Energo and EuroSibEnergo JSC was USD115.9 million.

Short-term electricity and capacity supply contracts

On 27 March 2014, the framework agreements (as mentioned on pages 11 and 23 of the circular of the Company dated 13 December 2013), governing (i) the transactions under the short-term electricity and capacity supply contracts with En+'s associates and the miscellaneous electricity and capacity transmission contracts with En+'s associates (as further discussed below); and (ii) the transactions under certain aluminium sales contracts with Mr. Deripaska's associates (as further discussed below) respectively, were signed. Such agreements were respectively extended to cover three years ending 31 December 2019 by an addendum entered on 27 December 2016. On 12 December 2019, a new framework agreement was entered into with En+ to cover electricity and capacity supply contracts with En+'s associates, including long-term electricity and capacity supply contracts, short-term electricity and capacity supply contracts, miscellaneous electricity and capacity supply contracts, long-term capacity RSE contracts (as defined below) and long term mandatory agreements for the purchase of capacity of retrofitted generating facilities (as mentioned in the circular of the Company dated 18 October 2019).

Members of the Group, including BrAZ, SAZ, NkAZ, JSC "RUSAL Ural" and RUSAL Energo have entered into, from time to time in the financial year ended 31 December 2021 as part of their ordinary course of business, short-term electricity and capacity supply contracts with duration not exceeding one year with the companies controlled by En+, including JSC "Irkutskenergo", LLC "Avtozavodskaya CHP", JSC "EuroSibEnergo" and EuroSibEnergoHydrogeneration and LLC "BEC". The electricity and capacity supplied under these short-term electricity and capacity supply contracts are derived from the plants operated by JSC Irkutskenergo, LLC "Avtozavodskaya CHP", JSC "EuroSibEnergo", "EuroSibEnergoHydrogeneration" and LLC "BEC".

The prices of electricity and capacity supplied (excluding electricity and capacity supplied to residential users) were determined under a competitive procedure (involving bidding and tendering by suppliers and customers of electricity and capacity) through the "Trading System Administrator of Wholesale Electricity Market Transactions" (TSA), a commercial operator and facilitator of transactions which matches suppliers and customers, and prices determined through such competitive procedure were generally considered as market prices. The parties to these short-term E&C Contracts receive information relating to prices of electricity and capacity directly from the TSA and this is consistent with normal market practice whereby prices are provided to each participant of the market individually.

The mechanism for the determination of market prices of electricity and capacity through the TSA is approved by, and is in compliance with statutory requirements stipulated in applicable regulations of, the Government of the Russian Federation, and the Group may only enter into short-term E&C Contracts (with independent third parties or connected persons) through the TSA.

Under the terms of the short-term E&C Contracts, payments due to be paid by members of the Group shall be made in installments in accordance with the regulations of the Market Council, and all payment amounts shall be satisfied by the relevant members of the Group in cash via bank transfer.

In addition, members of the Group, including LLC "RUSAL Silicon Ural", JSC "RUSAL SAYANAL", JSC "Ural Foil" have entered into, from time to time as part of their ordinary course of business, the additional agreements to the original short-term electricity and capacity supply contracts not exceeding three years with LLC "MAREM+" (formerly CJSC "MAREM+" until 3 August 2015), a company controlled by En+, for the supply of electricity and capacity purchased at the wholesale energy and capacity market.

The purchase of electricity and capacity at the wholesale market is effected at a price which is determined daily (for electricity) and monthly (for capacity), based on the trading results at the wholesale market, and subject to unpredictable external fluctuations (including, without limitation, weather factors, river stream flow rates, hydro-power plant output storage, transborder crossflow planning, provision for reserves by power generation facilities, scheduled equipment repairs, fuel price fluctuations, details of fuel regime for "endpoint" power generation facilities, economic efficiency of bids submitted by producers, technological processes of power generation facilities' equipment, and effect of state regulation on the market model).

The prices of electricity and capacity under these contracts/addendums were derived from the wholesale market price regulated by regulations prescribed by the Government of the Russian Federation. Payments due by members of the Group shall be made in accordance with tentatively scheduled installments during each month, and the final payment shall be made in the middle of the month following the month of billing, and all payment amounts shall be satisfied by the relevant members of the Group in cash via bank transfer.

During 2021, members of the Group have also from time to time entered into the additional agreements to the original short-term electricity and capacity supply contracts with LLC "Irkutskaya Energosbytovaya Company" (**LLC "Irkutskenergosbyt"**), a company controlled by En+

as to more than 30%, for the supply of electricity and capacity purchased at the wholesale electricity market and supplied to the consumers in the retail market on normal commercial terms (including the pricing terms) regulated under the regulations of the Government of the Russian Federation. Payments due by members of the Group under each of these short-term electricity and capacity supply contracts shall be made by installments during each month of supply, and all payment amounts shall be satisfied by the relevant members of the Group in cash via bank transfer.

The actual monetary value of electricity and capacity purchased for the year ended 31 December 2021 under the contracts/addendums with JSC Irkutskenergo, LLC "Avtozavodskaya CHP", LLC MAREM+ (including LLC "MAREM+K", which is a subsidiary of LLC MAREM+), JSC "EuroSibEnergo", EuroSibEnergo-Hydrogeneration, LLC "Irkutskenergosbyt" and LLC "BEC" was USD238.4 million.

Miscellaneous electricity and capacity transmission contracts

The Group has also entered into miscellaneous electricity and capacity transmission contracts and/or addendums to those contracts with Joint Stock Company "Irkutsk Electronetwork Company" ("**JSC** "**IENC**""), a company controlled by En+ as to more than 30% of its issued share capital, from time to time during the year ended 31 December 2021.

The prices of electricity transmission under such miscellaneous electricity and capacity transmission contracts (and addendums thereto) were based on tariff rates stipulated by the Tariff Service of the Irkutsk region (an executive authority of the Irkutsk region in the sphere of government regulation of tariffs including electricity and capacity transmission tariffs), and on terms which are the same for all consumers (tariffs are differentiated depending on voltage levels). Payments under these miscellaneous electricity and capacity transmission contracts (and addendums thereto) were made in accordance with tentatively scheduled instalments during each month, with the final payment effected in the middle of the month following the month of billing, and all payment amounts were satisfied in cash via bank transfer.

The actual monetary value of electricity and capacity transmission purchased and sold for the year ended 31 December 2021 under these contracts with companies controlled by En+ was USD125.1 million.

Long-term capacity RSE contracts

The Group also entered into long-term capacity supply from renewable sources of energy ("**RSE**") contracts with a term of 15 years with companies controlled by En+ as sellers, including EuroSibEnergo-Hydrogeneration and Krasnoyarskaya HPP (which was replaced by LLC "Abakanskaya SPS" in 2017), from time to time during the year ended 31 December 2021.

The entering into of these long-term capacity RSE contracts is compulsory for participants of the wholesale electric energy market under the capacity-based renewable energy support scheme of the Russian Federation. Under applicable regulations of the Government of the Russian Federation, participants in the electricity energy wholesale market must purchase capacity by entering into standard form of contracts, the terms and conditions (including the mechanics of price determination and duration of contract to be of 180 months) of which are determined by the Market Council and published on the website of the Market Council. Such terms and conditions prescribed by the Market Council may not be amended by the supplier or buyer entering into the long-term capacity RSE contracts. The exact capacity volume to be supplied under the contract and its value are determined by the TSA.

The price of capacity to be sold under long-term capacity RSE contracts is determined by the TSA in accordance with procedures established by the rules of determination of the price of capacity of generating facilities using renewable energy sources approved by relevant legislation of the Government of the Russian Federation and the Wholesale Market Rules, details of which were set out in the circular of the Company dated 11 October 2016. Payment for the supply of capacity is made by the buyer of capacity via bank transfer using designated bank accounts it maintains pursuant to the TSA's instructions, and the buyer is only notified of the volume supplied for the payments made at a later stage.

On 30 March 2016, the TSA on behalf of RUSAL Energo entered into the long-term capacity RSE contract with Krasnoyarskaya HPP (which was replaced by LLC "Abakanskaya SPS" in 2017).

The actual monetary value of electricity and capacity purchased for the year ended 31 December 2021 under the long-term capacity RSE contracts with LLC "Abakanskaya SPS" was USD0.6 million.

Long-term mandatory agreements for purchase of capacity of retrofitted generating facilities

Members of the Group are current participants (entities) on the wholesale electricity and capacity market, and purchase electricity and capacity on the wholesale electricity and capacity market.

Activity on the wholesale electricity and capacity market is regulated by legislation of the Russian Federation currently in effect (in particular, Resolution No. 1172 of the Government of the Russian Federation "On approving Rules for the wholesale electricity and capacity market and on making changes to some acts of the Government of the Russian Federation regarding the arrangement of functioning of the wholesale electricity and capacity market"). The wholesale electricity and capacity market operating principle is ensured by infrastructure organisations including the Market Council, the TSA, the "Financial Settlement Center" (the single settlement center of the wholesale electricity and capacity market) and "System Operator of the United Power System", Joint-stock Company, an office performing a centralized operational and dispatching management of the unified energy system of the Russian Federation, conferred, among others, with the authority to issue instructions compulsory to all subjects and consumers of the electric energy which influence the whole energy system (the "**System Operator**").

The aforementioned legislation of the Russian Federation introduced to the current wholesale electricity and capacity market model a procedure for selecting projects for the retrofitting of generating facilities of thermal power plants on the wholesale electricity and capacity market during the period from 2019 through 2025 (inclusively). This procedure guarantees the refund of cash spent for retrofitting thermal power plants at the expense of wholesale electricity and capacity market consumers.

As such, a new type of mandatory agreements for the purchase and sale (supply) of capacity of retrofitted generating facilities ("**KOMMod agreements**") has been introduced on the Russian wholesale electricity and capacity market in 2019.

System Operator and the Government Commission for Electric Power Industry Development select projects for retrofitting thermal power plant generating facilities on an annual basis. According to the selection results, based on commercial representation agreements as an agent, the "Financial Settlement Center" concludes KOMMod agreements with selected suppliers on behalf of wholesale electricity and capacity market participants, with a delivery period of 16 years.

According to results of a selection of projects for retrofitting of thermal power plant generating facilities carried out in 2019, Decree of the Government of the Russian Federation No.1713-r dated 2 August 2019 approved a list of generating facilities the capacity of which are to be supplied under KOMMod agreements. Projects for retrofitting of thermal power plant facilities owned by JSC Irkutskenergo, were included in the list of selected projects.

In accordance with wholesale electricity and capacity market regulations, the "Financial Settlement Center", as agent, is obliged to conclude KOMMod agreements on behalf of members of the Group participating in the Russian wholesale electricity and capacity market based on a commercial representation agreement. As such, the Company could neither participate nor exert control over conclusion of KOMMod agreements.

Members of the Group may not impede the conclusion of KOMMod agreements since this type of agreement is obligatory for conclusion by all wholesale electricity and capacity market members. If wholesale electricity and capacity market rules are not observed, members of the Group will be stripped of the wholesale electricity and capacity market entity status which will result in a significant growth in electricity and capacity purchase costs.

In September 2019, the "Financial Settlement Center" concluded KOMMod agreements on behalf of certain members of the Group (which are participants of the wholesale electricity and capacity market) with JSC Irkutskenergo, a company controlled by En+, as the counterparty/supplier. The obligations of the parties under these agreements (supply and payment) will commence from August 2022 at the earliest. Amounts payable by members of the Group under these KOMMod agreements shall be made in cash via bank transfer on payment terms prescribed by regulations of the Market Council.

According to results of a selection of projects for retrofitting of thermal power plant generating facilities carried out in 2019, Decree of the Government of the Russian Federation No.232-r dated 7 February 2020 approved a list of generating facilities the capacity of which is to be supplied under KOMMod agreements. In March 2020 the "Financial Settlement Center" concluded KOMMod agreements on behalf of certain members of the Group (which are participants of the wholesale electricity and capacity market) with JSC Irkutskenergo (as replaced by LLC "BEC" in 2020) and LLC "Avtozavodskaya CHP", companies controlled by En+, as the counterparty/supplier. The obligations of the parties under these agreements (supply and payment) will commence from 2025 at the earliest.

It is expected that members of the Group will enter into KOMMod agreements with associates of En+ from time to time in the future on the same terms as described in the circular of the Company dated 18 October 2019.

As the obligations of the parties under the KOMMod agreements will commence from August 2022 and 2025 accordingly at the earliest, the actual monetary value of electricity and capacity purchased for the year ended 31 December 2021 under the KOMMod agreements with JSC Irkutskenergo was USD nil.

The aggregate consideration for the long-term and short-term electricity and capacity supply contracts, long-term capacity RSE contracts, KOMMod agreements together with the miscellaneous electricity and capacity transmission contracts between the Group and the associates of En+ for the year ended 31 December 2021 was USD710.1 million, which is within the annual cap of USD1,141 million (net of VAT) as approved by the independent shareholders of the Company for such type of continuing connected transactions for the year ended 31 December 2021.

B Aluminium Sale Contracts

Members of the Group have from time to time entered into aluminium sales contracts with associates of En+.

Aluminium Sales Contracts with En+'s Associates

Primary Aluminium Sales Contract with the associates of En+

"KraMZ" Ltd. is an indirect subsidiary of En+ and is therefore an associate of En+. "KraMZ" Ltd. is therefore an associate of En+ and a connected person of the Company under the HKSE Listing Rules. Accordingly, the contract between member of the Group on one part and "KraMZ" Ltd. on the other, as described below, constitute continuing connected transactions for the Company under the HKSE Listing Rules.

The original contract as mentioned in the table below was entered into on 14 December 2006 when the Company and SUAL Partners merged. In accordance with the Order of Federal Antimonopoly Service of the Russian Federation, members of the Group do not have the right to unduly refuse to supply aluminium products to the buyers and are obliged to organise the work in such a way as to ensure the satisfaction of the needs of the buyers of aluminium products in the Russian market subject to the availability of the relevant production capacities, therefore the contract was entered into. Pursuant to this contract, "KraMZ" Ltd. was to buy primary aluminium from the member of the Group. This contract was concluded on arms-length commercial terms. The consideration for this contract was satisfied in cash via wire transfer.

Details of this contract is set out in the table below:

Contractor (associate of En+)	Customer (member of the Group)	Date of contract	Term of contract	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
"KraMZ" Ltd.	JSC "UC RUSAL TH"	25.12.2020, which is an addendum to the original contract dated 14.12.2006	Up to 31.12.2021	100% prepayment	197.6
"KraMZ" Ltd.	LLC "LMTI"	27.09.2021	Up to 31.12.2021	100% within 10 calendar days from the date of signing the contract	–
Total:					**197.6**

The aggregate consideration for primary aluminium sale contracts provided by the associates of En+ during the year ended 31 December 2021 amounted to USD197.6 million, which was within the maximum aggregate consideration of USD210,232,488 for 2021 as disclosed in the announcement dated 22 November 2021.

Aluminium Sales Contracts under the Glencore sales contract

On 13 December 2019, the Board approved that Rusal Marketing GmbH (or another member of the Group) (the "**Seller**"), enter into the sales contract in relation to the sale of primary aluminium to Glencore International AG (the "**Purchaser**"), a subsidiary of Glencore, as the purchaser. The sale contract has a term from 1 September 2020 to 31 December 2024 and can be extended to 31 December 2025. This sales contract was approved by the independent shareholders of the Company at the general meeting held on 13 May 2020. The sales contract grants an option (the "**Purchaser Call Option**") exercisable by the Purchaser between the financial year ended 31 December 2021 and the financial year ended 31 December 2024 to require the Seller to sell to the Purchaser up to an additional 200,000 tons a year of primary aluminium with an aggregate amount under the term of the sales contract being up to 800,000 tons of primary aluminium. As (i) the sales contract includes (among other things) the Purchaser Call Option; (ii) the Purchaser has granted the SUAL a call option to SUAL Partners which require the Purchaser to sell primary aluminium to SUAL partners or any of its associates (the "**SUAL Call Option**"), a connected person of the Company; and (iii) the exercise of the SUAL Call Option is a condition precedent to the exercise of the Purchaser Call Option by the Purchaser, the Purchaser has been deemed by the Hong Kong Stock Exchange to be a connected person of the Company at the point in time of entering the sales contract pursuant to Rule 14A.20 of the HKSE Listing Rules. The sales contract was entered into on 17 July 2020.

As such, the transactions contemplated under the sales contract constitute continuing connected transactions of the Company under the HKSE Listing Rules.

The total consideration for the aluminium supplied under the abovementioned sales contract with the Purchaser during the year ended 31 December 2021 amounted to USD464.1 million, which is within the annual cap of USD3,597 million as approved by the independent shareholders of the Company for such continuing connected transactions for the year ended 31 December 2021.

C Transportation Contracts with the associates of En+

KraMZ-Auto is held by En+ as to more than 30% of the issued share capital and therefore is an associate of En+. During the Review Period, En+ holds more than 30% of the issued share capital of JSC Otdeleniye Vremennoy Expluatatsii ("**OVE**"), thus OVE is also an associate of En+. Each of KraMZ-Auto and OVE is therefore an associate of En+ and a connected person of the Company under the HKSE Listing Rules. Accordingly, the contracts between members of the Group on one part and KraMZ-Auto or OVE on the other, as described below, constitute continuing connected transactions for the Company under the HKSE Listing Rules. Pursuant to these contracts, KraMZ-Auto and OVE were to provide various transportation services to members of the Group. All these transportation contracts were concluded on arms-length commercial terms. The consideration for each of these contracts was satisfied in cash via wire transfer or set-off of obligations.

Details of these contracts are set out in the table below:

Service provider (associate of En+)	Customer (member of the Group)	Date of contract	Term of contract	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
KraMZ-Auto	LLC "SVRZ"	01.01.2021	Up to 31.12.2023	Payment is made within 10 calendar days from the receipt of the invoice	–
KraMZ-Auto	LLC "SVRZ"	01.01.2021	Up to 31.12.2023	Payment is made within 10 banking days from the receipt of the invoice	–
KraMZ-Auto	JSC "Kremniy"	01.01.2021	Up to 31.12.2021	Payment is made within 30 calendar days from the receipt of the invoice	–
OVE	JSC RUSAL Sayanogorsk	31.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2021	Payment is made within 10 working days from the receipt of the original of invoice	4.1
KraMZ-Auto	RUSAL Bratsk PJSC	01.01.2021	Up to 31.12.2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services	2.2
KraMZ-Auto	RUSAL Bratsk PJSC (Shelekhov)	01.01.2021	Up to 31.12.2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services	4.1
KraMZ-Auto	RUSAL Bratsk PJSC (Shelekhov)	01.01.2021	Up to 31.12.2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services	0.2
KraMZ-Auto	JSC RUSAL Krasnoyarsk	28.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services	2

Service provider (associate of En+)	Customer (member of the Group)	Date of contract	Term of contract	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
KraMZ-Auto	JSC RUSAL Krasnoyarsk	28.12.2020 (the terms of the contract commenced on 01.01.2021)	Up to 31.12.2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services	0.7
KraMZ-Auto	JSC RUSAL SAYANAL	23.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services in the absence of motivated objections to the certificate	–
KraMZ-Auto	JSC RUSAL SAYANAL	23.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2023	Payment is made within 10 calendar days from the date of receipt of the invoice issued and presented to the charterer on the basis of the certificate of services signed by the parties and in the absence of reasoned objections to the certificate.	0.1
KraMZ-Auto	LLC “SUAL-PM”	23.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2021	Payment is made within 10 working days from the receipt of the invoice and the signed certificate of rendered services	–
KraMZ-Auto	JSC RUSAL Sayanogorsk	23.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services	2.7
KraMZ-Auto	JSC RUSAL Sayanogorsk	23.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services	0.2

Service provider (associate of En+)	Customer (member of the Group)	Date of contract	Term of contract	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
KraMZ-Auto	JSC RUSAL Sayanogorsk	23.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services	0.3
OVE	JSC RUSAL SAYANAL	01.04.2021, which is an additional agreement to the contracts dated 31.12.2019 and 23.12.2020 (the term of the contract commenced on 01.01.2021)	Up to 31.12.2021. If neither party declares its intention to terminate the contract one month before its expiration date, the contract is considered to be extended for each subsequent calendar year on the same terms, and the total term of the contract cannot be longer than three years	Payment is to be made within 10 days after the receipt of the VAT invoice	–
KraMZ-Auto	"Casting and mechanical plant "SKAD" Ltd".	13.07.2021 (additional agreement to the contract dated 23.07.2020)	Up to 31.12.2021	Payment is to be made within 10 days after the receipt of the VAT invoice	–
KraMZ-Auto	RUSAL Bratsk PJSC	24.12.2021 (supplementary agreement to the contract dated 01.01.2021	Up to 31.12.2021	Payment is to be made within 10 days of receipt of the original invoice	–
Total:					**16.6**

The aggregate consideration for the transportation services provided by the associates of En+ during the year ended 31 December 2021 amounted to USD16.6 million, which was within the maximum aggregate consideration of USD19.579 million for 2021 as disclosed in the announcement dated 28 December 2021.

D Heat Supply Contracts with the associates of En+

Each of the issued share capital of Limited Liability Company "Irkutskenergosbyt", Baykalenergo JSC, JSC Irkutskenergo, LLC BEC and Khakass Municipal Systems LLC is held by En+ (being a substantial shareholder of the Company) as to more than 30%, and is therefore an associate of En+. Each of Limited Liability Company "Irkutskenergosbyt", Baykalenergo JSC, JSC Irkutskenergo, LLC BEC and Khakass Municipal Systems LLC is thus a connected person of the Company under the HKSE Listing Rules. Accordingly, the contracts below constitute continuing connected transactions of the Company. Pursuant to these contracts, the associates of En+ were to supply heat (including heat energy and heat power in the form of steam and hot water) to members of the Group. All of these heat supply contracts were entered into on arms-length commercial terms. The consideration for each of these contracts was satisfied in cash via wire transfer or set-off of obligations.

Supplier (associate of En+)	Customer (member of the Group)	Date of contract	Term of contract	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
Limited Liability Company "Irkutskenergosbyt"	Limited Liability Company "United Company RUSAL Anode Plant"	29.08.2019, which is an additional agreement to the original contract dated 22.05.2019 (the terms of this additional agreement commenced on 03.06.2019)	Up to 31 May 2022	On or before the 18th day of the current accounting period, the consumer shall pay 35% of the heat energy cost as approved by the parties; on or before the last day of the current accounting period the consumer shall pay 50% of the heat energy cost as approved by the parties; on or before the 10th day of the month following the accounting period, the consumer shall pay the balance between of actual consumed heat energy as registered by metering instruments readings or based on the calculation if a metering instrument is not available, and the amount already paid by the consumer	–
Baykalenergo JSC	Limited Liability Company RUSAL Taishet Aluminium Smelter	01.01.2020	Up to 31 December 2022	First payment (35% of the planned total cost of heat) shall be paid no later than the 18th of the month. Second payment (50% of the planned total cost of heat) shall be paid no later than the last day of the month. Final payment (for the heat actually consumed, taking into account earlier payments) shall be paid no later than the 10th day of the following month.	–

Supplier (associate of En+)	Customer (member of the Group)	Date of contract	Term of contract	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
LLC BEC	PJSC RUSAL Bratsk	01.01.2021	Up to 31.12.2021	Advance payments up to the 18th day of the month are to be settled in the amount of 35%, up to the last day of the month – 50%, the balance in fact up to the 10th day of the month following the settlement	–
LLC BEC	PJSC RUSAL Bratsk (Shelekhov branch)	01.01.2021	Up to 31.12.2023	The first term of payment is not later than the 18th day of the current month in the amount of 35% of the amount, the second payment period is not later than the last day of the current month in the amount of 50% and the third term payment is not later than the 10th day of the month following the reporting month	1.2
LLC BEC	PJSC RUSAL Bratsk (Shelekhov branch)	01.01.2021	Up to 31.12.2023	The first term of payment is not later than the 18th day of the current month in the amount of 35% of the amount, the second payment period is not later than the last day of the current month in the amount of 50% and a third term payment is not later than the 10th day of the month following the reporting month	0.4
Khakass Municipal Systems LLC	JSC RUSAL Sayanogorsk	28.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2021	First payment (85% of the total amount of thermal energy) shall be paid no later than the 20th day of the month of the current billing period, based on the invoice	3.3
Baykalenergo JSC	JSC RUSAL Sayanogorsk	28.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2021	The payment is made monthly, not later than the 20th day of the month following the reporting period	–
Baykalenergo JSC	JSC RUSAL Sayanogorsk	28.12.2020 (the term of this contract commenced on 1.1 2021)	Up to 31.12.2021	The payment is made monthly, not later than the 20th day of the month following the reporting period.	–

Supplier (associate of En+)	Customer (member of the Group)	Date of contract	Term of contract	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
Baykalenergo JSC	LLC RUSAL Taishet Aluminium Smelter	28.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2023	The first term of payment is not later than the 18th day of the current month in the amount of 35% of the amount, the second payment period is not later than the last day of the current month in the amount of 50% and a third term payment is not later than the 10th day of the month following the reporting month.	0.1
Baykalenergo JSC	UC RUSAL Anode Plant LLC	28.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2021	The first term of payment is not later than the 18th day of the current month in the amount of 35% of the amount, the second payment period is not later than the last day of the current month in the amount of 50% and a third term payment is not later than the 10th day of the month following the reporting month	–
Khakass Municipal Systems LLC	JSC RUSAL SAYANAL	28.12.2020 (the term of this contract commenced on 01.01.2021)	Up to 31.12.2023	Payment is made no later than on the 10th day of the month following the billing period	0.3
LLC BEC	Joint Stock Company "SibVAMI"	19.02.2021 (the term of the contract commenced on 01.12.2020)	Up to 31.12.2023. Agreement is considered to be extended for the next calendar year and on the same terms, if before the end of its validity period, any of the parties declare neither its termination or modification, or the conclusion of the agreement on other terms	Advance payment of 35% of the total price on the 18th day of the current month and 50% by the last day of the current month, with the remaining 15% being payable by the 10th day of the next month	–

Supplier (associate of En+)	Customer (member of the Group)	Date of contract	Term of contract	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
Khakass Municipal Systems LLC	JSC RUSAL SAYANAL	22.03.2021, which is an additional agreement to the original contract dated 28.12.2020	Up to 31.12.2023	First payment term (payment period): no later than the 20th day of the month of the current billing period (month), on the basis of the invoice issued payment of 50% of the total cost of the amount of thermal energy agreed by the parties. Second payment term (payment period): no later than the 20th day of the month following the billing period (month), payment of the difference between the cost of the actual amount of heat energy received, determined on the basis of the readings of metering devices, or by calculation in the absence of metering devices, and the amount paid earlier. If there is any overpayment, it is credited as an advance payment for the cost of thermal energy in subsequent billing periods (months).	–
JSC Irkutskenergo	PJSC “RUSAL Bratsk” (Shelekhov)	18.02.2020	Up to 31 December 2022	Payment to be made monthly no later than the 10th day of the month following the reporting period	–
Total:					**5.3**

The aggregate consideration for the heat supply provided by the associates of En+ during the year ended 31 December 2021 amounted to USD5.3 million, which was within the maximum aggregate consideration of USD7.630 million for 2021 as disclosed in the announcement dated 23 March 2021.

E Repair Services Contracts with the associates of En+

Each of the issued share capital of KraMZ-Auto, LLC Irkutskenergoremont, JSC “Irkutsk electronetwork company”, JSC “Baikalenergo”, “BEC-repair” LLC, KraMZ Ltd., “HPS engineering” Ltd. and JSC “IENC” is directly or indirectly held by En+ as to more than 30%, each of them is therefore an associate of En+ and thus is a connected person of the Company under the HKSE Listing Rules.

Accordingly, the transactions entered into between members of the Group as customers and KraMZ-Auto, LLC Irkutskenergoremont, JSC “Irkutsk electronetwork company”, JSC “Baikalenergo”, “BEC-repair” LLC, KraMZ Ltd., “HPS engineering” Ltd. or JSC “IENC”as contractors constitute continuing connected transactions of the Company under the HKSE Listing Rules. The consideration for the repair services under each of these contracts are determined on an arm’s length basis. The consideration for each of these contracts was satisfied in cash via wire transfer or set-off of obligations.

Details of these transactions are set out in the table below:

Date of contract	Customer (member of the Group)	Contractor (associate of En+)	Term of contract	Repair services	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
14.05.2020	Joint stock company "RUSAL Krasnoyarsk Aluminium Smelter"	KraMZ-Auto	Up to 31.03.2021	Acquisition of equipment repair services	Payment upon delivery within 15 calendar days after signing acts of completion	–
14.01.2021	PJSC RUSAL Bratsk	LLC Irkutskenergoremont	Up to 31.12.2021	Production equipment maintenance and repair works	Payment is within 60 calendar days from the date of signing of the act of acceptance by customer based on the invoice	0.3
14.01.2021	JSC RUSAL Achinsk	LLC Irkutskenergoremont	Up to 31.12.2021	Works on overhaul of the boiler #5	Prepayment of 50% of the consideration is made according to the monthly financial schedule up to 5th of the month, the final payment of 50% of the consideration is made within 10 calendar days from the receipt of the originals of the invoices	2.9
01.01.2021	JSC RUSAL Achinsk	LLC Irkutskenergoremont	Up to 31.12.2021	Service maintenance of equipment at CHPP	Prepayment of 50% of the consideration is made according to the monthly financial schedule up to 5th of the month, the final payment of 50% of the consideration is made within 10 calendar days from the receipt of the originals of the invoices	7.5
28.12.2020, the term of the contract commenced on 01.01.2021	"PJSC RUSAL Bratsk	JSC "Irkutsk electronetwork company"	Up to 31.12.2021	Technical maintenance of equipment services	Payment is made within 5 calendar days after receipt of invoice for the current month	0.6
09.12.2020	Societe Anonyme "FRIGUIA" (FRIGUIA SA)	LLC "Irkutskenergoremont"	Up to 31.12.2021	Works on overhaul of the boiler #5	15% prepayment to be paid within 5 calendar days from the date of the signing of the contract, and the remaining 85% payable within 30 calendar days from the date of the act of the performed works	0.2

Date of contract	Customer (member of the Group)	Contractor (associate of En+)	Term of contract	Repair services	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
22.03.2021	Joint stock company "RUSAL Sayanogorsk Aluminium Smelter"	JSC "Baikalenergo"	Up to 31.12.2021	Providing service to the equipment of fuel oil pumping station of power shot at JSC "RUSAL Sayanogorsk" in 2021	Payment will be made within 60 calendar days after receipt of the original invoices corresponding to the certificates of acceptance signed by both parties	–
22.03.2021	Joint stock company "RUSAL Sayanogorsk Aluminium Smelter"	JSC "Baikalenergo"	Up to 31.12.2021	Providing service to the external heat networks and industrial plant wiring at JSC "RUSAL Sayanogorsk" in 2021	Payment will be made within 60 calendar days after receipt of the original invoices corresponding to the certificates of acceptance signed by both parties	–
01.04.2021	Joint stock company "RUSAL Krasnoyarsk Aluminium Smelter"	KraMZ-Auto	Up to 31.12.2021	Carrying out maintenance repair service of tractors used for transportation of liquid metal in buckets from the electrolysis buildings to the foundry departments, the transportation of anode pins from the electrolysis bodies to the pin cleaning area	Payment of 100% of the consideration within 10 days following the reporting date after signing the certificate of acceptance and providing an invoice	0.1
01.04.2021	PJSC "RUSAL Bratsk"	"BEC-repair" LLC	Up to 31.12.2021	Providing equipment maintenance and repair works	Payment to be made within 60 calendar days of signature by customer of the certificates of acceptance based on an invoice	1.3
19.04.2021	Limited Liability Company "Casting and mechanical plant "SKAD"	KraMZ Ltd.	Up to 31.12.2021	Equipment repair services (in respect of melting furnace inductors and cable-hoses)	100% of the consideration to be paid within 30 days from the date of signature of the certificate of acceptance	0.1
28.05.2021	Joint Stock Company "RUSAL Krasnoyarsk"	KraMZ-Auto	Up to 31.3.2022	Maintenance and repair of vehicles used for the transportation of people, materials, tools by maintenance and repair of railway tracks located within the territory of the plant	Payment is made within 10 calendar days from the date of receipt of the invoice issued and presented to the customer on the basis of the certificate of acceptance signed by the parties	–

Date of contract	Customer (member of the Group)	Contractor (associate of En+)	Term of contract	Repair services	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
28.05.2021	Joint Stock Company "RUSAL Krasnoyarsk"	"HPS engineering" Ltd.	Up to 31.12.2021	Repair of equipment	Pre-payment for materials up to USD41,000 excluding VAT within 5 banking days from date of invoice Remaining payment to be made within 30 calendar days after receipt of the original invoices corresponding to the certificates of acceptance signed by both parties	0.1
21.07.2021	JSC "RUSAL Achinsk"	LLC Irkutskenergoremont	Up to 31.12.2021	Purchase of equipment repair services at CHPP	Payment is made within 10 calendar days from the end of the reporting month	–
06.09.2021	JSC "RUSAL Achinsk"	LLC Irkutskenergoremont	Up to 31.12.2021	Purchase of equipment repair services for boiler unit at station 6 of the combined heat-and-power plant	Advance payment of 50% will be made as per the monthly financial schedule by the 5th day of the current month. The remaining 50% will be paid within 10 calendar days from the date of receipt of the original invoices	2.5
06.09.2021 (supplemental agreement to the agreement dated 01.01.2021)	JSC "RUSAL Achinsk"	LLC Irkutskenergoremont	Up to 31.12.2021	Purchase of equipment repair services for the combined heat-and-power plant	Advance payment of 50% will be made as per the monthly financial schedule by the 5th day of the current month. The remaining 50% will be paid within 10 calendar days from the date of receipt of the original invoices	–
23.11.2021	JSC RUSAL Krasnoyarsk	"HPS engineering" Ltd.	Up to 31.12.2021	Purchase of works on repair of equipment	Payment to be made within 30 calendar days of signature by the customer of the performed works certificate based on an invoice	–
26.11.2021	JSC RUSAL Krasnoyarsk	KraMZ-Auto	Up to 31.12.2022	Maintenance services for tractors with trailer devices	Payment to be made within 10 calendar days from the date of receipt of the invoice issued	–

Date of contract	Customer (member of the Group)	Contractor (associate of En+)	Term of contract	Repair services	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
26.11.2021 (Supplemental agreement to the contract dated 19.04.2021)	Limited Liability Company "Casting and mechanical plant "SKAD"	KraMZ Ltd.	Up to 31.12.2021	Equipment repair services (in respect of melting furnace inductors and cable-hoses)	100% of the consideration to be paid within 30 days from the date of signature of the certificate of acceptance	–
01.12.2021 (Supplemental agreement to the contract dated 01.04.2021)	PJSC "RUSAL Bratsk"	"BEC-repair" LLC	Up to 31.12.2021	Production equipment maintenance and repair works	Payment to be made within 60 calendar days of signature by customer of the certificates of acceptance based on an invoice	–
29.12.2021, which is a supplementary agreement to contract dated 01.01.2021	JSC RUSAL Achinsk	LLC Irkutskenergoremont	Up to 31.12.2021	Maintenance of the combined heat and power plant's equipment	Advance payment of 50% of the total price of the work to be performed will be made as per the monthly financial schedule by the 5th day of the current month. The remaining 50% will be paid within 10 calendar days from the date of receipt of the original invoices	–
28.12.2021, which is a supplementary agreement to the contract dated 28.12.2020 (the term of this contract commenced on 01.01.2021)	PJSC RUSAL Bratsk	JSC "IENC"	Up to 31.12.2021	Technical maintenance of equipment (electric networks)	Payment to be made within 5 calendar days of receipt of the invoice for the current month. The invoice to be issued no later than the 25th of the current month and the amount to be paid shall be in equal installments in the amount of 1/12 of the annual consideration	–
Total:						**15.7**

The aggregate consideration for the repair services provided under these contracts by the associates of En+ during the year ended 31 December 2021 amounted to USD15.7 million which was within the maximum aggregate consideration of USD16.867 million for 2021 as disclosed in the announcement dated 29 December 2021.

F Operation of Ondskaya Hydro Power Station

EuroSibEnergo – Thermal Energy LLC is directly or indirectly held by En+ as to more than 30% of the issued share capital, it is therefore an associate of En+ and thus is a connected person of the Company under the HKSE Listing Rules.

Accordingly, the transactions entered into between members of the Group and EuroSibEnergo – Thermal Energy LLC constitute continuing connected transactions of the Company under the HKSE Listing Rules. The consideration under each of these contracts is determined on an arm's length basis. The consideration for each of these contracts was satisfied in cash via wire transfer.

Details of these transactions are set out in the table below:

Member of the Group)	Associate of En+	Date of contract	Subject matter	Term of contract	Payment terms	Actual consideration for the year ended 31 December 2021 USD million (excluding VAT)
JSC RUSAL Ural	EuroSibEnergo – Thermal Energy LLC	13.12.2018 (addendum to the lease dated 11.11.2016)	Lease of movable and immovable property of Ondskaya Hydro Power Station	From 1 January 2019 to 31 December 2021	50% of the monthly payment to be paid before the 20th of the current lease month; the remaining 50% of the monthly payment to be paid before the 5th of the month following the lease month	3.5
JSC RUSAL Ural	EuroSibEnergo – Thermal Energy LLC	13.12.2018 (addendum to the contract dated 11.11.2016)	Provision of operation and maintenance services in relation to the Ondskaya Hydro Power Station	From 1 January 2019 to 31 December 2021	An advance payment amounting to 50% of the monthly payment will be made by the 30th of the current month and the remaining 50% of the monthly payment will be made within 10 calendar days after the customer and the contractor have signed a bilateral acceptance certificate to confirm that the rendered services meet the terms of the addendum.	2.3
Total:						**5.7***

* – The sum of the figures in the tables is different due to rounding

The aggregate consideration for operation of Ondskaya Hydro Power Station under these contracts by EuroSibEnergo – Thermal Energy LLC during the year ended 31 December 2021 amounted to USD5.7 million which was within the maximum aggregate consideration of USD6,612,121 for 2021 as disclosed in the announcement dated 14 December 2018.

G Connection of electrical grid by the associate of En+

Each of the issued share capital of JSC "IENC" is held by En+ as to more than 30% of the issued share capital and is therefore an associate of En+ and thus is a connected person of the Company under the Listing Rules.

Accordingly, the transaction entered into between a member of the Group as customer and JSC "IENC" as service provider constitute continuing connected transactions of the Company under the Listing Rules. The consideration for the electrical grid connection services under the contracts is determined on an arm's length basis. The consideration for the contracts was satisfied in cash via bank transfer.

Details of the transaction are set out in the table below:

Date of contract	Customer (member of the Group)	Service provider (associate of En+)	Term of contract	Payment terms	Actual consideration for the year ended 31 December 2020 USD million (excluding VAT)
03.10.2017	LLC "RUSAL Taishet Aluminium Smelter"	JSC "IENC"	Up to 01.10.2020, may be extended for the next year if neither party declares its intention to terminate the contract in writing no later than 30 calendar days prior to its expiration	The payment of consideration will be made monthly against the invoices issued by the service provider and the subsequent work acceptance certificates based on stages	20.6
Total:					**20.6**

The aggregate consideration for the electrical grid connection services provided under the above contract by the associate of En+ during the year ended 31 December 2021 amounted to USD20.6 million which was within the maximum aggregate consideration of USD26,918,849 for 2021 as disclosed in the announcement dated 02 December 2021.

(II) The transactions and arrangements summarised below were entered into by members of the Group on or prior to 31 December 2021 and are in relation to transactions for the year ending 31 December 2022 and subsequent years (and not for the year ended 31 December 2021):

A Transportation Contracts with the associates of En+

As discussed above, each of KraMZ-Auto and OVE is an associate of En+, and therefore is a connected person of the Company under the HKSE Listing Rules. Accordingly, the transactions entered into between members of the Group on one part, and each of KraMZ-Auto and OVE on the other, constitute continuing connected transactions of the Company under the HKSE Listing Rules.

During 2021 or previous years, members of the Group, as customers, entered into the following transportation contracts with particulars set out below:

Date of contract	Customer (member of the Group)	Service provider (associate of En+)	Transportation services	Estimated consideration for the relevant year payable excluding VAT (USD)	Scheduled termination date	Payment terms
01.01.2021	LLC "SVRZ"	KraMZ-Auto	Transport and transportation services	2022: 15,885 2023: 16,520	31 December 2023	Payment is made within 10 calendar days from the receipt of the invoice
01.01.2021	LLC "SVRZ"	KraMZ-Auto	Transport and transportation services	2022: 4,710 2023: 4,899	31 December 2023	Payment is made within 10 banking days from the receipt of the invoice
01.01.2021	RUSAL Bratsk PJSC	KraMZ-Auto	Cargo and special vehicles transportation services	2022: 2,401,832 2023: 2,497,035	31 December 2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services
01.01.2021	RUSAL Bratsk PJSC (Shelekhov)	KraMZ-Auto	Light vehicles and passenger transport transportation services	2022: 286,842 2023: 298,291	31 December 2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services
01.01.2021	RUSAL Bratsk PJSC (Shelekhov)	KraMZ-Auto	Cargo, special equipment and lifting mechanisms transportation services	2022: 6,325,092 2023: 6,575,650	31 December 2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services
28.12.2020 (the term of this contract commenced on 01.01.2021)	JSC RUSAL Krasnoyarsk	KraMZ-Auto	Passenger vehicles transportation services	2022: 774,246 2023: 805,033	31 December 2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services
28.12.2020 (the term of this contract commenced on 01.01.2021)	JSC RUSAL Krasnoyarsk	KraMZ-Auto	Trucks, passenger vehicles and special vehicles transportation services	2022: 2,260,613 2023: 2,322,291	31 December 2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services

Date of contract	Customer (member of the Group)	Service provider (associate of En+)	Transportation services	Estimated consideration for the relevant year payable excluding VAT (USD)	Scheduled termination date	Payment terms
23.12.2020 (the term of this contract commenced on 01.01.2021)	JSC RUSAL SAYANAL	KraMZ-Auto	Transport and transportation (passenger transportation) services	2022: 28,978 2023: 30,137	31 December 2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services in the absence of motivated objections to the certificate
23.12.2020 (the term of this contract commenced on 01.01.2021)	JSC RUSAL SAYANAL	KraMZ-Auto	Transport and transportation (cargo transportation) services	2022: 92,202 2023: 96,429	31 December 2023	Payment is made within 10 calendar days from the date of receipt of the invoice issued and presented to the charterer on the basis of the certificate of services signed by the parties and in the absence of reasoned objections to the certificate
23.12.2020 (the term of this contract commenced on 01.01.2021)	JSC RUSAL Sayanogorsk	KraMZ-Auto	Light vehicles transportation services	2022: 185,731 2023: 187,087	31 December 2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services
23.12.2020 (the term of this contract commenced on 01.01.2021)	JSC RUSAL Sayanogorsk	KraMZ-Auto	Passenger bus transportation services	2022: 347,126 2023: 361,012	31 December 2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services
23.12.2020 (the term of this contract commenced on 01.01.2021)	JSC RUSAL Sayanogorsk	KraMZ-Auto	Cargo and special vehicles transportation services	2022: 2,934,837 2023: 3,049,639	31 December 2023	Payment is made within 10 working days from the receipt of the original of invoice on the basis of the signed certificate of rendered services
24.12.2021	LLC RUSAL Taishet	KraMZ-Auto	Transport and transportation services using specialized equipment and mechanisms	2022: 540,827 2023: 993,258	31 December 2023	Payment to be made within 10 days of receipt of the original invoice

Date of contract	Customer (member of the Group)	Service provider (associate of En+)	Transportation services	Estimated consideration for the relevant year payable excluding VAT (USD)	Scheduled termination date	Payment terms
28.12.2021, which is an additional agreement to the contracts dated 31.12.2019 and 23.12.2020 (the term of the contract commenced on 01.01.2021)	JSC RUSAL SAYANAL	OVE	Organisation of cargo and passenger forwarding	2022: 29,590	31 December 2022	Payment to be made within 10 days after the receipt of the VAT invoice
28.12.2021	JSC RUSAL Sayanogorsk	OVE	Transportation and provision of railway transport services and provision of cars	2022: 5,044,548	31 December 2022	Payment to be made every ten days within 10 working days from the date of receipt of the invoice
01.01.2022	JSC "Kremniy"	KraMZ-Auto	Transport and forwarding services	2022: 12,962	31 December 2022	Payment to be made within 30 days after receiving the invoice
28.12.2021 (supplementary agreement to the contract dated 23.12.2020)	LLC "SUAL-PM"	KraMZ-Auto	Transport and forwarding services	2022: 32,573	31 December 2022	Payment to be made within 10 days of receipt of the invoice

The consideration under these transportation contracts is to be paid in cash via wire transfer or set-off of mutual obligations.

B Heat Supply Contracts with the associates of En+

As discussed above, each of JSC Irkutskenergo, LLC BEC, Khakass Municipal Systems LLC, JSC "Baykalenergo" and Limited Liability Company "Irkutskenergosbyt" is an associate of En+, and is thus a connected person of the Company under the HKSE Listing Rules.

Accordingly, the transactions entered into between members of the Group on one part and JSC Irkutskenergo, LLC BEC, Khakass Municipal Systems LLC, JSC "Baykalenergo" or Limited Liability Company "Irkutskenergosbyt" on the other, as discussed below, constitute continuing connected transactions of the Company under the HKSE Listing Rules.

During 2021 or previous years, members of the Group, as purchasers, entered into the following heat supply contracts with particulars set out below:

Date of contract	Purchaser (member of the Group)	Supplier (associate of En+)	Form of heat	Estimated amount of heat to be supplied for the relevant year	Estimated consideration payable for the relevant years excluding VAT (USD)	Payment terms
29.08.2019, which is an additional agreement to the original contract dated 22.05.2019 (the terms of this additional agreement commenced on 03.06.2019 (Note 1))	Limited Liability Company "United Company RUSAL Anode Plant"	Limited Liability Company "Irkutskenergosbyt"	Supply of domestic hot water	Gcal/m^2 – 1258.58	2022: 1,154	On or before the 18th day of the current accounting period, the consumer shall pay 35% of the heat energy cost as approved by the parties; on or before the last day of the current accounting period the consumer shall pay 50% of the heat energy cost as approved by the parties; on or before the 10th day of the month following the accounting period, the consumer shall pay the balance between of actual consumed heat energy as registered by metering instruments readings or based on the calculation if a metering instrument is not available, and the amount already paid by the consumer
01.01.2020 (Note 1)	Limited Liability Company RUSAL Taishet Aluminium Smelter	JSC Baykalenergo	Thermal energy	Heat: 2022: 4,341.08 Gcal Coolant: 2022: 250.12 m^3	2022: 129,444	First payment (35% of the planned total cost of heat) shall be paid no later than the 18th of the month. Second payment (50% of the planned total cost of heat) shall be paid no later than the last day of the month. Final payment (for the heat actually consumed, taking into account earlier payments) shall be paid no later than the 10th day of the following month
18.02.2020 (Note 2)	PJSC "RUSAL Bratsk" (Shelekhov)	JSC Irkutskenergo	Purchase of heat (water, steam)	Heat: 2022: 15.5 Gcal	2022: 236	Payment to be made monthly no later than the 10th day of the month following the reporting period

Date of contract	Purchaser (member of the Group)	Supplier (associate of En+)	Form of heat	Estimated amount of heat to be supplied for the relevant year	Estimated consideration payable for the relevant years excluding VAT (USD)	Payment terms
01.01.2021 (Note 3)	PJSC RUSAL Bratsk (Shelekhov branch)	LLC BEC	Purchase of heat energy in hot water	Heat: 2022: 128 978 Gcal 2023: 128 978 Gcal Chemical purified water: 2022: 196 202 m^3 2023: 196 202 m^3	2022: 1,836,476 2023: 1,909,935	The first term of payment is not later than the 18th day of the current month in the amount of 35% of the amount, the second payment period is not later than the last day of the current month in the amount of 50% and the third term payment is not later than the 10th day of the month following the reporting month
01.01.2021 (Note 3)	PJSC RUSAL Bratsk (Shelekhov branch)	LLC BEC	Purchase of heat energy in steam	Heat: 2022: 30 382 Gcal 2023: 30 382 Gcal Chemical purified water: 2022: 42 145 m^3 2023: 42 145 m^3	2022: 584,205 2023: 607,573	The first term of payment is not later than the 18th day of the current month in the amount of 35% of the amount, the second payment period is not later than the last day of the current month in the amount of 50% and a third term payment is not later than the 10th day of the month following the reporting month
28.12.2020 (the term of this contract commenced on 01.01.2021) (Note 3)	LLC RUSAL Taishet Aluminium Smelter	JSC Baykalenergo	Purchase of heat	Heat: 2022: 4,341.08 Gcal 2023: 4,341.08 Gcal Coolant: 2022: 250.12 m^3 2023: 250.12 m^3	2022: 15,500 2023: 17,050	The first term of payment is not later than the 18th day of the current month in the amount of 35% of the amount, the second payment period is not later than the last day of the current month in the amount of 50% and a third term payment is not later than the 10th day of the month following the reporting month
28.12.2020 (the term of this contract commenced on 01.01.2021) (Note 3)	JSC RUSAL SAYANAL	Khakass Municipal Systems LLC	Purchase of heat and chemically purified water	Heat: 2022: 34,000 Gcal 2023: 34,000 Gcal Chemical purified water: 2022: 77,000 m^3 2023: 77,000 m^3	2022: 482,812 2023: 555,235	Payment is made no later than on the 10th day of the month following the billing period

Date of contract	Purchaser (member of the Group)	Supplier (associate of En+)	Form of heat	Estimated amount of heat to be supplied for the relevant year	Estimated consideration payable for the relevant years excluding VAT (USD)	Payment terms
19.2.2021 (the term of the contract commenced on 01.12.2020) (Note 4)	Joint Stock Company "SibVAMI"	LLC BEC	The acquisition of thermal energy to provide heat and hot water for the building of JSC SibVAMI	2022: 1,700 Gcal 2023: 1,700 Gcal	2022: 29,408 2023: 32,349	Advance payment of 35% of the total price on the 18th day of the current month and 50% by the last day of the current month, with the remaining 15% being payable by the 10th day of the next month
22.03.2021, which is an additional agreement to the original contract dated 28.12.2020 (Note 3)	JSC RUSAL SAYANAL	Khakass Municipal Systems LLC	Purchase of heat and chemically purified water	Heat: 2022: 34,000 Gcal 2023: 34,000 Gcal Chemical purified water: 2022: 77,000 m^3 2023: 77,000 m^3	2022: 482,812 2023: 555,235	First payment term (payment period): no later than the 20th day of the month of the current billing period (month), on the basis of the invoice issued payment of 50% of the total cost of the amount of thermal energy agreed by the parties. Second payment term (payment period): no later than the 20th day of the month following the billing period (month), payment of the difference between the cost of the actual amount of heat energy received, determined on the basis of the readings of metering devices, or by calculation in the absence of metering devices, and the amount paid earlier. If there is any overpayment, it is credited as an advance payment for the cost of thermal energy in subsequent billing periods (months)

1. The scheduled termination date of the contract is 31 May 2022.
2. The scheduled termination date of the contract is 31 December 2022.
3. The scheduled termination date of the contract is 31 December 2023.
4. The scheduled termination date of the contract is 31 December 2023. Agreement is considered to be extended for the next calendar year and on the same terms, if before the end of its validity period, any of the parties declare neither its termination or modification, or the conclusion of the agreement on other terms.

C Repair Services Contracts with associates of En+

As discussed above, each of KraMZ-Auto, Joint Stock Company "Irkutsk electronetwork company" and LLC Irkutskenergoremont is an associate of En+, and is thus a connected person of the Company under the HKSE Listing Rules.

Accordingly, the transaction entered into between a member of the Group on one part and each of KraMZ-Auto, Joint Stock Company "Irkutsk electronetwork company" and LLC Irkutskenergoremont on the other, as discussed below, constitute continuing connected transactions of the Company under the HKSE Listing Rules.

During 2021, members of the Group, as customer, entered into the following repair services contracts with particulars set out below:

Date of contract	Customer (member of the Group)	Contractor (associate of En+)	Repair services	Scheduled termination date	Estimated consideration payable for the relevant year USD	Payment terms
28.05.2021	Joint Stock Company "RUSAL Krasnoyarsk"	KraMZ-Auto	Maintenance and repair of vehicles used for the transportation of people, materials, tools by maintenance and repair of railway tracks located within the territory of the plant	Up to 31 March 2022	2022: 2,750	Payment is made within 10 calendar days from the date of receipt of the invoice issued and presented to the customer on the basis of the certificate of acceptance signed by the parties
26.11.2021	JSC RUSAL Krasnoyarsk	KraMZ-Auto	Maintenance services for tractors with trailer devices	Up to 31 December 2022	2022: 132,552	Payment to be made within 10 calendar days from the date of receipt of the invoice issued
28.12.2021	PJSC RUSAL Bratsk	Joint Stock Company "Irkutsk electronetwork company"	Technical maintenance of equipment (electric networks)	Up to 31 December 2022	2022: 601,042	Payment to be made within 5 calendar days of receipt of the invoice for the current month. The invoice to be issued no later than the 25th of the current month and the amount to be paid shall be in equal installments in the amount of 1/12 of the annual consideration
29.12.2021	JSC RUSAL Achinsk	LLC Irkutskenergoremont	Maintenance of combined heat-and-power plant's equipment	Up to 31 December 2022	2022: 5,574,947	Advance payment of 50% of the total price of the work to be performed will be made as per the monthly financial schedule by the 5th day of the current month. The remaining 50% will be paid within 10 calendar days from the date of receipt of the original invoices

The consideration under the repair services contracts is to be paid in cash via wire transfer or set-off of mutual obligations.

D Connection of electrical grid by the associate of En+

As discussed above, JSC "IENC" is an associate of En+ and thus is a connected person of the Company under the HKSE Listing Rules. Accordingly, the transactions entered into between members of the Group and JSC "IENC" constitute continuing connected transactions of the Company under the HKSE Listing Rules.

During 2021, a member of the Group, entered into the following contracts with JSC "IENC" with particulars set out below:

Member of the Group)	Associate of En+	Date of contract	Subject matter	Term of contract	Payment terms	Estimated consideration payable for the relevant year, excluding VAT (USD)
"RUSAL Taishet Aluminium Smelter" Limited Liability Company	JSC "IENC"	01.12.2021 (supplementary agreement to the original contract dated 3.10.2017 (as amended by additional agreement dated 29.04.2019))	Technological connection of the Taishet Aluminium Smelter to electrical grid	From 01.12.2021 to 31.12.2022 and may be extended until 30 November 2024 if neither party declares its intention to terminate the contract in writing no later than 30 calendar days prior to its expiration	The payment will be made monthly against the invoices issued by JSC "IENC" and the subsequent work acceptance certificates based on stages	2022: 26,918,649

E Primary Aluminium Sales Contract with the associates of En+

As discussed above, "KraMZ" Ltd. is an associate of En+ and thus is a connected person of the Company under the HKSE Listing Rules. Accordingly, the transactions entered into between members of the Group and "KraMZ" Ltd. constitute continuing connected transactions of the Company under the HKSE Listing Rules.

During 2021, a member of the Group, entered into the following contract with "KraMZ" Ltd. with particulars set out below:

Contractor (associate of En+)	Customer (member of the Group)	Date of contract	Term of contract	Payment terms	Estimated consideration payable for the year ending 31 December 2022 USD (excluding VAT)
"KraMZ" Ltd.	JSC "UC RUSAL TH"	30.12.2021	Up to 31.12.2022	Within 65 calendar days from the date of shipment of the goods	286,666,667

The consideration is to be settled in cash via bank transfer.

12. Agreements subject to change of control provisions

The following agreements with the Company contain (or contained as the case may be) change of control provisions allowing the other parties under such agreements to cancel their commitments in full and declare (or which action would result in) all outstanding loans immediately due and payable in the relevant event:

(a) The PXF Facility 2019 – as at 31 December 2021, the outstanding nominal value of debt was USD995 million and the final maturity of the debt is 7 November 2024.

(b) A term facility agreement dated 29 January 2018 between the Company as borrower and Nordea Bank Abp as lender with a limit up to USD200 million. The facility was fully repaid on 29 January 2021.

(c) Up to USD200,000,000 aluminium pre-export finance term facility agreement dated 28 January 2021, between the Company as borrower and SOCIÉTÉ GÉNÉRALE as facility agent and security agent – the outstanding nominal value of debt as of 31 December 2021 is USD200 million and the final maturity of the debt is 29 January 2024.

(d) Standard loan agreements #1,2,3 dated 28 April 2020 entered into between the Company as guarantor, UC RUSAL Anode Plant LLC as borrower and UniCredit Bank AG as lender – as of 31 December 2021, the outstanding nominal value of debt was equal to EUR 7.6 million and the final maturity of the debt is 1 December 2029.

(e) Standard loan agreement #4 dated 4/5 August 2021 entered into between the Company as guarantor, JSC “RUSAL Sayanogorsk Aluminium Smelter” as borrower and UniCredit Bank AG as lender – as of 31 December 2021, the outstanding nominal value of debt was equal to EUR 1.6 million and the final maturity of the debt is 9 February 2027.

(f) Standard loan agreement #5 dated 8 September 2021 entered into between the Company as guarantor, JSC “RUSAL Sayanogorsk Aluminium Smelter” as borrower and UniCredit Bank AG as lender – the current outstanding nominal value of debt was equal to EUR 4.7 million and the final maturity of the debt is 15 February 2032.

13. Major customers and suppliers

Large scale end-customers of the Group include Glencore International AG, JSC “Arkonik SMZ”, Boguchansky aluminium smelter, DK Trade AG and OJSC KUMZ.

The largest customer and the five largest customers of the Group accounted for 7.67% and 20.73%, respectively, of the Group’s total sales for the year ended 31 December 2021.

The major suppliers of the Group are Boguchansky aluminium smelter with respect to primary aluminium supply, PJSC “FGS UES” and LLC “EuroSibEnergo-Hydrogeneration” with respect to electricity and capacity and power supply or transmission, LLC “ISO” with respect to repair and maintenance services and OJSC “Russian Railways” with respect to railway transportation.

The amount of purchases from the largest supplier and the five largest suppliers of the Group accounted for 8.41% and 28.36%, respectively, of the Group’s total cost of sales for the year ended 31 December 2021.

No Director or their respective close associates (as defined in the HKSE Listing Rules) or any Shareholders (which to the knowledge of the Directors own more than 5% of the share capital of the Company), save as disclosed in paragraph 11 Connected transactions section of the Report of the Board of Directors of this Annual Report, had any interests in the Group’s five largest customers or the suppliers at any time during 2021.

14. Directors

The following individuals served as Directors during the financial year:

Name	Position at year end (unless specified otherwise)
Evgeny Kuryanov	Executive Director
Evgenii Nikitin	Executive Director
Evgenii Vavilov	Executive Director
Vladimir Kolmogorov	Non-executive Director
Marco Musetti	Non-executive Director
Vyacheslav Solomin	Non-executive Director
Elsie Leung Oi-sie	Independent non-executive Director (ceased to hold office with effect from 24 June 2021)
Christopher Burnham	Independent non-executive Director
Nicholas Jordan	Independent non-executive Director
Kevin Parker	Independent non-executive Director
Randolph N. Reynolds	Independent non-executive Director
Evgeny Shvarts	Independent non-executive Director
Anna Vasilenko	Independent non-executive Director (elected with effect from 24 June 2021)
Dmitry Vasiliev	Independent non-executive Director
Bernard Zonneveld	Independent non-executive Director

A. Particulars of appointments of Directors

Pursuant to the Charter, any member of the Board of Directors is elected by the GSM for the term until the next AGM and may be re-elected for any number of terms provided such re-election is not contradictory to requirements of the applicable listing rules. Pursuant to the Charter, the powers of all members of the Board of Directors may be terminated earlier by a resolution of the GSM. The power of the Board of Directors expires at the AGM each year. In case no AGM was held until established deadline, the Board will only have authority to convene and hold the GSM for election of the Board.

Executive Directors

The appointment of each executive Director is subject to the provisions of the Charter.

Non-executive Directors and independent non-executive Directors

Appointment of a non-executive Director and an independent non-executive Director may be terminated in accordance with the Charter. Each of the non-executive Directors and the independent non-executive Directors is entitled to a fixed director's fee.

Paragraph B.2.2 HKSE CG Code provides that every Director, including those appointed for a specific term, should be subject to retirement by rotation at least once every three years. The Company has addressed this requirement in Article 24.1. of the Charter which provides that each member of the Board is elected by the GSM for the period until the next AGM.

Other than the service contract of Mr. Evgenii Nikitin as the General Director of the Company which came into force on 25 September 2020 and does not have a fixed term, there are no service contracts with any Directors who may be proposed for re-election at the forthcoming AGM that are not determinable by the Company within one year from the date of such contract without payment of compensation (other than statutory compensation if any).

B. Confirmation of Independence

The Company has received from each of the independent non-executive Directors an annual confirmation of independence pursuant to Rule 3.13 of the HKSE Listing Rules and considers all the independent non-executive Directors to be independent. The Board considers that all independent non-executive Directors are independent by reference to the factors stated in the HKSE Listing Rules.

C. Change of particulars of Directors

Mr. Marco Musetti ceased to be a member of the board of directors of Sulzer AG from April 2021. He became a board member of Medmix AG from 30 September 2021.

Mr. Nicholas Jordan ceased to be a member of the board of directors of En+ as an independent director from 26 May 2021.

Ms. Anna Vasilenko was elected as independent director of PJSC "Russian Aquaculture" on 30 June 2021.

Mr. Christopher Burnham was elected as the chairman of the board of directors of En+ effective from 25 March 2022.

D. Retirement of Directors

Mr. Evgeny Kuryanov, Mr. Evgenii Nikitin and Mr. Evgenii Vavilov (being executive Directors), Mr. Vladimir Kolmogorov, Mr. Marco Musetti and Mr. Vyacheslav Solomin (being non-executive Directors), Mr. Christopher Burnham, Mr. Nicholas Jordan, Mr. Kevin Parker, Mr. Randolph N. Reynolds, Dr. Evgeny Shvarts, Ms. Anna Vasilenko, Mr. Dmitry Vasiliev and Mr. Bernard Zonneveld (being independent non-executive Directors), were elected by the AGM 2021 held on 24 June 2021 for the term until the next AGM.

Dr. Elsie Leung Oi-sie ceased to be an independent non-executive Director with effect from 24 June 2021 at the conclusion of the AGM 2021, and ceased to be member of the respective Board committees.

E. Appointment of Directors

Ms. Anna Vasilenko was appointed as an independent non-executive Director with effect from 24 June 2021.

F. Changes to the composition of Board Committees

Ms. Anna Vasilenko was appointed as a member of each of the Audit Committee and the Remuneration Committee of the Company, with effect from 24 June 2021.

Mr. Nicholas Jordan was appointed as the chairman of the Remuneration Committee of the Company with effect from 24 June 2021.

15. Directors' and General Director's interests in the Shares and in the shares of associated corporations of the Company

As at 31 December 2021, none of the Directors or the General Director had any interest or short position, whether beneficial or non-beneficial, in the Shares, the underlying Shares and debentures of the Company as recorded in the register required to be kept pursuant to section 352 of the SFO or otherwise notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code (as incorporated by the Company in the Code for Securities Transactions – for further information, please refer to the section "Corporate Governance Report").

Interests and short positions in the underlying shares and in the underlying shares of the associated corporations of the Company

As at 31 December 2021, none of the Directors or the General Director had any interest or short position, whether beneficial or non-beneficial, in the shares, underlying shares and debentures in any of its associated corporations (within the meaning of Part XV of the SFO) which were notified to the Company or the Hong Kong Stock Exchange and entered into the register required to be kept under section 352 of the SFO, or which were notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code.

16. Directors' interests in businesses that may compete with the Company

None of the Directors has any interest in business apart from the Company's business that competes or is likely to compete directly or indirectly with the Company's business.

17. Substantial Shareholders' Interests

As at 31 December 2021, so far as the Directors are aware based on their understanding and based on notifications made to the Company pursuant to the provisions of Divisions 2 and 3 of Part XV of the SFO and recorded in the register (of interests in shares and short positions as stated on the disclosure of interests forms received) required to be kept by the Company under section 336 of the SFO, the following persons had interests or short positions in the Shares or underlying Shares (unless specified otherwise):

Interests and short positions in Shares

Name of Shareholder	Capacity	Number of Shares held as at 31 December 2021	Percentage of issued share capital as at 31 December 2021
Oleg Deripaska	Beneficiary of a trust (Note 1)	8,641,888,022 (L)	56.88%
	Beneficial owner	1,669,065 (L)	0.01%
	Total	8,643,557,087 (L)	56.89 %
Fidelitas Investments Ltd. ("**Fidelitas Investments**") (Note 1)	Interest of controlled corporation	8,641,888,022 (L)	56.88%
B-Finance Ltd. ("**B-Finance**") (Note 1)	Interest of controlled corporation	8,641,888,022 (L)	56.88%
En+ (Note 1)	Beneficial owner	8,641,888,022 (L)	56.88%
Access Aluminum Holdings Ltd. ("**Access Aluminum**") (Note 2)	Interest of controlled corporation	4,967,738,987 (L) 1,017,931,998 (S) (Note 2)	32.70% 6.70%
Access Industries Holdings LLC ("**Access Holdings**") (Note 2)	Interest of controlled corporation	4,967,738,987 (L) 1,017,931,998 (S) (Note 2)	32.70 % 6.70%
Access Industries Holdings (BVI) L.P. ("**Access BVI**")	Interest of controlled corporation	4,967,738,987 (L) 1,017,931,998 (S) (Note 2)	32.70 % 6.70%
Access Industries LLC ("**Access Industries**") (Note 2)	Interest of controlled corporation	4,967,738,987 (L) 1,017,931,998 (S) (Note 2)	32.70 % 6.70%
GPTC LLC (Note 2)	Interest of controlled corporation	4,967,738,987 (L) 1,017,931,998 (S) (Note 2)	32.70 % 6.70%
Zonoville Investments Limited ("**Zonoville**") (Note 2)	Beneficial owner	1,625,652,591 (L) (Note 2)	10.70%
	A person making a loan or providing security to buy shares	3,342,086,396 (L) 1,017,931,998 (S)	22.00% 6.70%
TCO Holdings Inc. ("**TCO**") (Note 2)	Interest of controlled corporation	4,967,738,987 (L) 1,017,931,998 (S) (Note 2)	32.70 % 6.70%
SUAL Partners (Note 2)	Beneficial owner	3,342,086,396 (L) 1,017,931,998 (S) (Note 2)	22.00% 6.70%
	A person making a loan or providing security to buy shares	1,625,652,591 (L) (Note 2)	10.70%
	Total	4,967,738,987 (L) (Note 2)	32.70 %
Victor Vekselberg ("**Mr. Vekselberg**") (Note 3)	Beneficiary of a trust	4,967,738,987 (L) (Note 3)	32.70%

(L) Long position

(S) Short position

Notes – see notes on page 123.

Other than the interests disclosed above and the notes set out below, so far as the Directors are aware, as at 31 December 2021, the Company has not been notified of any other notifiable interests or short positions in Shares or underlying Shares. The Company has no information on the interests in Shares in excess of five percent of the issued Shares, other than those disclosed above.

(Note 1)
Based on the disclosure of interests forms filed on the Hong Kong Stock Exchange, Mr. Oleg Deripaska was the founder and a beneficiary of a private discretionary trust which held 86.33% of the share capital of Fidelitas International Investments Corp. (formerly Fidelitas Investments Ltd.), which in turn held 99.99% of the share capital of B-Finance, which in turn held 44.95% of the share capital of En+. Each of B-Finance, Fidelitas International Investments Corp., and Mr. Oleg Deripaska was deemed to be interested in the Shares and underlying Shares held by En+ by virtue of the SFO.

(Note 2)
Based on the disclosure of interests forms filed on the Hong Kong Stock Exchange, SUAL Partners was owned as to 36.39% by Renova Metals & Mining Ltd ("**Renova Metals**"), which in turn was wholly-owned by Renova Holding Ltd. ("**Renova Holding**"). Renova Holding was controlled by TZ Columbus Services Limited ("**TZC**") as to 100% and TZC was in turn wholly-owned by TCO. Based on the disclosure of interests forms filed on the Hong Kong Stock Exchange, Zonoville was owned as to 40.32% by Access Aluminum, which in turn was owned as to 98.48% by Access Holdings. Access Holdings was wholly-owned by Access BVI. According to the disclosure of interests form filed by Access Industries LLC on 23 January 2021, Access BVI was owned as to 67.16% by Access Industries, which in turn was controlled as to 69.70% by GPTC LLC.

Each of Renova Metals, Renova Holding, TZC, TCO, Access Aluminum, Access Holdings, Access BVI, Access Industries and GPTC LLC were deemed to be interested in the Shares held by SUAL Partners and/or Zonoville by virtue of the SFO.

Based on the latest disclosure of interests forms filed on the Hong Kong Stock Exchange, as of 28 March 2022, SUAL Partners as a beneficial owner was interested in 3,907,527,611 Shares (long position), representing 25.72% of the issued share capital of the Company. Based on the disclosure of interests forms filed, SUAL Partners agreed to terminate the securities borrowing and lending agreements with Zonoville in respect of 1,147,016,472 Shares. Those Shares were kept by SUAL Partners to set off the debts owed by Zonoville to SUAL Partners, and Zonoville agreed to sell 478,636,119 Shares to SUAL Partners. As a result, Zonoville holds nil Shares.

Given that the definition of "interest in shares" under the SFO is broadly defined and covers among others actual ownership of shares, deemed interests in shares and contractual interest which give right to shares, the number of shares interested by the relevant shareholder as disclosed by the shareholder in the relevant disclosure of interests form does not necessarily reflect the actual registered ownership of shares by such shareholder.

(Note 3)
The Company has been informed by a representative of SUAL Partners that, according to SUAL Partners' knowledge, Mr. Vekselberg is a beneficiary under certain irrevocable and fully discretionary trust arrangement pursuant to which the trustee under such trust arrangement owned and controlled an indirect interest in approximately 36.39% of the issued shares in SUAL Partners and, Mr. Vekselberg neither owned nor controlled (whether directly or indirectly) any interest in any Shares as at 31 December 2021 and therefore, based on that information, it might be assumed Mr. Vekselberg is not presently required to make any disclosure of interests filings under the SFO.

As of the Latest Practicable Date, none of the Major Shareholders have or will have different voting rights attached to the Shares they hold in the Company.

18. Pre-emptive rights

There are no applicable statutory pre-emption rights which apply to the Company and according to the Charter the Shareholders shall have no pre-emptive right to purchase the Company's Shares, with exception to the pre-emptive right to purchase additional Shares and other securities converted to Shares placed by the Company by subscription in an amount proportional to the number of Company's Shares of this category (type) that they hold.

There are, however, certain restrictions and preferential terms and conditions relating to sales and acquisitions of certain Shares held by the Major Shareholders, that are provided in the Shareholders' Agreement between Major Shareholders. The principal terms of the Shareholders' Agreement between Major Shareholders only are described in Appendix B.

19. Emolument policy

There are no arrangements under which a Director has waived or agreed to waive any emoluments due by the Group.

The aggregate remuneration that the Directors have received (including fees, salaries, bonus, contributions to defined contribution benefit plans (including pension), housing and other allowances, and other benefits in kind) for the financial year ended 31 December 2021 was approximately USD7.6 million. The aggregate remuneration was calculated in accordance with HKSE Listing Rules and included the remuneration received by the Directors from the Group as a whole. Additional information on the remuneration of the Directors and the individuals with the highest emoluments can be found below as well as in notes 9 and 10 to the consolidated financial statements for the year ended 31 December 2021 as disclosed in this Annual Report.

Basis for Compensation of Directors and senior management

Remuneration policies of the Company are considered by the Remuneration Committee 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:

1 *Chairman of the Board of Directors*

The Chairman of the Board was entitled to receive a chairman's fee of EUR1,000,000 in 2021 prior to 1 July 2021. According to the resolution of the AGM 2021 with effect from 1 July 2021 the Chairman of the Board was entitled to EUR1,430,000 annually (before tax) to be paid monthly in equal installments.

2 *Non-executive Directors*

(a) Non-executive Directors were entitled to EUR215,000 annually (before tax) to be paid monthly in equal installments;

(b) Board committee chairmen were entitled to EUR26,000 per annum (before tax) for membership per one committee to be paid monthly in equal installments;

(c) Members of Board committees were entitled to EUR18,000 per annum (before tax) for membership per one committee to be paid monthly in equal installments.

General Director

For 2021, the annual compensation of the General Director comprised the following:

(a) Total annual base salary of RUB84.477 million (paid monthly) after the increase of the total amount of annual salary from RUB72 million to RUB90 million effective from 21 April 2021;

(b) Annual discretionary bonus of USD1,137,461, in total, determined by the Remuneration Committee on the basis of the performance results of the General Director for 2021 and approved by the Board;

(c) Other ancillary benefits and compensations.

No emoluments have been paid to the Directors as an inducement to join or upon joining the Group or as compensation for loss of office during the Review Period.

Pursuant to provision E.1.5 of the HKSE CG Code, the remuneration of the members of the senior management of the Group by band for the year ended 31 December 2021 is set out as below:

	Number of individuals
Nil – HKD7,770,000 (Nil – US$1,000,000)	5
HKD7,770,001 – HKD38,073,000 (USD1,000,001 – USD4,900,000)	9

The total remuneration, including the basic salary, performance-linked salary, incentive-linked salary and bonus of the Directors in 2021 amounted to approximately USD7.6 million. All non-executive Directors are entitled to receive Director's fees and additional fees for being a member of a Board committee or chairing a Board committee. The executive Directors are not entitled to a director's fee, and they are entitled to a salary pursuant to their respective employment with the Group, which is determined with reference to the relevant experience, duties and responsibilities with the Group and bonus is to be paid on the basis of achievement of performance targets.

Directors' remuneration for the year ended 31 December 2021 is as follows:

	Directors' fees	Salaries, allowances, benefits in kind[21]	Discretionary bonuses	Total
	USD thousand	USD thousand	USD thousand	USD thousand
Executive Directors				
Evgenii Nikitin	–	1,433	992	2,425
Evgenii Vavilov	–	41	5	46
Evgeny Kuryanov	–	262	232	494
Non-executive Directors				
Marco Musetti	306	–	–	306
Vyacheslav Solomin	324	–	–	324
Vladimir Kolmogorov	259	–	–	259
Independent Non-executive Directors				
Bernard Zonneveld (Chairman)	1,562	–	–	1,562
Christopher Burnham	305	–	–	305
Nicholas Jordan	322	–	–	322
Elsie Leung Oi-Sie (a)	149	–	–	149
Kevin Parker	336	–	–	336
Evgeny Svarts	307	–	–	307
Randolph Reynolds	295	–	–	295
Dmitry Vasiliev	348	–	–	348
Anna Vasilenko (b)	151	–	–	151
	4,664	**1,736**	**1,229**	**7,629**

a. Elsie Leung Oi-sie ceased to be independent non-executive Director with effect from 24 June 2021.

b. Anna Vasilenko was elected as an independent non-executive Director with effect from 24 June 2021.

Information on the remuneration of five individuals with the highest emoluments for the year ended 31 December 2021:

	USD thousand
Salaries	16,601
Discretionary bonuses	11,833
Retirement scheme contributions	2,165
	30,599

Further particulars regarding Directors' emoluments and the five highest paid employees as required to be disclosed pursuant to Appendix 16 to the HKSE Listing Rules are also detailed in notes 9 and 10 to the consolidated financial statements for the year ended 31 December 2021 as disclosed in this Annual Report.

[21] Information include payments received by the Directors from Group as a whole.

20. Pension schemes

Information on the Company's pension schemes is set out in note 20(a) to the consolidated financial statements.

21. Sufficiency of public float

The Hong Kong Stock Exchange has granted the Company a waiver from strict compliance with Rule 8.08(1)(a) of the HKSE Listing Rules. As a result, the Hong Kong Stock Exchange accepted a lower public float percentage of the Company, i.e. the higher of: (i) 10% of the Shares, and (ii) the percentage of public shareholding that equals HK$6 billion at the Listing Date, shall be the minimum percentage of public float of the Company. From the information publicly available to the Company and within the knowledge of the Directors as at the date of this Annual Report, the Company has sufficiently maintained the abovementioned public float.

22. Auditors

The consolidated financial statements have been audited by Ernst & Young LLC (which was subsequently renamed to TSATR - Audit Services LLC) as a sole auditor who will retire and, being eligible, will offer themselves for re-appointment as the Company's sole auditor. A resolution for the reappointment of TSATR – Audit Services LLC (formerly Ernst & Young LLC) as sole auditor of the Company is to be proposed at the forthcoming AGM. Ernst & Young LLC was approved as the auditor of the Company for the year ended 31 December 2021 by the resolution of the AGM 2021. Prior to the AGM 2021 JSC "KPMG" had been the auditor of the Company for the year ended 31 December 2020.

23. Amendments to the constitution

The Charter provides that the Charter can be amended or a new version of the Charter can be approved by the decision of the GSM adopted by three-quarters majority of votes of the Shareholders holding voting shares and participating in the GSM. A notice of holding the GSM is to be given not later than 21 days prior to the GSM.

24. Litigation

Details of the litigation in which the Company, its subsidiaries and certain beneficial owners are involved in are set out in notes 20(c) (provisions for legal claims) and 24(c) (legal contingencies) to the consolidated financial statements.

25. Social investments and charity

The main goal of the Company's social strategy is to create a favorable social environment for production activities through the implementation of sustainable social investment in a comprehensive socio-economic development of territories where the Company operates, with a wide participation of stakeholders – in this way, the implementation of the Company's contribution to the achievement of the Sustainable Development Goal #11 which is aimed at ensuring inclusiveness, safety, resilience and sustainability of cities and human settlements. In 2021, the Company allocated more than USD45 million to social programmes and charity projects.

26. Post balance sheet events

The details of the events subsequent to the balance sheet date up to the date of the Group's and the Company's consolidated financial statements presented in this Annual Report, are disclosed in note 28 to the consolidated financial statements.

27. Directors' interests in contracts

Save as disclosed in paragraph 11 (Connected transactions) above, there has been no contract of significance to the Group, subsisting during or at the end of 2021 in which a Director is or was materially interested, either directly or indirectly.

28. Directors' Indemnification

During the Review Period and as of the date of this Annual Report the Company purchased D&O liability insurance policies to cover the Company for its obligation to the Directors and officers to be indemnified against claims alleging wrongful acts (acts, errors or omissions in their capacity as Directors and/or officers of the Company), subject to the terms and conditions of the policies. The insurance premium under the D&O insurance policy for the Review Period was USD1,684,375.82.

On behalf of the Board

Bernard Zonneveld

Chairman of the Board

09

Corporate governance report

CORPORATE GOVERNANCE REPORT

1. Corporate governance practices

The Company adopts internationally recognized standards of corporate governance. The Company and its Board of Directors believe that high quality corporate governance leads to successful business development and increases the investment potential of the Company, providing more security for shareholders, partners and customers as well as reinforcing the Company's internal control systems. The Company developed and adhered its corporate governance standards, based on the principles of transparent and responsible business operations. The Company adopted a corporate code of ethics that sets out the Company's values and principles for many of its areas of operations.

The Company and its Board of Directors believe that the Company has complied with the code provisions of the HKSE CG Code during the Review Period, other than as described in paragraphs 3(d) and 3(e) of this Corporate Governance Report. The Company and the Board of Directors are committed to upholding the corporate governance of the Company to ensure that formal and transparent procedures are in place to protect and maximise the interests of the shareholders.

The Company aims to comply with the applicable Russian Laws, the MoEx Listing Rules, as well as the recommendations of the Russian CG Code. In its corporate governance practices the Company is guided by the MoEx Listing Rules, the HKSE CG Code and the HKSE Listing Rules.

The Company's corporate governance structure consists of the following key elements: the General shareholders meeting, the Board of Directors and the General Director.

Set out below is a detailed discussion of the corporate governance practices adopted and observed by the Company during the Review Period. Report on compliance with the Russian CG Code is indicated in Appendix C of this Annual Report.

2. General Shareholders Meeting

The GSM is the supreme management body of the Company, which operates in accordance with the laws of the Russian Federation and the Company's Charter and considers the most significant issues. Voting at the GSM is carried out on a one "ordinary share – one vote" principle.

The Company shall hold an AGM once a year. The AGM shall be held not earlier than two months and not later than six months after the end of a reporting year.

The AGM shall resolve on the following matters, inter alia: election of the Board of Directors, internal audit committee; approval of the Company's auditor; approval of annual accounting (financial) statements of the Company; distribution of profits, including payment (declaration) of dividends.

All other GSMs held by the Company are extraordinary GSMs (the "**EGM**").

Matters falling within the competence of the GSM are listed in the Charter and may not be transferred to discretion of the Board of Directors or the General Director.

The GSM is not entitled to consider and make decisions on issues that are not within its competence under the Russian Federal Law "On Joint Stock Companies", as applicable, and the Charter. As long as the Company's Shares are admitted to trading on the HKSE, the GSM competence is also subject to the HKSE Listing Rules requirement (as provided for the Charter).

The AGM 2021 was held on 24 June 2021 in a hybrid format due to the COVID-19 pandemic and the resulting restrictions. There were two EGMs during the Review Period, which were held on 7 April 2021 (the EGM 2021 April) and on 9 September 2021 (the EGM 2021 September) in a hybrid format, respectively.

Shareholders' Right

Right to convene an extraordinary general meeting

According to the Charter, Shareholder(s) holding in aggregate not less than 5% of the voting Shares of the Company have the right to demand from the Board of Directors the convocation of the EGM. If within the term specified in the existing laws of the Russian Federation and the Charter the decision to convene the EGM or the decision to refuse to convene that meeting is not made by the Board of Directors, the Shareholder(s) shall have the right to (i) submit a matter to arbitration with a request to compel the Company to hold the EGM; or (ii) to convene it on its(their) own.

According to Article 15.4 of the Charter, the Board of Directors shall not be entitled to amend the wordings of items of the agenda, wordings of resolutions on such items of the EGM convened at the request of Shareholder(s) holding at least 5% of the voting Shares of the Company.

According to Article 15.5 of the Charter, a resolution to convene the EGM or to reject to convene it shall be adopted by the Board of Directors within 5 days from the date of submission of the request of Shareholder(s) who own(s) at least 5% of the voting Shares of the Company.

According to Article 15.6 of the Charter, the EGM convened upon demand of the Shareholder(s) who own(s) at least 5% of the voting Shares of the Company shall be held within 40 days from the date of submission of the request to convene the EGM.

Putting forward proposals at general meetings

According to the Charter, Shareholder(s) jointly holding at least 2% of the Company's voting Shares may no later than 30 days from the end of the Company's reporting year include issues in the agenda of the AGM.

According to Article 11.4 of the Charter, proposal for additional issues to be included in the agenda of the GSM shall be made in writing containing the wording of the issue, the name of the Shareholder(s) submitting the issue, number and category (type) of the Shares owned by him/her and shall be signed by the Shareholder(s). Proposal on introducing issues to the agenda of the GSM may contain the wording of resolution on each proposed issue.

Company's contact details

Any proposal to convene an EGM, to put forward a proposal at a general meeting and any general enquiries of the Board should be sent to the Company at the following address: Office 410, 8, Oktyabrskaya street, Kaliningrad, Kaliningrad region, 236006, Russian Federation.

3. Board of Directors

Board of Directors is a governing body of the Company and according to the Charter it shall consist of fourteen Board members. As at the date of this Report, the Board comprises a combination of three executive, three non-executive and eight independent non-executive Directors.

(a) Board functions and duties

The Board of Directors is responsible for the overall management of the Company. The matters specifically reserved for the Board under the Charter include, inter alia, the following:

- determination of priority areas of the Company's activities
- approval of the Company's strategy and development program, risk management policy, long-term and annual budgets
- convening annual and extraordinary general meeting of the shareholders, approval of GSM agenda
- establishment and dissolution of committees, commissions, councils and other internal bodies of the Board of Directors, approval of their personnel composition and approval of provisions on their work
- preliminary review and approval of the annual report, annual accounting (financial) statements of the Company
- recommendations on the remuneration and compensation paid to the members of the internal audit committee of the Company
- approval of terms and conditions of the contract with the General Director
- approval of transactions with a value exceeding USD75,000,000 (seventy five million)

– recommendations on the amount of the dividend on shares, the procedure for its payment, setting the date on which the persons entitled to receive dividends are determined

– approval of certain internal documents of the Company on the matters that are within the competence of the Board

– approval of the register holder of the Company.

The general executive function rests with the office of General Director of the Company. The executive committee now functions as an advisory body reporting to the General Director and assisting the General Director and the Board in implementing the strategy of the Group and monitoring its performance as well as with a day-to day business.

(b) Election of Directors

Authority of every Director (including non-executive Director) expires at the annual general meeting each year and each of them may be subject for re-election, provided such re-election is not contradictory to applicable requirements of the HKSE Listing Rules and the MoEx Listing Rules.

(c) Independent non-executive Directors

The current composition of the Board represents an appropriate mix of Directors which offers sufficient independent checks and balances and an appropriate governance structure for the Company. As at the Latest Practicable Date, 8 out of 14 Directors are independent non-executive Directors.

Both HKSE Listing Rules and MoEx Listing Rules require the composition of the Board of Directors to be balanced and consist of independent directors. The Board believes that all independent non-executive Directors have appropriate and sufficient industry or finance experience and qualifications to carry out their duties so as to protect the interests of the Shareholders. Each of the independent non-executive Directors has undertaken to inform the Hong Kong Stock Exchange and the Securities and Futures Commission as soon as practicable if there is any subsequent change of circumstances which may affect their independence. The Company has also received a written confirmation from each of the independent non-executive Directors in respect of their independence. The Board considers that all independent non-executive Directors are independent by reference to the factors stated in the HKSE Listing Rules.

The Board has also recognized that all independent non-executive Directors comply with the independence criteria set out in the Russian CG Code and MoEx Listing Rules, including Dr. Elsie Leung Oi-sie (ceased to be a Director with effect from 24 June 2021), Mr. Nicholas Jordan (until 26 May 2021 when he ceased to be a member of the board of directors of En+) and Mr. Christopher Burnham regardless the existence of formal criterion of association with the Company. The Company complies with applicable requirements concerning the number of independent directors on the Board of Directors.

(d) Composition of the Board and attendance at Board meetings and Board committee meetings

During the Review Period, the Board consisted of the Directors listed below and their attendance record for the Board meetings, Board committee meetings and the GSMs is as follows:

	Attendance and number of meetings								
							General Meeting of Shareholders		
	Board	Corporate Governance and Nomination Committee	Remuneration Committee	Audit Committee	Health, Safety and Environmental Committee	Compliance Committee	AGM 2021	EGM 2021 April	EGM 2021 September
Total meetings in 2021	29	5	4	10	4	3		3	
Personal attendance	12	4	4	6	3	3	1	1	1
Absentee voting	17	1	–	4	1	–			
Executive Directors									
Evgeny Kuryanov	29	–	–	–	–	–	1 (via teleconference)	–	1 (via teleconference)
Evgenii Nikitin	27	–	–	–	–	–	1 (via teleconference)	–	1 (via teleconference)
Evgenii Vavilov	29	–	–	–	–	–	1 (via teleconference)	–	–
Non-executive Directors									
Vladimir Kolmogorov	27	–	–	–	–	–	–	–	1 (via teleconference)
Marco Musetti	29	–	–	–	–	–	1 (via teleconference)	–	1 (via teleconference)
Vyacheslav Solomin	27	–	–	–	4	–	–	–	1 (via teleconference)
Independent non-executive Directors									
Elsie Leung Oi-sie (Note 1)	16	–	3	6	–	–	–	1 (via teleconference)	–
Christopher Burnham	26	5	–	–	–	3	1 (via teleconference)	–	1 (via teleconference)
Nicholas Jordan	26	–	4	–	4	3	–	–	1 (via teleconference)
Kevin Parker	24	–	–	10	4	3	1 (via teleconference)	–	1 (via teleconference)
Randolph N. Reynolds	29	5	4	–	–	–	1 (via teleconference)	1 (via teleconference)	1 (via teleconference)
Evgeny Shvarts	28	–	–	–	4	–	1 (via teleconference)	–	1 (via teleconference)
Anna Vasilenko (Note 2)	12	–	1	4	–	–	1 (via teleconference)	–	1 (via teleconference)
Dmitry Vasiliev	29	5	4	10	4	–	1 (via teleconference)	–	1 (via teleconference)
Bernard Zonneveld	29	5	–	10	–	3	1 (via teleconference)	1 (via teleconference)	1 (via teleconference)

Notes:

1. Dr. Elsie Leung Oi-sie ceased to be a Board member with effect from 24 June 2021.
2. Ms. Anna Vasilenko became a member of each of the Audit Committee and the Remuneration Committee of the Company, with effect from 24 June 2021.

Biographical details of the Directors are set out in the section headed Profiles of the Board Members, the General Director and Senior Management on pages 74 to 87 of this Annual Report.

Changes in the composition of the Board of Directors that took place in the Review Period are set out in the section headed Report of the Board of Directors on pages 90 to 127 of this Annual Report.

C.1.6 of the HKSE CG Code provides that generally independent non-executive directors and other non-executive directors should attend general meetings of shareholders. Certain executive directors, non-executive directors and independent non-executive directors were unable to attend the AGM 2021, the EGM 2021 April and/or the EGM 2021 September respectively due to conflicting business schedules.

(e) Board meetings

During 2021, the Board held 29 meetings, with 12 of them in person and 17 in the form of absentee voting.

The schedule for Board meetings for the year 2021 was approved by the Board. The Directors are provided on a timely basis with the relevant documents and copies of the draft resolutions to be considered at that particular meeting.

Key agenda items reviewed by the Board of Directors during the Review Period

In 2021, the Board of Directors considered issues connected with, inter alia, 2020 financial results, 2020 Annual Report, transactions with connected parties, achievement of target KPIs for 2020 by the General Director, results of the Board and Board Committees self-assessment and debt capital market financing.

All Directors are given an opportunity to include matters in the agenda for the Board meeting and have access to the Corporate Secretary to ensure that all Board procedures and all applicable rules are followed. The Board also enables the Directors to seek independent professional advice at the Company's expense in appropriate circumstances.

Self-Assessment of the Board of Directors performance

The Board annually conducts a self-assessment of its activities according to set of criteria and indicators approved by the Board annually by means of questionnaires.

At the Board meeting held on 24 June 2021, the Board considered the results of the self-evaluation process. The key conclusions of the consideration were as follows:

– the Board has appropriate skills and expertise to face issues arising in the course of the Company's business;

– the Board is mostly satisfied with the range of issues discussed at the Board meetings; and

– the Board is satisfied with operation of its Committees.

While the Board concluded that its' performance in 2021 was adequate, the directors concluded that one of the potential areas of further improvement of the Board's performance in 2022 could be a more active involvement in determination of the Company's strategy.

Board meetings at which Directors have material interests

In relation to compliance with Code Provision C.5.7 of the HKSE CG Code, the Board endeavoured throughout the twelve-month period ended 31 December 2021 to ensure that it did not deal with business by the way of written resolution where a Substantial Shareholder of the Company or a Director had disclosed an interest in a matter to be considered by the Board which the Board determined to be material. As a result, there were only 2 occurrences (out of the 17 instances of absentee voting of the Board during the period) when urgent business was dealt with by the Board by way of written resolution where a material interest of a Director was stated to have been disclosed. In those instances, the material interest of the Director was a potential conflict of interest by virtue of the fact that the Directors also held offices in companies in the same group as the entities contracting with the Group.

On those occurrences, the resolutions were passed by the requisite majority excluding the materially interested Directors.

Of the 6 Board meetings held in the twelve-month period ended 31 December 2021 where one or more Directors had disclosed a material interest, all the independent non-executive Directors were present at 5 of the Board meetings held.

Of the 12 Board meetings held, there were 6 occasions where non-executive Directors might have a material interest in the transaction. On such occurrences, those non-executive Directors abstained from voting and the resolutions approving entry into such transactions were passed by the requisite majority excluding those non-executive Directors who might have a material interest.

(f) Relationships among members of the Board

Please refer to the section Profiles of the Board Members, the General Director and Senior Management for more information about the relationships among members of the Board.

(g) Shareholders' Agreements

The Shareholders' Agreement with the Company and the Shareholders' Agreement between Major Shareholders only were both entered into on 22 January 2010. For brief details of these shareholders' agreements, please see Appendix A and Appendix B.

(h) Directors' securities transactions

The Company has adopted a Code for Securities Transactions in respect of the Directors of the Company. The Code for Securities Transactions was based on the Model Code as set out in Appendix 10 to the HKSE Listing Rules but it was made more exacting than the required standard set out in Appendix 10. Having made specific enquiry of all Directors, all Directors confirmed that they had fully complied with the required standard set out in the Model Code and the Code for Securities Transactions throughout the Review Period.

The Company has not been notified of any other transaction by the Directors in respect Company's Shares in the Review Period.

The Directors do not directly or indirectly own the Company's Shares.

(i) Directors' continuous professional development

Pursuant to Code Provision C.1.4 of the HKSE CG Code, all Directors should participate in continuous professional development to develop and refresh their knowledge and skills. During the Review Period, all Directors of the Company (namely, Dr. Elsie Leung Oi-sie (ceased to a Director with effect from 24 June 2021), Mr. Evgeny Kuryanov, Mr. Evgenii Nikitin, Mr. Evgenii Vavilov, Mr. Vladimir Kolmogorov, Mr. Marco Musetti, Mr. Vyacheslav Solomin, Mr. Christopher Burnham, Mr. Nicholas Jordan, Mr. Kevin Parker, Mr. Randolph N. Reynolds, Dr. Evgeny Shvarts, Ms. Anna Vasilenko (elected with effect from 24 June 2021), Mr. Dmitry Vasiliev and Mr. Bernard Zonneveld), received regular briefings and updates on the Group's business, operations, risk management and corporate governance matters.

4. Chairman and General Director

The roles of the Chairman of the Board and the General Director are segregated and are independent to each other.

Chairman of the Board

The Chairman (being Mr. Bernard Zonneveld) is chiefly responsible for maintaining the effective operation of the Board. The Chairman is also responsible for chairing Board meetings, briefing Board members on issues discussed at Board meetings and ensuring good corporate governance practices and procedures are established. The Chairman is also responsible for leadership of the Board and for creating the conditions necessary to allow the Board and individual Directors to operate effectively. According to the Charter, the Chairman shall arrange the work of the Board, convene and chair the Board meetings, ensure that the minutes of the meetings of the Board of Directors are properly kept.

General Director – Sole executive body

The Charter of the Company operates with the concept of General Director who acts as the sole chief executive body of the Company and manage the Company's activities on a day-to-day basis. The General Director enjoys all executive powers that are not within the exclusive authority of the GSM or the Board. Those powers include, inter alia:

– acting on behalf of the Company without a power of attorney (including by representing the Company and entering into transactions on its behalf)

– representing the Company in the Russian Federation and abroad

– ensuring the implementation of the plans for current and future activities of the Company

– preparation of the necessary materials and proposals to the Board of Directors and the GSM and ensures the implementation of their resolutions

– appointment and dismissal of heads of branches and representative offices, approval of the terms of contracts with them

– issuing powers of attorney, authorising their holders to represent the Company

– employment and dismissal of the Company's employees

The Board has assessed the achievement by the General Director of his key performance indicators, which represent the evaluation of the General Director's performance, based on the recommendation of the Remuneration Committee.

Biographical details of the General Director (Mr. Nikitin) are set out in the section headed Profile of the General Director on page 82 of this Annual Report.

The General Director does not directly or indirectly own the Company's Shares.

5. Board Committees

As at the date of this Annual Report, the following committees, among others, assisted the Board in exercising its functions:

1. Corporate Governance and Nominations Committee

2. Remuneration Committee

3. Audit Committee

4. Health, Safety and Environmental Committee

5. Compliance Committee

Corporate Governance and Nominations Committee

The Company established the Corporate Governance and Nominations Committee with written terms of reference in compliance with the HKSE CG Code and the Russian CG Code.

The primary functions of the Corporate Governance and Nominations Committee are, among other things, to develop, review at least once a year and make recommendations to the Board in relation to corporate governance principles and policies of the Company and its consolidated subsidiaries, to oversee corporate governance matters, to review and monitor the training and continuous professional development of Directors, to develop, review and monitor the Company's code of conduct applicable to employees and Directors, reviewing the Company's compliance with the HKSE CG Code set out in Appendix 14 of the HKSE Listing Rules and disclosure in the Corporate Governance Report. The Corporate Governance and Nominations Committee is provided with sufficient resources to discharge its duties and its terms of reference also permit it to obtain access to a legal adviser.

In recommending a candidate for election to the Board, the Corporate Governance and Nominations Committee is required to determine criteria, objectives and procedures for selecting Board members, including factors such as independence (in the case of independent directors), diversity, age, future succession planning, integrity, skills, expertise, experience, knowledge about the Company's business and industry, and willingness to devote adequate time and effort to Board responsibilities. In identifying suitable candidates the Corporate Governance and Nominations Committee is required to use open advertising or the services of external advisers to facilitate the search, consider candidates from a wide range of backgrounds and consider candidates on merit against objective criteria, taking care that appointees have enough time to devote to the position.

The Corporate Governance and Nominations Committee consists exclusively of independent Directors. The members are as follows:

– Mr. Christopher Burnham *(independent non-executive Director)*

– Mr. Randolph N. Reynolds *(independent non-executive Director)*

– Mr. Dmitry Vasiliev *(chairman of the committee, independent non-executive Director)*

– Mr. Bernard Zonneveld *(independent non-executive Director)*

The Corporate Governance and Nominations Committee has held 5 meetings during the Review Period, out of which 1 meeting was held by absentee voting. At these meetings, the Corporate Governance and Nominations Committee considered, amongst other things, recommendations on nomination of Directors, composition of the Board Committees, results of the Board and Board Committees self-assessment process.

The members of the Corporate Governance and Nominations Committee have regularly attended and actively participated in meetings. For the attendance record of the meetings held by the Corporate Governance and Nominations Committee during 2021, please refer to paragraph 3(d) of this Corporate Governance Report.

Diversity

With a view to achieving a sustainable and balanced development, the Company recognises increasing diversity at the Board level as an essential element in supporting the attainment of its strategic objectives and its sustainable development. In designing the Board's composition, Board diversity has been considered from a number of aspects, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service. All Board appointments are based on meritocracy, and candidates will be considered against objective criteria, having due regard for the benefits of diversity on the Board.

The Company recognises and embraces the benefits of having a diverse Board to enhance the quality of its performance. The current mix of skills, experience and other diversity criteria of directors, including but not limited to sex, age, nationality and educational background, provides for a balanced composition of the Board.

The Corporate Governance and Nominations Committee also monitors the implementation of the Board diversity policy of the Company.

Remuneration Committee

The Company has established the Remuneration Committee governed by the written terms of reference in compliance with the HKSE CG Code and the Russian CG Code. The primary functions of the Remuneration Committee are, among other things, to prepare and revise remuneration policy, to make recommendations to the Board on the remuneration package of the Directors, the General Director, the Corporate Secretary and senior management, and to assist the Board in overseeing the administration of the Company's compensation and benefits 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 Committee consists exclusively of independent non-executive Directors. The members are as follows:

– Mr. Nicholas Jordan *(chairman of the committee, independent non-executive Director)*

– Mr. Randolph N. Reynolds *(independent non-executive Director)*

– Ms. Anna Vasilenko *(independent non-executive Director) (appointed to the committee with effect from 24 June 2021)*

– Mr. Dmitry Vasiliev *(independent non-executive Director)*

The Remuneration Committee has held 4 meetings during the Review Period. There were no meetings in a form of absentee voting. At those meetings, the Remuneration Committee considered, amongst other things, the issues related to achievement of the target KPIs for 2020 by the General Director, amendment of the terms of remuneration of the Directors, terms of employment of the General Director, target KPIs of the General Director for 2022. For details of the Company's emolument policy, please refer to section 19 of the Report of the Board of Directors. The members of the Remuneration Committee have regularly attended and actively participated in meetings. For the attendance record of the meetings held by the Remuneration Committee during 2021, please refer to paragraph 3(d) of this Corporate Governance Report.

Audit Committee

The Company established the Audit Committee of the Board with written terms of reference in compliance with the HKSE CG Code and the Russian CG Code.

The primary duties of the Audit Committee are to assist the Board in providing an independent view of the effectiveness of the Company's financial reporting process, risk management and internal control systems, and internal audit function, to oversee the audit process and to perform other duties and responsibilities as are assigned to the Audit Committee by the Board. The Audit Committee is assisted by the Company's internal audit function that undertakes both regular and ad hoc reviews of risk management, internal controls and procedures, the results of which are reported to the Audit Committee.

The Audit Committee consists of independent Directors. The current members are as follows:

– Mr. Kevin Parker *(chairman of the committee, independent non-executive Director)*

– Mr. Bernard Zonneveld *(independent non-executive Director)*

– Ms. Anna Vasilenko *(independent non-executive Director) (appointed to the committee with effect from 24 June 2021)*

– Mr. Dmitry Vasiliev *(independent non-executive Director)*

During the Review Period, the Audit Committee has held 10 meetings, out of which 4 were in a form of absentee voting. The Company's external auditors are regularly invited to attend meetings of the Audit Committee. At the meeting held on 15 March 2021, members of the Audit Committee reviewed the consolidated financial statements for the year ended 31 December 2020. At the meeting held on 11 August 2021, members of the Audit Committee reviewed the interim condensed financial information as at and for the six months ended 30 June 2021, and at the meeting held on 25 March 2022, members of the Audit Committee reviewed the consolidated financial statements for the year ended 31 December 2021. The Audit Committee is of the opinion that such consolidated financial statements have complied with the applicable accounting standards, the HKSE Listing Rules, other legal requirements and that adequate disclosures have been made. Minutes of Audit Committee meetings are taken, recorded and kept.

The Audit Committee reviews the Company's financial and accounting policies and practices, meets the external auditors on a regular basis, and reviews all connected transactions before the Board's consideration. The Audit Committee also reviews the Company's financial controls, internal control and risk management system, and the Company's internal audit function on a quarterly basis.

The Audit Committee reviewed and concurred with the management confirmation that for the year ended 31 December 2021, the Group's risk management and internal control systems were effective and adequate. The Audit Committee is satisfied that the Company has complied satisfactorily with the requirements of the HKSE CG Code in respect of risk management and internal control systems.

The members of the Audit Committee have regularly attended and actively participated in meetings. For the attendance record of meetings held by the Audit Committee during 2021, please refer to paragraph 3(d) of this Corporate Governance Report.

Health, Safety and Environmental Committee

Health, Safety and Environmental Committee was established by the Board of Directors in order to ensure that the Company undertakes and conducts, in compliance with Company policies, its operations in a socially and environmentally responsible manner, pursuing sustainable business. Primary duties of Health, Safety and Environmental Committee include, inter alia, review of health, safety and environmental audits carried out in terms of both legal and Company requirements and annual report on the health, safety and environmental performance of the Company, as well as preparing recommendations to the Board for the formulation and setting of objectives to be achieved in the field of health, safety and environmental management.

The composition of the Health, Safety and Environmental Committee is as follows:

- Mr. Nicholas Jordan *(independent non-executive Director)*
- Mr. Kevin Parker *(chairman of the committee, independent non-executive Director)*
- Dr. Evgeny Shvarts *(independent non-executive Director)*
- Mr. Vyacheslav Solomin *(non-executive Director)*
- Mr. Dmitry Vasiliev *(independent non-executive Director)*

In 2021, the Health, Safety and Environmental Committee held 4 meetings out of which 1 was in a form of absentee voting. At those meetings, the Committee considered, amongst other things, issues related to achievement of the Company's environmental targets, health and safety report, influence of the COVID-19 pandemic on the Company's operations, and CDP Report.

Compliance Committee

The Compliance Committee was established following the removal of the Company from OFAC's SDN list. The primary responsibilities of the Compliance Committee are, inter alia, ensuring the formation of a compliance management system within the Group, taking part in the development of policies and other internal regulations of the Company relating to matters of compliance, and consistently following up on their observance, ensuring that adequate compliance control is in place at the Group, conducting due diligence in the event of any reasonable doubt regarding observance of compliance requirements and the provisions of compliance documents.

The Compliance Committee consists of the following members:

- Mr. Christopher Burnham *(chairman of the committee, independent non-executive Director)*
- Mr. Nicholas Jordan *(independent non-executive Director)*
- Mr. Kevin Parker *(independent non-executive Director)*
- Mr. Bernard Zonneveld *(independent non-executive Director)*

In 2021, the Compliance Committee held 3 meetings and considered the issues related to the formation and development of the Company's compliance system.

6. Corporate Secretary

According to Company's Charter and taking into account the recommendations set out in the Russian CG Code, the Corporate Secretary has been appointed in order to, among other functions, ensure the operation of the Board of Directors and committees of the Board of Directors. The Corporate Secretary performs the functions of the Board secretary. Biographical details of the Corporate Secretary are set out in the section headed Profiles of the Board Members, the General Director and Senior Management on page 87 of this Annual Report.

7. Company Secretary

The Company engages Ms. Aby Wong Po Ying from an external service provider as its Company secretary in Hong Kong to ensure the compliance with the HKSE Listing Rules. The primary contact person in the Company in Hong Kong is Mr. Eugene Choi, authorised representative of the Company acting on the basis of the power of attorney.

8. Auditors' remuneration in respect of audit and non-audit services

For the year ended 31 December 2021, the total fees paid or payable in respect of audit and non-audit services provided by the Group's external auditor, Ernst & Young LLC (which was subsequently renamed to TSATR – Audit Services LLC) (appointed with effect from the conclusion of the AGM 2021), are set out below.

	For the year ended 31 December 2021 USD'000
Audit services	
Annual audit services	4,752
Annual non-audit services	1,122

The non-audit services mainly comprised tax compliance and certain agree-upon-procedure work.

The responsibilities of Ernst & Young LLC (which was subsequently renamed to TSATR – Audit Services LLC) with respect to the 2021 consolidated financial statements are set out in the "Independent Auditors' Report" on pages 147 to 150.

External auditor is appointed by the GSM by a simple majority for one year based upon the recommendations of the Company's Audit Committee.

The choice of an audit organization was carried out according to the following criteria:

- the range of services offered;
- business reputation;
- price policy.

The Company selects an auditor (audit organization) through a closed competitive selection on an annual basis. The Company sends a request to submit a proposal for the provision of audit services to leading audit companies ("Big Four"). The main conditions for a closed competitive selection are the compliance of the auditor (audit organization) with the requirements established by applicable law for persons providing audit services, as well as the compliance of the auditor (audit organization) with the list of criteria established by the Company for external auditors. The Company chooses the winner based on the results of consideration of proposals (technical and financial) and presentations of the participants.

The Audit Committee has considered the external audit process as effective based on the provided auditor's report.

9. Responsibility Statement for the Consolidated Financial Statements

The members of the Board acknowledge that, it is their responsibility to prepare the consolidated financial statements for the year ended 31 December 2021 and to the best of their knowledge, the consolidated financial statements for the year ended 31 December 2021, were prepared in accordance with applicable law and IFRS, and that these consolidated financial statements give true and fair view of the state of affairs of the Group and of the results and cash flow for that period. The consolidated financial statements have been prepared in accordance with IFRS. The reporting responsibility of the external auditors of the Company on the financial statements of the Group are set out in the independent auditors' report on pages 149 and 150 of this Annual Report.

10. Risk Management and Internal Control

The Company's risk management and internal control system (hereinafter referred to as the "**System**") assures that the Company's operations are effective, efficient and well aligned with its strategic and business objectives. The System is designed to determine the nature and extent of risks, to safeguard the assets of the Company, to ensure correct, reliable, complete and timely financial reporting. The System promotes ethical values, good corporate governance and ensures regulatory compliance.

Roles and responsibilities

The System stipulates the following roles and responsibilities:

- Owners of the Company's business processes (hereinafter referred to as "**Process owners**");

- Directorate for Control, Internal Audit and Business Coordination (hereinafter referred to as "**Directorate for Control**");

- the Audit Committee.

Process owners are responsible for running specific business processes in compliance with the System, for identification and analysis of the risks inherent in the process, development and implementation of the risk mitigation activities.

The Directorate for Control is responsible for methodological support and independent assessment of the System. The Directorate for Control performs internal audits and revisions to assess the effectiveness and efficiency of the business processes and the applicable controls. Thus, the System design is based on both best practices suggested by Process owners and recommendations developed by the Directorate for Control as the result of the internal audits.

The Directorate for Control reports the results of audits and revisions, as well as other activities related to internal controls and risk management, to the Audit Committee on a quarterly basis.

The Audit Committee is responsible for the oversight of the financial reporting process, the audit process, the Company's system of risk management and internal controls and compliance with laws and regulations.

In accordance with HKSE CG Code, the Audit Committee reviews the Company's risk management and internal control systems, the effectiveness of the issuer's internal audit function, and its other duties under the HKSE CG Code. The Audit Committee approves the annual schedule of audits and revisions to be performed by the Directorate for Control, though the scope of the Directorate's activities is not limited to scheduled audits – the Audit Committee and the Company's management can initiate additional unscheduled activities.

The Board of Directors approves the risk management policy, reviews the policy's performance results and determines the Company's principles and approaches to risk management, internal control and internal audit. The Board of Directors considers the results of the effectiveness of the risk management and internal control system at least once a year, based on reports provided by the Directorate for Control. In 2021 there were no significant issues identified in the functioning of the risk management and internal control system.

Risk management system

The Company aims to promote a risk-aware culture among all its employees, including those directly engaged in day-to-day operations. Such attitude to risk management improves risk awareness and enables the Company to respond to changes in the business environment on a timely basis.

However, it is important to note that the System is designed to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable assurance against material misstatement or loss.

The Company faces the following types of risks:

Operational risks are those related to direct or indirect damages incurred within the Company's core operating activities due to inefficient or ineffective business processes, systems or human error.

Financial and market risks are those related to financing the Company's activities and volatility on global markets including commodity prices, interest rates and foreign currency rates.

Corporate risks are those related to business environment affecting financial results of the Company, including political, legal and other risks.

Project risks are those faced by the Company while performing the capital expenditures projects as well as production continuous improvement projects.

All material risks are consolidated under the Company's Risk Register monitored at all management levels. There is a specific employee, a risk-owner, responsible for managing each risk. The Directorate for Control verifies risk analysis and risk management tools applied by risk-owner to each material risk.

The Audit Committee and Directorate for Control aim to regularly improve and enhance the Company's internal controls and risk management processes. The results of the Audit Committee's quarterly reviews of the System in 2021 are as follows:

Key improvements of procurement controls:

– kick-off of the automation project "from the order to the contract" for the chosen pilot plants in order to ensure transparent and well-controlled procurement process and automated supply demand analysis taking into account current stocks;

– new indicator was introduced among procurement KPIs – savings from tender procedures in order to improve procurement quality and reduce costs;

– 50 entities of the Group, 1200 users are working through electronic trade platform to perform procurement procedures in order to broaden suppliers portfolio, reduce costs and risks of choosing precarious supplier;

– Company's suppliers base was developed and uploaded to the electronic trade platform in order to broaden suppliers portfolio;

– the agreement was made with Russian largest internet trade platform to improve sales of non-core and illiquid assets.

Key elements of risk management system:

– quarterly reports on Company's risk management activities and consolidated risk portfolio to executive management and the Audit Committee;

– risk management procedure with the focus on risk analysis and risk mitigation activities;

– risk management trainings for the Aluminium, Alumina and Downstream Divisions covering key smelters as well as for Management Company;

– distinct link between process' and risk owners KPIs and effectiveness and efficiency of risk management under their responsibility;

– continuous improvement of automated risk management system (ARMS);

– independent risk audits of Company's production facilities conducted by independent risk surveyors to assess risks and enhance the Company's insurance programs.

Information Disclosure

Since the Company's Listing, it has been subject to requirements relating to continuous disclosure obligations, including determination and disclosure of inside information. The Company has established the disclosure committee with authority to assess whether information constitutes inside information, whether it is subject to immediate disclosure or whether any safe harbor provisions may apply; to determine the timing and format of disclosure; to appoint officers responsible for collection, preliminary analysis and processing of the information within various business subdivisions of the Group; to appoint the Company's authorized representatives to the HKSE; and to decide on trading halts and other issues. At the same time, an internal policy regulating the treatment of inside information was adopted within the Group. The internal control system applied in the Group with respect to inside information ensures that any piece of information that may constitute inside information is promptly escalated to the disclosure committee and, should it constitute inside information, is disclosed.

It is important to note that the Directorate for Control did not identify in the year 2021 any significant violations of operational, financial or compliance controls nor any significant risks such as those that may potentially give rise to uncertainties about ability of the Company to continue to operate as a going concern.

Being a Russian issuer, the Company is subject to disclosure requirements of Russian legislation and MoEx Listing Rules.

Disclosure of information is made through the tools available to the Company under applicable legislation of HKSE Listing Rules and MoEX Listing Rules in order to insure that all shareholders have equal access to the disclosed information:

Website of the HKSE: *(available in English and Chinese language only)*	https://www.hkexnews.hk https://www.hkexnews.hk/index_c.htm
Interfax newswire and the Company's dedicated page *(available in Russian language only)*	https://www.e-disclosure.ru/portal/company.aspx?id=38288
Company's corporate website *(available in Russian, English and Chinese languages)*	http://rusal.ru/investors/info/moex/ https://rusal.ru/en/investors/info/hkse/ https://rusal.ru/cn/investors/info/hkse/filter/years-is-2021/

11. Relevant Officers' Securities Transactions

The Company has also adopted the Relevant Officers Code. The Relevant Officers Code was based on Appendix 10 to the HKSE Listing Rules but it was made more exacting. It applies to any employee of the Company or a director or employee of a subsidiary of the Company who, because of such office or employment, is likely to be in possession of unpublished price sensitive information in relation to the Company or its securities.

12. Going Concern

As of 31 December 2021, there are no material uncertainties relating to events or conditions that may cast significant doubt upon the Company's ability to continue as a going concern.

13. Investor Relations

The Company has established a designated department for investor relations, which is responsible for matters concerning investor relations and has developed its own systems and process for communications with investors. The Company's management also maintains close communication with investors, analysts and the media.

The Charter was not amended during 2021.

14. Loans

In 2021 no loans have been issued by the Company (or any Group company) to members of the Board or the General Director.

10

Financial statements

BEING TRANSPARENT

FINANCIAL STATEMENTS

Statement of Management's Responsibilities

The following statement, which should be read in conjunction with the auditors' responsibilities stated in the auditors' report on the audit of the consolidated financial statements set out on pages 151-227, is made with a view to distinguishing the respective responsibilities of management and those of the auditors in relation to the consolidated financial statements of United Company RUSAL, international public joint-stock company ("UC RUSAL, IPJSC") and its subsidiaries.

Management is responsible for the preparation of the consolidated financial statements for the year ended 31 December 2021 in accordance with International Financial Reporting Standards ("IFRS") and in accordance with the disclosure requirements of the Hong Kong Companies Ordinance.

In preparing the consolidated financial statements, management is responsible for:

- selecting appropriate accounting principles and applying them consistently;
- making judgements and estimates that are reasonable and based on supportable assumptions;
- stating whether International Financial Reporting Standards have been followed, subject to any material departures disclosed and explained in the consolidated financial statements; and
- preparing the consolidated financial statements on a going concern basis, unless it is inappropriate to presume that the Group will continue in the business for the foreseeable future.

Management, within its competencies, is also responsible for:

- designing, implementing and maintaining an effective system of internal controls throughout the Group;
- maintaining statutory accounting records in compliance with local legislation and accounting standards in the respective jurisdictions in which the Group operates;
- taking steps to safeguard the assets of the Group; and
- detecting and preventing fraud and other errors.

INDEPENDENT AUDITOR'S REPORT

To the Shareholders and the Board of Directors of IPJSC UC RUSAL

Opinion

We have audited the consolidated financial statements of IPJSC UC RUSAL and its subsidiaries (hereinafter collectively referred to as the "Group"), which comprise the consolidated statement of financial position as at December 31, 2021, the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2021 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' (IESBA) International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Russian Federation, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of Matter

We draw attention to Note 28 "Events subsequent to the reporting date" to the consolidated financial statements which describes the development of geopolitical tensions related to the situation in Ukraine and sanctions imposed by certain countries that have affected and could significantly affect in the future the Russian economy, as well as the activity of the Group. Our opinion is not modified in respect of this matter.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For the matter below, our description of how our audit addressed this matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report, including in relation to this matter. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matter below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Key audit matter	How our audit addressed the key audit matter
Impairment analysis of property, plant and equipment	
Impairment analysis of property, plant and equipment was a key audit matter due to the significance of fixed assets balance in the consolidated financial statements, high subjectivity of judgments and estimates underlying the impairment analysis and used by management. Current global market conditions, including fluctuations in LME aluminium prices, market premiums and alumina purchase prices together with their long-term forecasts, may indicate that some cash generating units (CGU) may be subject to either impairment loss or full or partial reversal of previously recognized impairment. Evaluation of the recoverable amount of fixed assets is based on the higher of the fair value less cost to sell and value in use. As of the reporting date management makes an assessment of value-in-use based on the discounted cash flow models. Information on the results of the impairment testing is provided in Note 13 (VII) to the consolidated financial statements.	We tested management's assessment of whether indicators for potential impairment or reversal of impairment previously recorded exist. For the impairment tests performed our procedures included, among others: • Comparison of key assumptions such as production volumes, forecasted aluminium sales prices, forecasted alumina and bauxites purchase prices, forecasted costs inflation, forecasted currency exchange rates, discount rates, used in the Group's financial model with published macroeconomic indicators and forecast data. • Assessing the historical accuracy of management's budgets and forecasts by comparing them to actual performance. • Checking the arithmetic accuracy of the impairment model and assessing a sensitivity analysis of value-in-use to changes in key assumptions. We engaged our internal valuation experts to analyze the Group's management calculations of the recoverable amount of fixed assets. We assessed the impairment related disclosures in the consolidated financial statements, including the key assumptions used and the sensitivity of the consolidated financial statements to these assumptions.

Other Matter

The consolidated financial statements of the Group for the year ended 31 December 2020 were audited by another auditor who expressed an unmodified opinion on those statements on 16 March 2021.

Other Information Included in the Annual Report

Other information consists of the information included in the Annual Report other than the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information. The Annual Report is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Responsibilities of Management and the Board of Directors for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Board of Directors is responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Board of Directors, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The partner in charge of the audit resulting in this independent auditor's report is Mikhail Khachaturian

Mikhail Khachaturian,
acting on behalf of Ernst & Young LLC
on the basis of power of attorney w/o number dated 1 March 2022,
partner in charge of the audit resulting in this independent auditor's report
(main registration number 21906108270)

29 March 2022

Details of the auditor

Name: Ernst & Young LLC
Record made in the State Register of Legal Entities on 5 December 2002, State Registration Number 1027739707203.
Address: Russia 115035, Moscow, Sadovnicheskaya naberezhnaya, 77, building 1.
Ernst & Young LLC is a member of Self-regulatory organization of auditors Association "Sodruzhestvo". Ernst & Young LLC is included in the control copy of the register of auditors and audit organizations, main registration number 12006020327.

Details of the audited entity

Name: International public joint-stock company United Company RUSAL
Record made in the State Register of Legal Entities on 25 September 2020, State Registration Number 1203900011974.
Address: Russia 236006, Kaliningrad, Oktyabrskaya street, Office 411, b.8.

CONSOLIDATED STATEMENT OF INCOME

FOR THE YEAR ENDED 31 DECEMBER 2021

	Note	Year ended 31 December	
		2021 USD million	2020 USD million
Revenue	5	11,994	8,566
Cost of sales	6(a)	(8,273)	(7,112)
Gross profit		**3,721**	**1,454**
Distribution expenses	6(b)	(617)	(469)
Administrative expenses	6(b)	(603)	(553)
Impairment of non-current assets	6(b), 13	(209)	(9)
Expected credit losses	17(a)	(60)	(6)
Net other operating expenses	6(b)	(153)	(138)
Results from operating activities		**2,079**	**279**
Finance income	7	63	151
Finance expenses	7	(800)	(690)
Share of profits of associates and joint ventures	15	1,807	976
Gain from partial disposal of investment in associate	15	492	–
Profit before taxation		**3,641**	**716**
Income tax	8	(416)	43
Profit for the year		**3,225**	**759**
Attributable to Shareholders of the Company		3,225	759
Profit for the year		**3,225**	**759**
Earnings per share			
Basic and diluted earnings per share (USD)	12	0.212	0.050
Adjusted EBITDA	4, 6(d)	2,893	871

The consolidated statement of income is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 159 to 227.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2021

	Note	Year ended 31 December	
		2021	2020
		USD million	USD million
Profit for the year		**3,225**	**759**
Other comprehensive income or loss			
Items that will never be reclassified subsequently to profit or loss			
Actuarial (loss)/gain on post retirement benefit plans	20	(8)	2
		(8)	**2**
Items that are or may be reclassified subsequently to profit or loss			
Reclassification of accumulated foreign currency translation loss to Statement of Income due to partial disposal of investment in associate	15	613	–
Change in fair value of cash flow hedges	21	(28)	(53)
Foreign currency translation differences for equity-accounted investees	15	21	(665)
Foreign currency translation differences on foreign operations		29	(247)
		635	**(965)**
Other comprehensive income/(loss) for the year, net of tax		627	(963)
Total comprehensive income/(loss) for the year		**3,852**	**(204)**
Attributable to:			
Shareholders of the Company		3,852	(204)
Total comprehensive income/(loss) for the year		**3,852**	**(204)**

There was no significant tax effect relating to each component of other comprehensive income or loss.

The consolidated statement of comprehensive income is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 159 to 227.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2021

	Note	31 December 2021 USD million	31 December 2020 USD million
Assets			
Non-current assets			
Property, plant and equipment and investment properties	13	5,350	4,855
Intangible assets	14	2,411	2,407
Interests in associates and joint ventures	15	4,014	3,822
Deferred tax assets	8	113	199
Derivative financial assets	21	22	20
Investments in equity securities measured at fair value through profit and loss	17 (e)	315	74
Other non-current assets	17(d)	245	124
Total non-current assets		**12,470**	**11,501**
Current assets			
Inventories	16	3,692	2,292
Short-term investments	17(f)	167	163
Trade and other receivables and advances paid	17(a)	1,646	1,163
Dividends receivable		827	–
Derivative financial assets	21	120	30
Cash and cash equivalents	17(c)	1,984	2,229
Total current assets		**8,436**	**5,877**
Total assets		**20,906**	**17,378**

	Note	31 December 2021 USD million	31 December 2020 USD million
Equity and liabilities			
Equity	**18**		
Share capital		152	152
Share premium		15,786	15,786
Other reserves		2,805	2,841
Currency translation reserve		(9,450)	(10,113)
Retained earnings/(accumulated losses)		1,231	(2,123)
Total equity		**10,524**	**6,543**
Non-current liabilities			
Loans and borrowings	19	4,839	7,062
Provisions	20	378	405
Deferred tax liabilities	8	429	453
Derivative financial liabilities	21	61	28
Other non-current liabilities		83	96
Total non-current liabilities		**5,790**	**8,044**
Current liabilities			
Loans and borrowings	19	1,894	730
Trade and other payables and advances received	17(b)	2,408	1,836
Derivative financial liabilities	21	145	157
Provisions	20	145	68
Total current liabilities		**4,592**	**2,791**
Total liabilities		**10,382**	**10,835**
Total equity and liabilities		**20,906**	**17,378**
Net current assets		**3,844**	**3,086**
Total assets less current liabilities		**16,314**	**14,587**

Preliminary reviewed, approved and authorised for issue by the board of directors on 29 March 2022.

Evgenii V. Nikitin
General Director

Alexander V. Popov
Chief Financial Officer

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 159 to 227.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2021

	Note	Share capital USD million	Share premium USD million	Other reserves USD million	Currency translation reserve USD million	(Accumulated losses)/ retained earnings USD million	Total equity USD million
Balance at 1 January 2021		**152**	**15,786**	**2,841**	**(10,113)**	**(2,123)**	**6,543**
Profit for the year		–	–	–	–	3,225	3,225
Share of equity transactions of an associate	15	–	–	–	–	129	129
Other comprehensive income for the year		–	–	(36)	663	–	627
Total comprehensive loss for the year		**–**	**–**	**(36)**	**663**	**3,354**	**3,981**
Balance at 31 December 2021		**152**	**15,786**	**2,805**	**(9,450)**	**1,231**	**10,524**
Balance at 1 January 2020		152	15,786	2,892	(9,201)	(2,882)	6,747
Profit for the year		–	–	–	–	759	759
Other comprehensive loss for the year		–	–	(51)	(912)	–	(963)
Total comprehensive loss for the year		**–**	**–**	**(51)**	**(912)**	**759**	**(204)**
Balance at 31 December 2020		**152**	**15,786**	**2,841**	**(10,113)**	**(2,123)**	**6,543**

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 159 to 227.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2021

	Note	Year ended 31 December	
		2021	2020
		USD million	USD million
Operating activities			
Profit for the year		**3,225**	**759**
Adjustments for:			
Depreciation	6, 13	589	564
Amortisation	6, 14	7	6
Impairment of non-current assets	6(b)	209	9
Impairment/(reversal of impairment) of trade and other receivables	6(b)	60	6
Write-down of inventories to net realisable value	16	28	(2)
Pension provision	20	3	5
Provision for legal claims	20	6	–
Change in fair value of derivative financial instruments	7	352	226
Net foreign exchange loss/(gain)	7	29	(118)
Loss on disposal of property, plant and equipment	6(b)	9	13
Interest expense	7	372	464
Interest income	7	(43)	(33)
Income tax expense/(gain)	8	416	(43)
Dividends from other investments		(20)	–
Revaluation of investments measured at fair value through profit and loss	17(e)	47	–
Share of profits of associates and joint ventures	15	(1,807)	(976)
Gain on partial disposal of investment in associate	15	(492)	–
Cash from operating activities before changes in working capital and provisions		**2,990**	**880**

	Note	Year ended 31 December	
		2021	2020
		USD million	USD million
(Increase)/decrease in inventories		(1,387)	195
(Increase)/decrease in trade and other receivables and advances paid		(528)	201
Increase/(decrease) in trade and other payables and advances received		394	(135)
Decrease in provisions		(16)	(7)
Cash generated from operations before income tax paid		**1,453**	**1,134**
Income tax paid	8(e)	(307)	(43)
Net cash generated from operating activities		**1,146**	**1,091**
Investing activities			
Proceeds from disposal of property, plant and equipment		10	11
Interest received		37	26
Acquisition of property, plant and equipment		(1,164)	(877)
Dividends from associates and joint ventures		620	1,170
Dividends from other investments		20	–
Acquisition of intangible assets		(28)	(20)
Cash paid for investments in equity securities measured at fair value through profit and loss		(291)	–
Cash paid for other investments		(50)	(191)
Return of contribution to joint venture		–	10
Prepayment for and acquisition of subsidiaries		(85)	(1)
Proceeds from partial disposal of associate		1,421	–
Net cash generated from investing activities		**490**	**128**

	Note	Year ended 31 December	
		2021	2020
		USD million	USD million
Financing activities			
Proceeds from borrowings		918	491
Repayment of borrowings		(2,080)	(493)
Refinancing fees and other expenses		(34)	(12)
Interest paid		(380)	(465)
Settlement of derivative financial instruments		(315)	(215)
Net cash used in financing activities		**(1,891)**	**(694)**
Net (decrease)/increase in cash and cash equivalents		**(255)**	**525**
Cash and cash equivalents at the beginning of the year	17(c)	2,216	1,768
Effect of exchange rate fluctuations on cash and cash equivalents		21	(77)
Cash and cash equivalents at the end of the year	**17(c)**	**1,982**	**2,216**

Restricted cash amounted to USD2 million and USD13 million at 31 December 2021 and 31 December 2020, respectively.

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 159 to 227.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2021

1. Background

(a) Organisation

United Company RUSAL, international public joint-stock company (United Company RUSAL Plc prior to 25 September 2020) ("UC RUSAL IPJSC", the "Company" or "UC RUSAL") was established by the controlling shareholder of RUSAL Limited ("RUSAL") as a limited liability company under the laws of Jersey on 26 October 2006. On 27 January 2010, the Company successfully completed a placing on the Main Board of The Stock Exchange of Hong Kong Limited ("Hong Kong Stock Exchange") and changed its legal form from a limited liability company to a public limited company.

On 23 March 2015, the shares of the Company were admitted to listing on PJSC Moscow Exchange MICEX-RTS ("Moscow Exchange") in the First Level quotation list. The trading of shares on Moscow Exchange commenced on 30 March 2015. There was no issue of new shares.

The extraordinary general meeting of the Company held on 1 August 2019 approved the application by the Company to the regulatory authorities in Russia for continuance as a company with the status of an International Company established under the laws of Russia (the "Redomiciliation"). On 25 September 2020 UC RUSAL changed its domicile to the Russian Federation as UC RUSAL IPJSC.

The Company's registered office as at 31 December 2021 is Oktyabrskaya st. 8, office 410, Kaliningrad, Kaliningrad Region, 236006, Russian Federation (prior to 25 September 2020: 3rd floor, 44 Esplanade, St Helier, Jersey, JE4 9WG, Channel Islands).

The Company directly or through its wholly owned subsidiaries controls a number of production and trading entities engaged in the aluminium business and other entities, which together with the Company are referred to as "the Group".

The shareholding structure of the Company as at 31 December 2021 and 2020 was as follows:

	31 December 2021	31 December 2020
EN+GROUP IPJSC ("EN+", formerly En+ Group Plc)	56.88%	56.88%
SUAL Partners Limited ("SUAL Partners")	21.52%	22.10%
Zonoville Investments Limited ("Zonoville")	4.00%	4.00%
Mr. Oleg V. Deripaska	0.01%	0.01%
Publicly held	17.59%	17.01%
Total	**100.00%**	**100.00%**

At 31 December 2021 and 2020 the immediate parent of the Group was EN+ GROUP International public joint-stock company (EN+GROUP IPJSC) with the registered office at Oktyabrskaya st. 8, office 34, Kaliningrad, Kaliningrad Region, 236006, Russian Federation.

Based on the information provided by EN+, at the reporting date there is no individual that has an indirect prevailing ownership interest in EN+ GROUP IPJSC exceeding 50%, who could exercise voting rights in respect of more than 35% of EN+ GROUP IPJSC's issued share capital or has an opportunity to exercise control over EN+ GROUP IPJSC. As at 31 December 2021 and 31 December 2020 Mr. Oleg Deripaska beneficially controls and exercises voting rights in respect of 35% of the voting shares of EN+ GROUP IPJSC and cannot exceed his direct or indirect shareholding over 44.95% of the shares of the EN+ GROUP IPJSC.

According to the information disclosed at the Stock Exchange of Hong Kong Limited Zonoville Investments Limited and SUAL Partners Limited are associates. Major ultimate beneficiaries of SUAL Partners are Mr. Victor Vekselberg and Mr. Len Blavatnik.

Related party transactions are disclosed in note 25.

(b) Operations

The Group operates in the aluminium industry primarily in the Russian Federation, Ukraine, Guinea, Jamaica, Ireland, Italy and Sweden and is 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. The Group sells its products primarily in Europe, Russia, other countries of the Commonwealth of Independent States ("CIS"), Asia and North America.

(c) Business environment in emerging economies

The Russian Federation, Ukraine, Jamaica 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 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 counter 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 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 and Guinean business environments on the operations and the financial position of the Group. The future business environment may differ from management's assessment.

(d) OFAC Sanctions

On 6 April 2018, the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC") designated, amongst others, the Company, as a Specially Designated National ("SDN") (the "OFAC Sanctions").

As a result, all property or interests in property of the Company and its subsidiaries located in the United States or in the possession of U.S. Persons were blocked, must have been frozen, and could not be transferred, paid, exported, withdrawn, or otherwise dealt in. Several general licenses were issued at the time of the designation and later on authorizing certain transactions with the Company, its majority shareholder EN+ GROUP IPJSC ("EN+", former En+ Group Plc), and with their respective debt and equity.

On 27 January 2019 OFAC announced removal of the Company and En+ from OFAC's SDN List with immediate effect. The removal was subject to and conditional upon the satisfaction of a number of conditions including, but not limited to, corporate governance changes, including, inter alia, overhauling the composition of the Board to ensure that independent directors constitute the majority of the Board, stepping down of the Chairman of the Board, and ongoing reporting and certifications by the Company to OFAC concerning compliance with the conditions for removal.

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"), and the disclosure requirements of the Hong Kong Companies Ordinance.

These consolidated financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. Preparation of these consolidated financial statements is also regulated by Russian Federal Law 208-FZ dated 27 July 2010 "*On consolidated financial statements*" in all aspects, except for language and functional and presentation currencies, which are regulated by Russian Federal Law 290-FZ dated 3 August 2018 "*On international companies and international funds*".

Certain reclassifications have been made to the prior periods' consolidated financial statements to conform to the current year presentation. Such reclassifications affect the presentation of certain items in the consolidated statement of financial position, consolidated statement of comprehensive income, consolidated statement of cash flows and notes to the consolidated financial statements and have no impact on net income or equity.

(b) Standards issued but not effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

- IFRS 17 *Insurance Contracts*;
- *Reference to the Conceptual Framework* – Amendments to IFRS 3;
- *Property, Plant and Equipment: Proceeds before Intended Use* – Amendments to IAS 16;
- *Onerous Contracts – Costs of Fulfilling a Contract* – Amendments to IAS 37;
- IFRS 1 *First-time Adoption of International Financial Reporting Standards* – Subsidiary as a first-time adopter;
- *Definition of Accounting Estimates* – Amendments to IAS 8;
- IFRS 9 *Financial Instruments* – Fees in the '10 per cent' test for derecognition of financial liabilities;
- *Disclosure of Accounting Policies* – Amendments to IAS 1 and IFRS Practice Statement 2;

These amendments are not expected to have a material impact on the Group.

Amendments to IAS 1 Classification of Liabilities as Current or Non-current

In January 2020, the IASB issued amendments to paragraphs 69 to 76 of IAS 1 to specify the requirements for classifying liabilities as current or non-current. The amendments clarify:

- What is meant by a right to defer settlement;
- That a right to defer must exist at the end of the reporting period;
- That classification is unaffected by the likelihood that an entity will exercise its deferral right;
- That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification.

The amendments are effective for annual reporting periods beginning on or after 1 January 2023 and must be applied retrospectively. The Group is currently assessing the impact the amendments will have on current practice.

3. Significant Accounting Policies

(a) New and amended standards and interpretations adopted by the Group

The Group applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after 1 January 2021 (unless otherwise stated). The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

Interest Rate Benchmark Reform – Phase 2: Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16

The amendments provide temporary reliefs which address the financial reporting effects when an interbank offered rate (IBOR) is replaced with an alternative nearly risk-free interest rate (RFR). The amendments include some practical expedients.

These amendments had no impact on the Consolidated financial statements of the Group. The Group intends to use the practical expedients in future periods if they become applicable.

Covid-19-Related Rent Concessions beyond 30 June 2021 Amendments to IFRS 16

On 28 May 2020, the IASB issued *Covid-19-Related Rent Concessions* – amendment to IFRS 16 *Leases* The amendments provide relief to lessees from applying IFRS 16 guidance on lease modification accounting for rent concessions arising as a direct consequence of the Covid-19 pandemic. As a practical expedient, a lessee may elect not to assess whether a Covid-19 related rent concession from a lessor is a lease modification. A lessee that makes this election accounts for any change in lease payments resulting from the Covid-19 related rent concession the same way it would account for the change under IFRS 16, if the change were not a lease modification.

The amendment was intended to apply until 30 June 2021, but as the impact of the Covid-19 pandemic is continuing, on 31 March 2021, the IASB extended the period of application of the practical expedient to 30 June 2022.The amendment applies to annual reporting periods beginning on or after 1 April 2021. However, the Group has not received Covid-19-related rent concessions, but plans to apply the practical expedient if it becomes applicable within allowed period of application.

(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 the related notes below.

(c) Functional and presentation currency

The Company's functional currency is the United States Dollar ("USD") because it reflects the economic substance of the underlying events and circumstances of the 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.

The functional currencies of investments in associates and joint ventures are RUB, Kazakhstani tenge and Australian dollar.

(d) Use of judgements, 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.

Judgements 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 relate to:

- Measurement of recoverable amount of property, plant and equipment (note 13) and goodwill (note 14);
- Measurement of net realizable value of inventories (note 16);
- Measurement of recoverable amount of investments in associates and joint ventures (note 15);

- Measurement of recoverable amount of deferred tax assets (note 8);
- Estimates in respect of legal proceedings, restoration and exploration, taxation and pension reserve (note 20);
- Measurement of fair value of derivative financial instruments (note 21);
- Measurement of expected credit losses on financial assets (note 17).

(e) Basis of consolidation

(i) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed, 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 whether the Group has power, only substantive rights (held by the Group and other parties) are considered.

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances, transactions and cash flows and any unrealised profits arising from intra-group transactions are eliminated in full in preparing the consolidated financial statements. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment.

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 or, when appropriate, the cost on initial recognition of an investment in an associate or joint venture.

(ii) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group 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.

(f) 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 and translated using the exchange rate at the date of transaction. Foreign currency differences arising on retranslation are recognised in the statement of income, except for differences arising on the retranslation of qualifying cash flow hedges to the extent the hedge is effective, which is recognised in the 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 the statement of 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 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 the statement of income 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 the statement of income.

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 information or 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.

The Group has four reportable segments, as described below, which are the Group's strategic business units. These business units are managed separately and the results of their operations are reviewed by the CEO on a regular basis.

Aluminium. The Aluminium segment is involved in the production and sale of primary aluminium and related products.

Alumina. The Alumina segment is involved in the mining and refining of bauxite into alumina and the sale of alumina.

Energy. The Energy segment includes the Group companies and projects engaged in the mining and sale of coal and the generation and transmission of electricity produced from various sources. Where the generating facility is solely a part of an alumina or aluminium production facility it is included in the respective reportable segment.

Mining and Metals. The Mining and Metals segment includes the equity investment in PJSC MMC Norilsk Nickel ("Norilsk Nickel").

Other operations include manufacturing of semi-finished products from primary aluminium for the transportation, packaging, building and construction, consumer goods and technology industries; and the activities of the Group's administrative centres. None of these segments meet any of the quantitative thresholds for determining reportable segments in 2021 and 2020.

The Aluminium and Alumina segments are vertically integrated whereby the Alumina segment supplies alumina to the Aluminium segment for further refining and smelting with limited sales of alumina outside the Group. Integration between the Aluminium, Alumina and Energy segments also includes shared servicing and distribution.

(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:

Segment assets include all tangible, intangible assets and current assets with the exception of income tax assets and corporate assets. Segment liabilities include trade and other payables attributable to the production and sales activities of the individual segments. Loans and borrowings are not allocated to individual segments as they are centrally managed by the head office.

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 excluding impairment.

The measure used for reporting segment results is the statement of income before income tax adjusted for items not specifically attributed to individual segments, such as finance income, costs of loans and borrowings and other head office or corporate administration costs. 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, impairment and additions of non-current segment assets used by the segments in their operations. Inter-segment pricing is determined on a consistent basis using market benchmarks.

Segment capital expenditure is the total cost incurred during the year to acquire property, plant and equipment and intangible assets other than goodwill.

(i) Reportable segments

Year ended 31 December 2021

	Aluminium USD million	Alumina USD million	Energy USD million	Mining and Metals USD million	Total segment result USD million
Revenue from external customers	10,054	1,014	–	–	11,068
Inter-segment revenue	365	2,796	–	–	3,161
Total segment revenue	**10,419**	**3,810**	**–**	**–**	**14,229**
Segment profit	**2,494**	**96**	**–**	**–**	**2,590**
Depreciation/amortisation	(348)	(212)	–	–	(560)
Segment EBITDA	**2,842**	**308**	**–**	**–**	**3,150**
Reversal of impairment/(impairment) of non-current assets	623	(797)	–	–	(174)
Share of profits of associates and joint ventures	–	–	81	1,762	1,843
Non-cash expense other than depreciation	(8)	(16)	–	–	(24)
Capital expenditure	(700)	(234)	–	–	(934)
Non-cash additions to non-current segment assets related to site restoration	(62)	–	–	–	(62)
Segment assets	9,477	2,055	–	–	11,532
Interests in associates and joint ventures	–	–	738	3,274	4,012
Total segment assets					**15,544**
Segment liabilities	(1,095)	(758)	(14)	–	(1,867)
Total segment liabilities					**(1,867)**

Year ended 31 December 2020

	Aluminium USD million	Alumina USD million	Energy USD million	Mining and Metals USD million	Total segment result USD million
Revenue from external customers	7,158	811	–	–	7,969
Inter-segment revenue	217	2,429	–	–	2,646
Total segment revenue	**7,375**	**3,240**	**–**	**–**	**10,615**
Segment profit	**365**	**213**	**–**	**–**	**578**
Depreciation/amortisation	(350)	(183)	–	–	(533)
Segment EBITDA	**715**	**396**	**–**	**–**	**1,111**
Reversal of impairment/(impairment) of non-current assets	74	(59)	–	–	15
Share of profits of associates and joint ventures	–	–	76	930	1,006
Non-cash (expense)/income other than depreciation	(2)	6	–	–	4
Capital expenditure	(611)	(238)	–	–	(849)
Non-cash additions/(disposals) to non-current segment assets related to site restoration	6	(39)	–	–	(33)
Segment assets	6,987	2,572	–	–	9,559
Interests in associates and joint ventures	–	–	662	3,122	3,784
Total segment assets					**13,343**
Segment liabilities	(854)	(668)	(13)	–	(1,535)
Total segment liabilities					**(1,535)**

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

	Year ended 31 December	
	2021 USD million	2020 USD million
Revenue		
Reportable segment revenue	14,229	10,615
Elimination of inter-segment revenue	(3,161)	(2,646)
Unallocated revenue	926	597
Consolidated revenue	**11,994**	**8,566**

	Year ended 31 December	
	2021 USD million	2020 USD million
Profit		
Reportable segment profit	2,590	578
Impairment of non-current assets	(209)	(9)
Share of profits of associates and joint ventures	1,807	976
Loss on disposal of property, plant and equipment	(9)	(13)
Finance income	63	151
Finance expenses	(800)	(690)
Gain from partial disposal of investment in associate	492	–
Unallocated expenses	(293)	(277)
Consolidated profit before taxation	**3,641**	**716**

	Year ended 31 December	
	2021 USD million	2020 USD million
Adjusted EBITDA		
Reportable segment EBITDA	3,150	1,111
Unallocated depreciation	36	37
Unallocated expenses	(293)	(277)
Consolidated adjusted EBITDA	**2,893**	**871**

	31 December 2021 USD million	31 December 2020 USD million
Assets		
Reportable segment assets	15,544	13,343
Unallocated assets	5,362	4,035
Consolidated total assets	**20,906**	**17,378**

	31 December 2021 USD million	31 December 2020 USD million
Liabilities		
Reportable segment liabilities	(1,867)	(1,535)
Unallocated liabilities	(8,515)	(9,300)
Consolidated total liabilities	**(10,382)**	**(10,835)**

(iii) 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 and Ukraine. In Europe, production facilities are located in Italy, Ireland and Sweden. African production facilities are represented by bauxite mines and an alumina refinery in Guinea. In the Americas the Group operates one production facility in Jamaica and a trading subsidiary in the United States of America.

The following table sets out information about the geographical location of (i) the Group's revenue from external customers and (ii) the Group's property, plant and equipment, intangible assets and interests in associates and joint ventures ("specified non-current assets"). The geographical location of customers is based on the location at which the services were provided or the goods were 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	
	2021 USD million	2020 USD million
Russia	3,389	2,139
Turkey	1,108	956
China	772	615
Japan	744	471
USA	741	469
Netherlands	443	727
Greece	367	236
Poland	328	337
South Korea	314	329
Germany	325	190
Mexico	280	103
Norway	267	134
Italy	260	225
France	247	164
Taiwan	236	185
Other countries	2,173	1,285
	11,994	**8,566**

	Specified non-current assets	
	31 December 2021 USD million	31 December2020 USD million
Russia	8,697	7,331
Ireland	82	606
Guinea	232	225
Ukraine	6	229
Sweden	68	0
Unallocated	3,385	3,110
	12,470	**11,501**

5. Revenue

Accounting policies

IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised.

The details of significant accounting policies in relation to the Group's various goods and services are set out below:

Sales of goods: comprise sale of primary aluminium, alloys, alumina, bauxite and other products. Customers obtain control of the goods supplied when the goods are delivered to the point when risks are transferred based on Incoterms delivery terms stated in the contract. Invoices are generated and revenue is recognised at that point in time. Invoices are usually payable within 60 days or in advance. 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 the date of the invoice issued. At price finalisation the difference between estimated price and actual one is recognised as other revenue.

Rendering of transportation services: as part of sales of goods the Group also performs transportation to the customer under contract terms. In certain cases the control for goods delivered is transferred to customer at earlier point than the transportation is completed. In these cases rendering of transportation services from when the control of goods has transferred is considered as a separate performance obligation.

Rendering of electricity supply services: The Group is involved in sales of energy to 3rd and related parties. Invoices are issued once a month at the end of month and paid within 30 days. Revenue is recognised over time during the month of energy supply.

Disclosures

	Year ended 31 December	
	2021 USD million	2020 USD million
Revenue from contracts with customers	**11,994**	**8,566**
Sales of products	**11,702**	**8,397**
Sales of primary aluminium and alloys	9,966	7,088
Sales of alumina and bauxite	612	534
Sales of foil and other aluminium products	515	381
Sales of other products	609	394
Provision of services	**292**	**169**
Supply of energy	226	111
Provision of transportation services	7	8
Provision of other services	59	50
Total revenue by types of customers	**11,994**	**8,566**
Third parties	11,083	7,796
Related parties – companies capable of exerting significant influence	320	317
Related parties – companies related through parent company	223	141
Related parties – associates and joint ventures	368	312
Total revenue by primary regions	**11,994**	**8,566**
Europe	4,401	3,574
CIS	3,903	2,486
America	1,087	624
Asia	2,461	1,829
Other	142	53

In 2020 transactions with Glencore International AG (a member of Glencore International) have exceeded 10% of the Group's revenue and amounted to USD1,259 million.

Revenue from sale of primary aluminium and alloys relates to aluminium segment (Note 4). Revenue from sales of alumina and bauxite relates to alumina segment which also includes sale of other products. Revenue from sale of foil and other aluminium products and other products and services relates mostly to the revenue of non-reportable segments.

6. Cost of Sales and Operating Expenses

(a) Cost of sales

	Year ended 31 December	
	2021 USD million	2020 USD million
Cost of alumina, bauxite and other materials	**(3,693)**	**(2,924)**
Third parties	(3,638)	(2,898)
Related parties – companies capable of exerting significant influence	(24)	(15)
Related parties – companies related through parent company	(13)	(11)
Related parties – associates and joint ventures	(18)	–
Purchases of primary aluminium	**(1,229)**	**(605)**
Third parties	(517)	(129)
Related parties – companies related through parent company	(16)	(11)
Related parties – associates and joint ventures	(696)	(465)
Energy costs	**(2,070)**	**(1,868)**
Third parties	(1,288)	(1,094)
Related parties – companies capable of exerting significant influence	(33)	(27)
Related parties – companies related through parent company	(714)	(721)
Related parties – associates and joint ventures	(35)	(26)
Personnel costs	**(618)**	**(512)**
Depreciation and amortisation	**(572)**	**(542)**
Change in finished goods	**752**	**7**
Other costs	**(843)**	**(668)**
Third parties	(702)	(529)
Related parties – companies related through parent company	(30)	(28)
Related parties – associates and joint ventures	(111)	(111)
	(8,273)	**(7,112)**

(b) Distribution, administrative and other operating expenses, and impairment of non-current assets

	Year ended 31 December	
	2021 USD million	**2020 USD million**
Transportation expenses	(443)	(388)
Personnel costs	(301)	(272)
Impairment of non-current assets	(209)	(9)
Customs duties	(99)	(14)
Consulting and legal expenses	(86)	(82)
Expected credit losses	(60)	(6)
Taxes other than on income	(50)	(42)
Charitable donations	(45)	(63)
Packaging materials	(38)	(33)
Security	(33)	(31)
Repair and other services	(25)	(20)
Depreciation and amortisation	(24)	(28)
Loss on disposal of property, plant and equipment	(9)	(13)
Auditors' remuneration	(6)	(6)
Provision for legal claims	(6)	–
Short-term lease and variable lease payments	(5)	(3)
Other expenses	(203)	(165)
	(1,642)	**(1,175)**

(c) Personnel costs

Accounting policies

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 the statement of income 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 net total of any unrecognised past service costs and 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 the statement of income on a straight-line basis over the average period until the benefits become vested. To the extent that the benefits vest immediately, the expense is recognised 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.

Disclosures

	Year ended 31 December	
	2021 USD million	2020 USD million
Contributions to defined contribution retirement plans	193	155
Contributions to defined benefit retirement plans	3	5
Total retirement costs	**196**	**160**
Wages and salaries	724	624
	920	**784**

(d) EBITDA and operating effectiveness measures

Adjusted EBITDA is the key non-IFRS financial measure used by the Group as reference for assessing operating effectiveness.

	Year ended 31 December	
	2021 USD million	2020 USD million
Results from operating activities	2,079	279
Add:		
Amortisation and depreciation	596	570
Impairment of non-current assets	209	9
Loss on disposal of property, plant and equipment	9	13
Adjusted EBITDA	**2,893**	**871**

7. Finance Income and Expenses

Accounting policies

Finance income comprises interest income on funds invested, 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 investments measured at fair value through profit or loss, derivative financial instruments. All borrowing costs are recognised in the statement of income 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. Foreign exchange loss on loans and borrowing for the year ended 31 December 2021 equalled to USD3 million (31 December 2020: gain in the amount of USD291 million).

Disclosures

	Year ended 31 December	
	2021 USD million	2020 USD million
Finance income		
Interest income on third party loans and deposits	43	33
Dividends from other investments	20	–
Net foreign exchange gain	–	118
	63	**151**
Finance expenses		
Interest expense on bank loans and bonds wholly repayable within 5 years and other bank charges	(284)	(437)
Interest expense on bank loans and bonds wholly repayable after 5 years	(75)	(13)
Change in fair value of derivative financial instruments (refer to note 21)	(352)	(226)
Net foreign exchange loss	(29)	–
Interest expense on provisions	(8)	(3)
Revaluation of investments measured at fair value through profit and loss	(47)	–
Other finance costs	–	(2)
Leases interest costs	(5)	(9)
	(800)	**(690)**

8. Income Tax

Accounting policies

Income tax expense comprises current and deferred tax. Income tax expense is recognised in the statement of income 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.

Disclosures

(a) Income tax (credit)/expense

	Year ended 31 December	
	2021 USD million	2020 USD million
Current tax		
Current tax for the year	339	43
Deferred tax		
Origination and reversal of temporary differences	77	(86)
Actual tax expense/(credit)	**416**	**(43)**

The Company is considered a Russian tax resident with an applicable corporate tax rate of 20%, for dividend income of the Company tax rate is 0%. 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%; Guinea of 0% to 30%; China of 25%; Kazakhstan of 20%; Australia of 30%; Jamaica of 25%; Ireland of 12.5%; Sweden of 20.6% and Italy of 26.9%. For the Group's subsidiaries domiciled in Switzerland the applicable tax rate for the period is the corporate income tax rate in the Canton of Zug, Switzerland, which may vary depending on the subsidiary's tax status. The rate consists of a federal income tax and 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 rate are 9.55% and 11.85% for Swiss subsidiaries. For the Group's significant trading companies, the applicable tax rate is 0%. The applicable tax rates for the year ended 31 December 2020 were the same as for the year ended 31 December 2021 except for tax rates for subsidiaries domiciled in Switzerland which amounted to 9.1% and 11.91% subsequently and subsidiary domiciled in Sweden which amounted to 21.4%.

	Year ended 31 December			
	2021		2020	
	USD million	%	USD million	%
Profit before taxation	**3,641**	**100**	**716**	**100**
Income tax at tax rate applicable to the tax residence of the Company	728	20	143	20
Effect of different income tax rates	106	3	(42)	(6)
Effect of changes in investment in Norilsk Nickel	(451)	(12)	(186)	(26)
Change in unrecognised deferred tax assets	72	1	191	27
Effect of reversal/accrual of impairment	(42)	(1)	(30)	(4)
Other non-taxable income and non-deductible expenses	2	–	(119)	(17)
Actual tax expense/(credit)	**416**	**11**	**(43)**	**(6)**

(b) Recognised deferred tax assets and liabilities

Deferred tax assets and liabilities are attributable to the following temporary differences:

USD million	Assets		Liabilities		Net	
	31 December 2021	31 December 2020	31 December 2021	31 December 2020	31 December 2021	31 December 2020
Property, plant and equipment	85	62	(551)	(572)	(466)	(510)
Inventories	67	61	(19)	(15)	48	46
Trade and other receivables	52	33	(30)	(23)	22	10
Trade and other payables and advances received	17	24	–	–	17	24
Derivative financial assets/(liabilities)	3	8	(5)	(6)	(2)	2
Tax loss carry-forwards	54	173	–	–	54	173
Others	100	84	(89)	(83)	11	1
Deferred tax assets/(liabilities)	378	445	(694)	(699)	(316)	(254)
Set-off of deferred taxation	(265)	(246)	265	246	–	–
Net deferred tax assets/(liabilities)	**113**	**199**	**(429)**	**(453)**	**(316)**	**(254)**

Movement in deferred tax assets/(liabilities) during the year

USD million	1 January 2020	Recognised in profit or loss	Foreign currency translation	31 December 2020
Property, plant and equipment	(503)	(2)	(5)	(510)
Inventories	84	(38)	–	46
Trade and other receivables	7	3	–	10
Trade and other payables and advances received	23	1	–	24
Derivative financial assets/(liabilities)	(1)	3	–	2
Tax loss carry-forwards	66	107	–	173
Others	(11)	12	–	1
Total	**(335)**	**86**	**(5)**	**(254)**

USD million	1 January 2021	Recognised in profit or loss	Foreign currency translation	31 December 2021
Property, plant and equipment	(510)	33	11	(466)
Inventories	46	1	1	48
Trade and other receivables	10	12	–	22
Trade and other payables and advances received	24	(7)	–	17
Derivative financial assets/(liabilities)	2	(4)	–	(2)
Tax loss carry-forwards	173	(122)	3	54
Others	1	10	–	11
Total	**(254)**	**(77)**	**15**	**(316)**

Recognised tax losses expire in the following years:

Year of expiry	31 December 2021 USD million	31 December 2020 USD million
Without expiry	54	173
	54	**173**

(c) Unrecognised deferred tax assets

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

	31 December 2021 USD million	31 December 2020 USD million
Deductible temporary differences	972	946
Tax loss carry-forwards	347	301
	1,319	**1,247**

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 2021 USD million	31 December 2020 USD million
Without expiry	347	300
Up to one year	–	1
	347	**301**

(d) Current taxation in the consolidated statement of financial position represents

	31 December 2021 USD million	31 December 2020 USD million
Net income tax receivable at the beginning of the year	4	5
Income tax for the year	(339)	(43)
Income tax paid	307	43
Translation difference	4	(1)
	(24)	**4**
Represented by:		
Current tax liabilities (note 17(b))	(40)	(11)
Prepaid income tax (note 17(a))	16	15
Net income tax (payable)/receivable	**(24)**	**4**

9. Directors’ Remuneration

Directors’ remuneration disclosed pursuant to section 383(1) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of information about Benefits of Directors) Regulations are as follows:

	Year ended 31 December 2021			
	Directors’ fees USD thousand	Salaries, allowances, benefits in kind USD thousand	Discretionary bonuses USD thousand	Total USD thousand
Executive Directors				
Evgenii Nikitin	–	1,433	992	2,425
Evgenii Vavilov	–	41	5	46
Evgeny Kuryanov	–	262	232	494
Non-executive Directors				
Marco Musetti	306	–	–	306
Vyacheslav Solomin	324	–	–	324
Vladimir Kolmogorov	259	–	–	259
Independent Non-executive Directors				
Bernard Zonneveld (Chairman)	1,562	–	–	1,562
Christopher Burnham	305	–	–	305
Nicholas Jordan	322	–	–	322
Elsie Leung Oi-Sie (a)	149	–	–	149
Kevin Parker	336	–	–	336
Evgeny Svarts (b)	307	–	–	307
Randolph Reynolds	295	–	–	295
Dmitry Vasiliev	348	–	–	348
Anna Vasilenko (c)	151	–	–	151
	4,664	**1,736**	**1,229**	**7,629**

	Year ended 31 December 2020			
	Directors' fees USD thousand	Salaries, allowances, benefits in kind USD thousand	Discretionary bonuses USD thousand	Total USD thousand
Executive Directors				
Evgenii Nikitin	–	1,537	1,156	2,693
Evgenii Vavilov	–	32	5	37
Evgeny Kuryanov	–	194	14	208
Non-executive Directors				
Marco Musetti	307	–	–	307
Vyacheslav Solomin	308	–	–	308
Vladimir Kolmogorov	246	–	–	246
Independent Non-executive Directors				
Bernard Zonneveld (Chairman)	1,445	–	–	1,445
Christopher Burnham	294	–	–	294
Nicholas Jordan	306	–	–	306
Elsie Leung Oi-Sie (a)	295	–	–	295
Kevin Parker	321	–	–	321
Evgeny Svarts (b)	187	–	–	187
Randolph Reynolds	285	–	–	285
Dmitry Vasiliev	338	–	–	338
Maksim Poletaev (d)	63	–	–	63
	4,395	**1,763**	**1,175**	**7,333**

a. Elsie Leung Oi-Sie resigned from her position as Independent Non-executive Director in June 2021.
b. Evgeny Svarts was appointed as Independent Non-executive Director in April 2020.
c. Anna Vasilenko was appointed as Independent Non-executive Directors in June 2021.
d. Maksim Poletaev resigned from his position as Independent Non-executive Director in April 2020.

The remuneration of the executive directors disclosed above includes compensation received starting from the date of the appointment and/or for the period until their termination as a member of the Board of Directors.

Executive directors remuneration for the year ended 31 December 2021 includes contributions to the state pension funds in the following amounts: Mr. Nikitin – USD225 thousand, Mr. Vavilov – USD9 thousand, Mr. Kuryanov – USD49 thousand. Executive directors remuneration for the year ended 31 December 2020 includes contributions to the state pension funds in the following amounts: Mr. Nikitin – USD243 thousand, Mr. Vavilov – USD5 thousand, Mr. Kuryanov – USD21 thousand.

10. Individuals with Highest Emoluments

	Year ended 31 December	
	2021 USD thousand	2020 USD thousand
Salaries	16,601	13,301
Discretionary bonuses	11,833	24,307
Retirement scheme contributions	2,165	3,315
	30,599	**40,923**

The emoluments of individuals with the highest emoluments are within the following bands:

	Year ended 31 December	
	2021 Number of individuals	2020 Number of individuals
HK$30,500,001-HK$31,000,000 (US$3,900,001 – US$4,000,000)	–	1
HK$32,000,001-HK$32,500,000 (US$4,100,001 – US$4,200,000)	1	–
HK$36,500,001-HK$37,000,000 (US$4,700,001 – US$4,800,000)	–	1
HK$37,500,001-HK$38,000,000 (US$4,800,001 – US$4,900,000)	1	1
HK$52,000,001-HK$52,500,000 (US$6,700,001 – US$6,800,000)	1	–
HK$55,500,001-HK$56,000,000 (US$7,100,001 – US$7,200,000)	1	–
HK$56,000,001-HK$56,500,000 (US$7,200,001 – US$7,300,000)	1	–
HK$90,000,001-HK$90,500,000 (US$11,600,001 – US$11,700,000)	–	1
HK$100,000,001-HK$100,500,000 (US$12,850,001 – US$12,950,000)	–	1

No emoluments have been paid to these individuals as an inducement to join or upon joining the Group or as compensation for loss of office during the years presented.

The remuneration for the years ended 31 December 2021 and 31 December 2020 includes contributions to the state pension funds.

11. Dividends

No dividends were declared and paid by the Company during the year ended 31 December 2021 and the year ended 31 December 2020.

The Company is subject to external capital requirements (refer to note 22(f)).

12. Earnings Per Share

The calculation of earnings per share is based on the profit attributable to ordinary equity shareholders of the Company and the weighted average number of shares in issue during the years ended 31 December 2021 and 31 December 2020. Weighted average number of shares:

	Year ended 31 December	
	2021	2020
Issued ordinary shares at beginning of the year	15,193,014,862	15,193,014,862
Effect of treasury shares	–	–
Weighted average number of shares at end of the year	**15,193,014,862**	**15,193,014,862**
Profit for the year, USD million	3,225	759
Basic and diluted earnings per share, USD	**0.212**	**0.050**

There were no outstanding dilutive instruments during the years ended 31 December 2021 and 2020.

13. Property, Plant and Equipment and Investment Properties

Accounting policies

Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment are 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 self-constructed 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 the statement of income.

(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 the statement of income 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 the statement of income.

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 the statement of income.

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;
- 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. Freehold land is not depreciated.

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

• Buildings	30 to 50 years;
• Plant, machinery and equipment	5 to 40 years;
• Electrolysers	4 to 15 years;
• Mining assets	nits of production on proven and probable reserves;
• Other (except for exploration and evaluation assets)	1 to 20 years.

Investment properties

Investment properties is property held by the Group to earn rental income or for capital appreciation, or both, and is not occupied by the Group. Investment properties is measured initially at cost, including transaction costs. Subsequently investment properties is measured at historical cost less accumulated depreciation and impairment. If any indication exists that investment properties may be impaired, the Group estimates the recoverable amount as the higher of value in use and fair value less costs to sell. The carrying amount of investment properties is written down to its recoverable amount through a charge to profit or loss for the period. An impairment loss recognised in prior periods is reversed if there has been a subsequent change in the estimates used to determine the asset's recoverable amount. If an investment property becomes owner-occupied, it is reclassified to land and buildings.

Disclosures

USD million	Land and buildings	Machinery and equipment	Electrolysers	Other	Mining assets	Construction in progress	Total
Cost/deemed cost							
Balance at 1 January 2020	**3,682**	**6,622**	**2,713**	**159**	**493**	**2,059**	**15,728**
Additions	67	4	120	–	31	765	987
Acquired through business combination	10	8	–	1	–	2	21
Disposals	(11)	(85)	–	(3)	(10)	(11)	(120)
Transfers	52	284	43	121	1	(501)	–
Foreign currency translation	(65)	(73)	(8)	(10)	(48)	(66)	(270)
Balance at 31 December 2020	**3,735**	**6,760**	**2,868**	**268**	**467**	**2,248**	**16,346**
Balance at 1 January 2021	**3,735**	**6,760**	**2,868**	**268**	**467**	**2,248**	**16,346**
Additions	230	31	143	1	63	874	1,342
Acquired through business combination	8	6	–	1	–	–	15
Disposals	(54)	(71)	–	(1)	(1)	(6)	(133)
Transfers	121	431	35	(106)	9	(490)	–
Foreign currency translation	(19)	(15)	(14)	4	(9)	(8)	(61)
Balance at 31 December 2021	**4,021**	**7,142**	**3,032**	**167**	**529**	**2,618**	**17,509**
Accumulated depreciation and impairment losses							
Balance at 1 January 2020	**2,137**	**4,985**	**2,385**	**147**	**451**	**1,124**	**11,229**
Depreciation charge	97	303	156	14	1	–	571
Impairment loss/(reversal) of impairment loss	(29)	27	3	(3)	21	(60)	(41)
Disposals	(4)	(78)	–	(2)	(3)	–	(87)
Foreign currency translation	(42)	(55)	(8)	(3)	(46)	(27)	(181)
Balance at 31 December 2020	**2,159**	**5,182**	**2,536**	**153**	**424**	**1,037**	**11,491**
Balance at 1 January 2021	**2,159**	**5,182**	**2,536**	**153**	**424**	**1,037**	**11,491**
Depreciation charge	108	313	164	3	29	–	617
Impairment loss/(reversal) of impairment loss	143	436	(15)	26	68	(474)	184
Disposals	(6)	(61)	–	(1)	–	–	(68)
Transfers	–	30	–	(30)	–	–	–
Foreign currency translation	(20)	(19)	(13)	1	(10)	(4)	(65)
Balance at 31 December 2021	**2,384**	**5,881**	**2,672**	**152**	**511**	**559**	**12,159**
Net book value							
At 31 December 2020	**1,576**	**1,578**	**332**	**115**	**43**	**1,211**	**4,855**
At 31 December 2021	**1,637**	**1,261**	**360**	**15**	**18**	**2,059**	**5,350**

Depreciation expense of USD565 million (2020: USD536 million) has been charged to cost of goods sold, USD3 million (2020: USD3 million) to distribution expenses and USD21 million (2020: USD25 million) to administrative expenses.

During the year ended 31 December 2021 interest expense of USD7 million was capitalised in the course of active construction at several projects. The average capitalisation rate was 1.95% (2020: USD10 million; 3.8%).

Included into land and buildings at 31 December 2021 is investment property of USD72 million. The amount at 31 December 2020 was USD nil million.

Included into construction in progress at 31 December 2021 and 2020 are advances to suppliers of property, plant and equipment of USD157 million and USD149 million, respectively.

The carrying value of property, plant and equipment subject to lien under loan agreements was USD29 million as at 31 December 2021 (31 December 2020: USD28 million), refer to note 19.

(i) Impairment

In accordance with the Group's accounting policies, 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 recognised to the extent that the carrying amount exceeds the 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), bauxite reserve estimate, operating costs, restoration and rehabilitation costs and future capital expenditure.

Bauxite 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.

Management identified several factors that indicated that for a number of Group's cash-generating units previously recognised impairment loss may require reversal and for a number of cash-generating units impairment loss shall be recognised. These include significant increase of aluminium prices as a result of LME appreciation, significant increase of oil and gas prices and overall market instability. For alumina cash generating units, major influence was on the part of unfavourable dynamics in prices of energy resources being a significant part of cash cost. Bauxite cash generating units incurred more or less stable sale price and cash cost of bauxite.

Based on results of impairment testing as at 31 December 2021, 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 KAZ, VgAZ, Kubal and Taishet aluminium smelters (the latter aluminium smelter under construction) in the amount of USD699 million. Additionally management concluded that at the same date an impairment loss relating to property, plant and equipment of Mykolaiv alumina refinery and Aughinish Alumina in the amount of USD693 million should be recognised in these consolidated financial statements.

Based on results of impairment testing as at 31 December 2020, 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 Taishet aluminium smelter (aluminium smelter under construction) and Mykolaiv alumina refinery in the amount of USD158 million.

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. Assumptions used to determine the recoverable amount of the cash generating units are the same as disclosed in note 14(vi). Values assigned to key assumptions and estimates used to measure the units' 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 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	
	2021	2020
Taishet aluminium smelter	11.2%	11.8%
Mykolaiv alumina refinery	16.5%	18.7%
Kubikenborg Aluminium (Kubal)	14.3%	19.8%
KAZ (Kandalaksha aluminium smelter)	15.8%	15.5%
VgAZ (Volgograd aluminium smelter)	15.2%	14.8%
Aughinish Alumina	10.8%	11.9%

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 USD190 million at 31 December 2021 (2020: USD117 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.

(ii) Leases

The Group assesses whether a contract is or contains a lease based on whether the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration. At inception or on reassessment of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease and non-lease component on the basis of their relative stand-alone prices. However, for the leases of properties in which Group acts as a lessee, the Group does not separate non-lease components and account for the lease and non-lease components as a single lease component.

The Group applies judgement to determine the lease term for some lease contracts in which it is a lessee that include renewal options, the assessment of whether the Group is reasonably certain to exercise such options impacts the lease term, which significantly affects the amount of lease liabilities and right-of-use assets recognised.

In determining the enforceable period (i.e. the maximum lease term), the Group considers whether both it and the lessor has a right to terminate the lease without permission from the other party and, if so, whether that termination would result in more than an insignificant penalty. If a more than insignificant penalty exists, then the enforceable period extends until the point at which a no more than an insignificant penalty exists.

The Group leases many assets, including land, properties and production equipment. The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost and subsequently measured at cost less any accumulated depreciation and impairment losses and adjusted for certain remeasurements of the lease liability as required by IFRS 16.

The cost comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the cost of the right-of-use asset reflects that the Group will exercise a purchase option. In that case the right-of-use asset is depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The Group presents right-of-use assets as part of property plant and equipment, the same line item as it presents underlying assets of the same nature that it owns. Additions to right-of-use assets were in the amount of USD27 million during the year ended 31 December 2021 (31 December 2020: USD67 million). The carrying amounts of right-of-use assets are presented below.

USD Million	Property, plant and equipment		
	Land and buildings	Machinery and equipment	Total
Balance at 1 January 2021	57	6	63
Balance at 31 December 2021	**11**	**11**	**22**

Total depreciation charges related to the right-of-use assets for the year ended 31 December 2021 amount to USD13 million (31 December 2020: USD19 million).

USD15 million of right-of-use assets have been impaired during the year ended 31 December 2021 (31 December 2020: USD2 million). The Group's total cash outflow for leases was in the amount of USD20 million for the year ended 31 December 2021 (31 December 2020: USD28 million).

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

In accordance with IFRS 16 variable payments which do not depend on index or rate, e. g. which do not reflect changes in market rental rates, should not be included in the measurement of lease liability. In respect of municipal or federal land leases where lease payments are based on cadastral value of the land plot and do not change until the next revision of that value or the applicable rates (or both) by the authorities, the Group has determined that, under the current revision mechanism, the land lease payments cannot be considered as either variable that depend on index or rate or in-substance fixed, and therefore these payments are not included in the measurement of the lease liability. Future cash outflows to which the Group is potentially exposed that are not recognised in right-to-use assets and are not reflected in the measurement of lease liabilities and which arise from variable lease payments not linked to index or rate are in the amount of USD63 million as at 31 December 2021 (31 December 2020: USD61 million).

The lease liability is subsequently increased by the interest cost on the lease liability and decreased by lease payment made. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, a change in the estimate of the amount expected to be payable under a residual value guarantee, or as appropriate, changes in the assessment of whether a purchase or extension option is reasonably certain to be exercised or a termination option is reasonably certain not to be exercised.

The Group presents lease liabilities as part of other payables and other non-current liabilities in the statement of financial position depending on the period to which future lease payments relate. Total non-current part of lease liabilities as at 31 December 2021 amounted to USD35 million (31 December 2020: USD49 million).

Total interest costs on leases recognised for the year ended 31 December 2021 amount to USD5 million (31 December 2020: USD9 million).

The Group does not recognise right-of-use assets and lease liabilities for some leases of low-value assets and short-term leases. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term. The expense relating to short-term leases in the amount of USD15 million is included in cost of sales or administrative expenses depending on type of underlying asset for the year ended 31 December 2021 (31 December 2020: USD9 million).

When the Group is an intermediate lessor the sub-leases are classified with reference to the right-of the use asset arising from the head lease, not with reference to the underlying asset.

14. Intangible Assets

Accounting policies

(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.

The Group accounts for business combinations using the acquisition method when the acquired set of activities and assets meets the definition of a business and control is transferred to the Group. In determining whether a particular set of activities and assets is a business, the Group assesses whether the set of assets and activities acquired includes, at a minimum, an input and substantive process and whether the acquired set has the ability to produce outputs.

The Group has an option to apply a 'concentration test' that permits a simplified assessment of whether an acquired set of activities and assets is not a business. The optional concentration test is met if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets.

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group.

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. The Group measures goodwill at the acquisition date as the fair value of the consideration transferred plus the recognised amount of any non-controlling interests in the acquiree less the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed. The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognised in profit or loss. Transaction costs, other than those associated with the issue of debt or equity securities, that the Group incurs in connection with a business combination are expensed as incurred.

Goodwill is not amortised but is tested for impairment annually. For this purpose, goodwill arising on a business combination is allocated to the cash-generating units expected to benefit from the acquisition and any impairment loss recognised is not reversed even where circumstances indicate a recovery in value.

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 the statement of income.

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.

(ii) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in the statement of income 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 the statement of income when incurred.

Capitalised development expenditure is measured at cost less accumulated amortisation and accumulated impairment losses.

(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.

(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 the statement of income when incurred.

(v) Amortisation

Amortisation is recognised in the statement of income 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 2-8 years.

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

Disclosures

	Goodwill USD million	Other intangible assets USD million	Total USD million
Cost			
Balance at 1 January 2020	2,877	598	3,475
Additions	33	20	53
Disposals	–	(48)	(48)
Foreign currency translation	(188)	(9)	(197)
Balance at 31 December 2020	**2,722**	**561**	**3,283**
Balance at 1 January 2021	2,722	561	3,283
Additions	2	28	30
Disposals	–	(2)	(2)
Foreign currency translation	(6)	3	(3)
Balance at 31 December 2021	**2,718**	**590**	**3,308**
Amortisation and impairment losses			
Balance at 1 January 2020	(449)	(469)	(918)
Amortisation charge	–	(6)	(6)
Disposals	–	48	48
Balance at 31 December 2020	**(449)**	**(427)**	**(876)**
Balance at 1 January 2021	(449)	(427)	(876)
Amortisation charge	–	(7)	(7)
Disposals	–	–	–
Impairment loss	–	(14)	(14)
Balance at 31 December 2021	**(449)**	**(448)**	**(897)**
Net book value			
At 31 December 2020	**2,273**	**134**	**2,407**
At 31 December 2021	**2,269**	**142**	**2,411**

The amortisation charge is included in cost of sales in the consolidated statement of income.

Goodwill recognised in these consolidated financial statements as at 31 December 2021 initially arose on the formation of the Group in 2000-2003. The amount of goodwill was principally increased in 2007 as a result of the acquisition of certain businesses of SUAL Partners and Glencore.

Impairment

For the purposes of impairment testing, the entire amount of goodwill is allocated to the aluminium segment of the Group's operations, except for goodwill arisen from PGLZ LLC acquisition (Note 17). The aluminium segment represents the lowest level within the Group 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 Group's aluminium segment.

Similar considerations to those described above in respect of assessing the recoverable amount of property, plant and equipment apply to goodwill.

At 31 December 2021, management analysed changes in the economic environment and developments in the aluminium industry and the Group's operations since 31 December 2020 and performed an impairment test for goodwill at 31 December 2021 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 8.4 million metric tonnes of alumina and of 16.7 million metric tonnes of bauxite. Bauxite and alumina will be used primarily internally for production of primary aluminium;

- The aluminium and alumina prices were based on the long-term aluminium and alumina price outlook derived from available industry and market sources and were as follows:

	2022	2023	2024	2025	2026
Aluminium sales prices, based on the long-term aluminium price outlook, USD per tonne	2,623	2,476	2,371	2,375	2,411
Alumina sales prices, based on the long-term alumina price outlook, USD per tonne	345	319	316	320	352
Nominal foreign currency exchange rates, RUB per 1USD	72.2	74.7	76.8	79.2	80.7
Inflation in RUB	6.6%	4.5%	3.6%	4.2%	3.3%
Inflation in USD	4.0%	2.1%	2.1%	2.0%	2.1%

- 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 and inflation in RUB and USD assumed in determining recoverable amounts were as above;

- The pre-tax discount rate was estimated in nominal terms based on the weighted average cost of capital basis and was 11.5%;

- A terminal value was derived following the forecast period assuming a 2.0% annual growth rate.

Values assigned to key assumptions and estimates used to measure the units' recoverable amount were 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 and alumina price levels would result in a decrease in the recoverable amount by 18% 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 6% decrease in the recoverable amount but would not lead to an impairment;

- A 1% increase in the discount rate would have resulted in a 9% 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 2021.

At 31 December 2020, management analysed changes in the economic environment and developments in the aluminium industry and the Group's operations since 31 December 2019 and performed an impairment test for goodwill at 31 December 2020 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 8.5 million metric tonnes of alumina and of 15.7 million metric tonnes of bauxite. Bauxite and alumina will be used primarily internally for production of primary aluminium;

- The aluminium and alumina prices were based on the long-term aluminium and alumina price outlook derived from available industry and market sources and were as follows:

	2021	2022	2023	2024	2025
Aluminium sales prices, based on the long-term aluminium price outlook, USD per tonne	1,919	1,906	1,927	1,955	2,003
Alumina sales prices, based on the long-term alumina price outlook, USD per tonne	295	304	307	318	335
Nominal foreign currency exchange rates, RUB per 1USD	73.2	71.9	71.2	72.5	74.1
Inflation in RUB	3.8%	4.0%	3.9%	4.0%	4.1%
Inflation in USD	1.5%	1.8%	2.2%	1.9%	2.1%

- 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 and inflation in RUB and USD assumed in determining recoverable amounts were as above;

- The pre-tax discount rate was estimated in nominal terms based on the weighted average cost of capital basis and was 11.4%;

- A terminal value was derived following the forecast period assuming a 2.0% annual growth rate.

Values assigned to key assumptions and estimates used to measure the units' 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 and alumina price levels would result in a decrease in the recoverable amount by 33% 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 25% decrease in the recoverable amount but would not lead to an impairment;

- A 1% increase in the discount rate would have resulted in a 11% 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 2020.

15. Interests in Associates and Joint Ventures

Accounting policies

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 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, the Group's share of the post-acquisition results recorded directly in the statement of changes in equity is recognized in the consolidated statement of changes in equity as the share of other changes in equity of associate.

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.

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 venture. 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.

Disclosures

	31 December	
	2021 USD million	2020 USD million
Balance at the beginning of the year	3,822	4,240
Group's share of profits, impairment and reversal of impairment	1,807	976
Group's share of equity transactions	129	–
Partial disposal of investment in associate	(313)	–
Return of prepayment	–	(11)
Dividends	(1,452)	(718)
Foreign currency translation	21	(665)
Balance at the end of the year	**4,014**	**3,822**
Goodwill included in interests in associates	2,300	2,034

The following list contains only the particulars of associates and joint ventures, 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	Ownership interest		Principal activity
			Group's effective interest	Group's nominal interest	
PJSC MMC Norilsk Nickel	Russian Federation	153,654,624 shares, RUB1 par value	26.39%	26.25%	Nickel and other metals production
Queensland Alumina Limited	Australia	2,212,000 shares, AUD2 par value	20%	20%	Production of alumina under a tolling agreement
BEMO project	Cyprus, Russian Federation	BOGES Limited, BALP Limited – 10,000 shares EUR1.71 each	50%	50%	Energy/Aluminium production

The summary of the consolidated financial statements of associates and joint ventures for the year ended 31 December 2021 is presented below:

	PJSC MMC Norilsk Nickel		Queensland Alumina Limited		BEMO project		Other joint ventures	
	Group share*	100%	Group share*	100%	Group share*	100%	Group share*	100%
Non-current assets	5,590	13,565	185	933	1,362	2,548	214	433
Current assets	2,605	9,870	34	176	152	293	61	122
Non-current liabilities	(2,788)	(10,564)	(103)	(448)	(862)	(1,724)	(90)	(180)
Current liabilities	(2,133)	(8,083)	(116)	(580)	(57)	(115)	(40)	(81)
Net assets	**3,274**	**4,788**	**–**	**81**	**595**	**1,002**	**145**	**294**

* Groups share of assets and liabilities attributable to shareholders of the parent company.

	PJSC MMC Norilsk Nickel		Queensland Alumina Limited		BEMO project		Other joint ventures	
	Group share*	100%	Group share*	100%	Group share*	100%	Group share*	100%
Revenue	4,711	17,852	111	555	487	974	133	266
Profit/(loss) from continuing operations	1,762	6,974	–	(30)	58	97	(13)	49
Other comprehensive income	24	98	–	(5)	(3)	(7)	–	(3)
Total comprehensive income	**1,786**	**7,072**	**–**	**(35)**	**55**	**90**	**(13)**	**46**

* Groups share of profit/(loss) and other comprehensive income attributable to shareholders of the parent company.

The summary of the consolidated financial statements of associates and joint ventures for the year ended 31 December 2020 is presented below:

	PJSC MMC Norilsk Nickel		Queensland Alumina Limited		BEMO project		Other joint ventures	
	Group share*	100%	Group share*	100%	Group share*	100%	Group share*	100%
Non-current assets	5,206	12,147	199	777	1,420	2,680	238	402
Current assets	2,381	8,559	35	181	132	255	48	96
Non-current liabilities	(2,959)	(10,619)	(92)	(359)	(945)	(1,890)	(95)	(190)
Current liabilities	(1,506)	(5,412)	(142)	(478)	(67)	(134)	(31)	(62)
Net assets	**3,122**	**4,675**	**–**	**121**	**540**	**911**	**160**	**246**

* Groups share of assets and liabilities attributable to shareholders of the parent company.

	PJSC MMC Norilsk Nickel		Queensland Alumina Limited		BEMO project		Other joint ventures	
	Group share*	100%	Group share*	100%	Group share*	100%	Group share*	100%
Revenue	4,325	15,545	123	617	364	728	134	268
Profit from continuing operations	930	3,634	–	(20)	51	52	(5)	50
Other comprehensive income	(562)	(699)	–	1	(95)	(189)	(8)	(20)
Total comprehensive income	**368**	**2,935**	**–**	**(19)**	**(44)**	**(137)**	**(13)**	**30**

* Groups share of profit/(loss) and other comprehensive income attributable to shareholders of the parent company.

(i) PJSC MMC Norilsk Nickel

In 2021 the Group has participated in the repurchase of Norilsk Nickel shares to raise additional funds to finance its own investment programme. The Group sold 3,691,465 shares for RUR27,780 per share, with the aggregate consideration of USD1,418 million. The carrying value of the shares sold amounted to USD313 million, and USD613 million of currency translation reserve attributed to the shares sold was reclassified to profit/(loss) for the period, resulting in net gain of USD492 million recognised in the consolidated statement of income. The effective interest in Norilsk Nickel held by the Group after the transaction comprised 26.39%, the average effective interest for the year 2021 was 27.11%.

The Group's investment in Norilsk Nickel is accounted for using equity method and the carrying value as at 31 December 2021 and 31 December 2020 amounted USD3,274 million and USD3,122 million, respectively. The Group's share of profit of Norilsk Nickel was USD1,762 million, other comprehensive income was USD nil million, the foreign currency translation gain of USD24 million, other effects related to transactions with non-controlling interest owners of USD129 million for the year ended 31 December 2021.

As at 31 December 2020 Group's associate PJSC MMC Norilsk Nickel recognized a liability on the execution of a put option held by owners of 13.3% non-controlling interest in the share capital in LLC "GRK "Bystrinskoye" in the amount of USD428 million. Since the non-controlling interest owners did not exercise their right under the put option before its expiry date of 31 December 2021, PJSC MMC Norilsk Nickel derecognised the liability on the execution of the put option as at 31 December 2021. PJSC MMC Norilsk Nickel recorded derecognition of the liability directly in the consolidated statement of changes in equity as Other effects related to transactions with non-controlling interest owners in the amount of USD490 million, which was its fair value at 31 December 2021 immediately before derecognition. The Group recognized its share of this change of interest in the net assets of the associate directly in the consolidated statement of changes in equity as Share of other effects of associate recognized in the equity in the amount USD129 million.

The market value amounted USD12,395 million and USD14,123 million as at 31 December 2021 and 31 December 2020, 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.

(ii) Queensland Alumina Limited ("QAL")

The carrying value of the Group's investment in Queensland Alumina Limited as at both 31 December 2021 and 31 December 2020 amounted to USD nil million. At 31 December 2021 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.

(iii) BEMO project

The carrying value of the Group's investment in BEMO project as at 31 December 2021 and 31 December 2020 amounted USD595 million and USD540 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 2021 management has not identified any impairment indicators relating to the Group's investment in BoGES as well as any impairment reversal indicators relating to investments in BoAZ and as a result no detailed impairment testing was performed in relation to this investment.

At 31 December 2021, accumulated losses of USD51 million (2020: USD443 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.

Summary of the additional financial information of the Group's effective interest in BEMO project for the year ended 31 December 2021 and 31 December 2020 is presented below (all in USD million):

	31 December 2021 USD million	31 December 2020 USD million
Cash and cash equivalents	32	30
Current financial liabilities	(25)	(43)
Non-current financial liabilities	(770)	(859)
Depreciation and amortisation	(53)	(17)
Interest income	1	1
Interest expense	(13)	(15)
Income tax expense	(14)	(13)

16. Inventories

Accounting policies

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.

The production costs include mining and concentrating costs, smelting, treatment and refining costs, other cash costs and depreciation and amortisation of operating assets.

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 write-down of inventories charged to the statement of income in the periods in which such estimate has been changed.

Disclosures

	31 December 2021 USD million	31 December 2020 USD million
Raw materials and consumables	1,505	1,033
Work in progress	796	598
Finished goods and goods held for resale	1,551	799
	3,852	**2,430**
Write-down to net realisable value	(160)	(138)
	3,692	**2,292**

Inventories at 31 December 2021 and 31 December 2020 are stated at cost.

Inventory with a carrying value of USD781 million was pledged under existing trading contracts at 31 December 2021 (31 December 2020: USD738 million).

The analysis of the amount of inventories recognised as an expense is as follows:

	Year ended 31 December	
	2021 USD million	2020 USD million
Carrying amount of inventories sold	8,182	6,446
Write off of inventories	(28)	2
	8,154	**6,448**

17. Non-Derivative Financial Instruments

Accounting policies

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 except for trade and other receivables are recognised initially at fair value plus any directly attributable transaction costs. Trade and other receivables are recognised at transaction price.

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.

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. The details of significant accounting policies are set out below.

Classification and measurement of financial assets and financial liabilities

IFRS 9 contains such classification and measurement approach for financial assets that reflects their cash flow characteristics and the business model in which assets are managed.

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 classification of financial assets under IFRS 9 is generally based on its contractual cash flow characteristics and on the business model in which a financial asset is managed. 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.

The Group's financial assets mostly fall within category of financial assets measured at amortised cost. The only exception is derivative financial assets measured at fair value through profit or loss (note 21), cash flow hedges accounted through other comprehensive income (note 21) and other investments measured at fair value through profit or loss (note 17(e). The same applies to the Group's financial liabilities.

Disclosures

(a) Trade and other receivables and advances paid

	31 December 2021 USD million	31 December 2020 USD million
Trade receivables from third parties	757	429
Impairment loss on trade receivables	(17)	(23)
Net trade receivables from third parties	**740**	**406**
Trade receivables from related parties, including:	**184**	**70**
Related parties – companies capable of exerting significant influence	*105*	*50*
Impairment loss on trade receivables from related parties – companies capable of exerting significant influence	*(1)*	*(1)*
Net trade receivables from related parties – companies capable of exerting significant influence	*104*	*49*
Related parties – companies related through parent company	*64*	*13*
Related parties – associates and joint ventures	*16*	*8*
VAT recoverable	382	325
Impairment loss on VAT recoverable	(25)	(24)
Net VAT recoverable	**357**	**301**
Advances paid to third parties	118	105
Impairment loss on advances paid	(1)	(2)
Net advances paid to third parties	**117**	**103**
Advances paid to related parties, including:	**110**	**67**
Related parties – companies capable of exerting significant influence	*–*	*1*
Related parties – companies related through parent company	*1*	*–*
Related parties – associates and joint ventures	*109*	*66*
Prepaid expenses	**8**	**8**
Prepaid income tax	**16**	**15**
Prepaid other taxes	**19**	**29**
Other receivables from third parties	163	170
Impairment loss on other receivables	(71)	(9)
Net other receivables from third parties	**92**	**161**
Other receivables from related parties, including:	**3**	**3**
Related parties – companies related through parent company	*22*	*18*
Impairment loss on other receivables from related parties – companies related through parent company	*(19)*	*(15)*
Net other receivables to related parties – companies related through parent company	*3*	*3*
	1,646	**1,163**

All of the trade and other receivables are expected to be settled within one year or are repayable on demand.

(i) Ageing analysis

Included in trade and other receivables are trade receivables (net of loss allowance for expected credit losses) with the following ageing analysis as of the reporting dates:

	31 December 2021 USD million	31 December 2020 USD million
Current (not past due)	**896**	**385**
1-30 days past due	16	77
31-60 days past due	–	2
61-90 days past due	1	1
More than 90 days past due	11	11
Amounts past due	**28**	**91**
	924	**476**

Ageing analysis is performed based on number of days receivable is overdue. 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. The Group does not hold any collateral over these balances. Further details of the Group's credit policy are set out in note 22(e).

(ii) Impairment of trade receivables

Under IFRS 9, loss allowances are 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 a financial instrument.

The Group measures loss allowances at an amount equal to lifetime ECLs, except for bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition. The Group measures loss allowances for trade receivables at an amount equal to lifetime ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

The Group assumes that the credit risk on a financial asset has increased significantly if it is more than 30 days past due.

The Group considers a financial asset to be in default when:

- The borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held); or
- The financial asset is more than 90 days past due, but additional analysis is conducted for each such receivable and assessment is updated accordingly.

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset in case of long-term assets.

At each reporting date, the Group assesses whether financial assets carried at amortised cost are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of the assets. Impairment losses related to trade and other receivables are presented as part of net other operating expenses.

The following analysis provides further detail about the calculation of ECLs related to trade receivables. The Group uses an allowance matrix to measure the ECLs of trade receivables from the customers. Loss rates are calculated using a 'roll rate' method based on the probability of a receivable progressing through successive stages of delinquency to write-off. The ECLs were calculated based on actual credit loss experience over the past two years. The Group performed the calculation of ECL rates separately for the customers of each key trading company of the Group. Exposures within each trading company were not further segmented except for individually significant customers which bear specific credit risk depending on the repayment history of the customer and relationship with the Group.

The following table provides information about determined ECLs rates for trade receivables both as at 1 January 2021 and 31 December 2021.

	Weighted-average loss rate		
	31 December 2021	1 January 2021	Credit-impaired
Current (not past due)	1%	1%	No
1-30 days past due	18%	4%	No
31-60 days past due	45%	10%	No
61-90 days past due	52%	71%	No
More than 90 days past due	63%	86%	Yes

Impairment losses in respect of trade receivables are recorded using an allowance account unless the Group is satisfied that recovery of the amount is remote, in which case the impairment loss is written off against trade receivables directly.

The movement in the allowance for credit losses during the period is as follows:

	Year ended 31 December	
	2021 USD million	**2020 USD million**
Balance at the beginning of the year	(24)	(31)
Reversal of impairment	7	7
Uncollectible amounts written off	(1)	–
Balance at the end of the year	**(18)**	**(24)**

(b) Trade and other payables and advances received

	31 December 2021 USD million	31 December 2020 USD million
Accounts payable to third parties	**742**	**547**
Accounts payable to related parties, including:	**154**	**96**
Related parties – companies capable of exerting significant influence	*6*	*3*
Related parties – companies related through parent company	*51*	*44*
Related parties – associates and joint ventures	*97*	*49*
Advances received	**1,115**	**860**
Advances received from related parties, including:	**1**	**–**
Related parties – companies related through parent company	*1*	*–*
Other payables and accrued liabilities to third parties	**171**	**159**
Other payables and accrued liabilities to related parties, including:	**4**	**4**
Related parties – companies related through parent company	*4*	*4*
Current tax liabilities	**40**	**11**
Other taxes payable	**181**	**159**
	2,408	**1,836**

All of the trade and other payables are expected to be settled or recognised as income within one year or are repayable on demand.

Advances received represent contract liabilities to perform obligations under contracts with customers and are recognized in Trade and other payables and advances received line in the statement of financial position. Advances received are short-term and revenue in respect of the contract liability at the beginning of the period is fully recognized during the period.

Included in trade and other payables are trade payables with the following ageing analysis as at the reporting date. Ageing analysis is performed based on number of days payable is overdue.

	31 December 2021 USD million	31 December 2020 USD million
Current	**738**	**529**
Past due 0-90 days	139	93
Past due 91-120 days	2	8
Past due over 120 days	17	13
Amounts past due	**158**	**114**
	896	**643**

Lease liabilities that are expected to be settled within one year for the amount of USD8 million are included in other payables and accrued liabilities as at 31 December 2021 (31 December 2020: USD25 million).

(c) Cash and cash equivalents

	31 December 2021 USD million	31 December 2020 USD million
Bank balances, USD	549	1,027
Bank balances, RUB	167	467
Bank balances, EUR	83	94
Bank balances, other currencies	74	33
Short-term bank deposits	1,105	595
Other cash equivalents	4	–
Cash and cash equivalents in the consolidated statement of cash flows	**1,982**	**2,216**
Restricted cash	2	13
	1,984	**2,229**

As at 31 December 2021 and 31 December 2020 included in cash and cash equivalents was restricted cash of USD2 million and USD13 million, respectively.

(d) Other non-current assets

	31 December 2021 USD million	31 December 2020 USD million
Long-term deposits	137	111
Prepayment for subsidiary acquisition	73	–
Other non-current assets	35	13
	245	**124**

In September 2020 the Group obtained control of PGLZ LLC (note 26) by acquiring 99.9% of its shares. The Group has determined that together the acquired inputs and processes significantly contribute to the ability to create revenue and has concluded that the acquired set is a business. Total consideration paid amounted to USD71 million and was paid in cash as at 1 January 2020. Fair value of acquired assets and liabilities amounted to USD24 million from which USD21 million related to property, plant and equipment (note 13).

(e) Investments in equity securities measured at fair value through profit and loss

The Group accumulated 31,426,697,466 shares or 7% of RusHydro for a total consideration of USD366 million through several transactions from July 2020 till April 2021 and treats them as equity securities measured at fair value through profit and loss.

(f) Short-term investments

Primarily consist of short-term bank deposits and promissory notes of the company under common control.

18. Equity

(a) Share capital

	31 December 2021		31 December 2020	
	USD	Number of shares	USD	Number of shares
Ordinary shares at the end of the year, authorised	200 million	20 billion	200 million	20 billion
Ordinary shares at 1 January	151,930,148	15,193,014,862	151,930,148	15,193,014,862
Ordinary shares at the end of the year of USD0.01 each, issued and paid	**151,930,148**	**15,193,014,862**	**151,930,148**	**15,193,014,862**

(b) Other reserves

The acquisition of RUSAL Limited by the Company has been accounted for as a non-substantive acquisition. The consolidated share capital and share premium represent only the share capital and share premium of the Company and the share capital and other paid in capital of RUSAL Limited prior to the acquisition has been included in other reserves.

In addition, 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 and the Group's share of other comprehensive income of associates.

(c) Distributions

Following Company's redomiciliation in September 2020 (note 1(a)), the Company may distribute dividends from retained earnings and profit for the reporting period in compliance with the current legislation of the Russian Federation and the provisions of its Charter.

(d) Currency translation reserve

The currency translation reserve comprises all foreign exchange differences arising from the translation of the consolidated financial statements of foreign operations and equity accounted investees. The reserve is dealt with in accordance with the accounting policies set out in note 3(f).

(e) Movement in components of equity within the Company

USD million	Share capital	Reserves	Total
Balance at 1 January 2020	**152**	**15,743**	**15,895**
Profit for the year	–	785	785
Balance at 31 December 2020	**152**	**16,528**	**16,680**
Balance at 1 January 2021	**152**	**16,528**	**16,680**
Profit for the year	–	2,368	2,368
Balance at 31 December 2021	**152**	**18,896**	**19,048**

19. 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 22(c)(ii) and 22(c)(iii), respectively.

	31 December 2021 USD million	31 December 2020 USD million
Non-current liabilities		
Secured bank loans	3,490	4,603
Unsecured bank loans	33	22
Bonds	1,316	2,437
	4,839	**7,062**
Current liabilities		
Secured bank loans	343	270
Unsecured bank loans	380	403
Bonds	1,118	1
Accrued interest	53	56
	1,894	**730**

(a) Loans and borrowings

Terms and debt repayment schedule as at 31 December 2021

	Total USD million	2022 USD million	2023 USD million	2024 USD million	2025 USD million	2026 USD million	2027-2035 USD million
Secured bank loans							
Variable							
USD – 3M Libor + 3.0%	2,098	–	–	180	423	559	936
USD – 3M Libor + 2.1%	986	268	359	359	–	–	–
USD3M Libor + 1.7%	200	75	100	25	–	–	–
RUB KeyRate + 1.9%	240	–	–	–	–	–	240
RUB KeyRate + 3.15%	309	–	4	23	5	5	272
	3,833	**343**	**463**	**587**	**428**	**564**	**1,448**
Unsecured bank loans							
Variable							
EUR – 6M Euribor + (0.45% – 0.67%)	38	5	6	6	6	5	10
Fixed							
USD2.15%	200	200	–	–	–	–	–
USD2.25%	175	175	–	–	–	–	–
Total	**4,246**	**723**	**469**	**593**	**434**	**569**	**1,458**
Accrued interest	9	9	–	–	–	–	–
Total	**4,255**	**732**	**469**	**593**	**434**	**569**	**1,458**

As at 31 December 2021 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 syndicated Pre-Export Finance Term Facility Agreement (PXF) dated 25 October 2019 and dated 28 January 2021.

As at 31 December 2020 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 syndicated Pre-Export Finance Term Facility Agreements (PXFs) dated 25 October 2019.

As at 31 December 2021 and 31 December 2020 the secured bank loans are secured by certain pledges of shares of a number of Group subsidiaries, 25% +1 share of Norilsk Nickel (Group's associate) and property, plant and equipment with a carrying amount of USD3 million and USD28 million, respectively.

On 28 January 2021, the Group entered into new three-year sustainability-linked pre-export finance facility for up to USD200 million. The interest rate is subject to a sustainability discount or premium depending on the Company's fulfilment of the sustainability key performance indicators (KPIs). The proceeds were used to refinance the principal outstanding under the existing debt.

During the year Group acquired an investment property with related loan of USD96 million which has been repaid in full.

The nominal value of the Group's loans and borrowings was USD4,266 million at 31 December 2021 (31 December 2020: USD5,329 million).

As at 31 December 2021, the amount of accrued interest on unsecured bank loans and secured bank loans was USD3 million and USD6 million, respectively (31 December 2020: USD3 million and USD9 million, respectively).

Terms and debt repayment schedule as at 31 December 2020

	Total USD million	2021 USD million	2022 USD million	2023 USD million	2024 USD million	2025 USD million	2026-2028 USD million
Secured bank loans							
Variable							
USD – 3M Libor + 3.0%	2,097	–	–	–	180	424	1,493
USD – 3M Libor + 2.1%	1,073	–	358	359	356	–	–
USD3M Libor + 1.5%	192	192	–	–	–	–	–
USD3M Libor + 1.35%	68	68	–	–	–	–	–
RUB KeyRate + 1.9%	1,433	–	–	–	123	289	1,021
Fixed							
RUB 8.75%	10	10	–	–	–	–	–
	4,873	**270**	**358**	**359**	**659**	**713**	**2,514**
Unsecured bank loans							
Variable							
USD – 1M Libor + 2.4%	200	200	–	–	–	–	–
EUR – 6M Euribor + 0.67%	10	1	1	1	1	1	5
RUB – other	15	2	10	3	–	–	–
Fixed							
USD2.97%	200	200	–	–	–	–	–
Total	**5,298**	**673**	**369**	**363**	**660**	**714**	**2,519**
Accrued interest	12	12	–	–	–	–	–
Total	**5,310**	**685**	**369**	**363**	**660**	**714**	**2,519**

As at 31 December 2020 the Group through its subsidiaries had outstanding REPO loans backed by Norilsk Nickel shares in number of 1,123,968, in the amount of USD260 million and maturing in June 2021.

(b) Bonds

As at 31 December 2021 the Group had bonds nominated in roubles, eurobonds nominated in US dollars outstanding (traded in the market).

Type	Series	The number of bonds traded in the market	Nominal value, USD million	Nominal interest rate	Put-option date	Maturity date
Bond	BO-01	30,263	–	0.01%	18.04.2019	07.04.2026
Bond	BO-001P-01	15,000,000	202	9.00%	27.04.2022	16.04.2029
Bond	BO-001P-02	15,000,000	202	8.60%	25.01.2023	28.06.2029
Bond	BO-001P-03	15,000,000	202	8.25%	12.09.2022	30.08.2029
Bond	BO-001P-04	15,000,000	202	7.45%	14.11.2022	01.11.2029
Bond	BO-002P-01	10,000,000	134	6.50%	09.06.2023	28.05.2030
Eurobond	–	511,998	512	5.125%	–	02.02.2022
Eurobond	–	481,985	482	5.3%	–	03.05.2023
Eurobond	–	497,642	498	4.85%	–	01.02.2023

As at 31 December 2021, the amount of accrued interest on bonds was USD44 million (31 December 2020: USD44 million).

Total foreign exchange gain on bonds for the year ended 31 December 2021 accounted in other comprehensive income as part of cash flow hedge result amounted to USD4 million (USD167 million for the year ended 31 December 2020).

20. Provisions

Accounting policies

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.

Disclosures

USD million	Pension liabilities	Site restoration	Provisions for legal claims	Total
Balance at 1 January 2020	**60**	**371**	**17**	**448**
Provisions made during the year	9	57	–	66
Provisions reversed during the year	(1)	(23)	–	(24)
Actuarial gain	(2)	–	–	(2)
Provisions utilised during the year	(4)	(3)	–	(7)
Foreign currency translation	(7)	(1)	–	(8)
Balance at 31 December 2020	**55**	**401**	**17**	**473**
Non-current	*51*	*354*	–	*405*
Current	*4*	*47*	*17*	*68*
Balance at 1 January 2021	**55**	**401**	**17**	**473**
Provisions made during the year	6	89	6	101
Provisions reversed during the year	–	(23)	–	(23)
Actuarial loss	8	–	–	8
Provisions utilised during the year	(4)	(2)	(10)	(16)
Foreign currency translation	1	(21)	–	(20)
Balance at 31 December 2021	**66**	**444**	**13**	**523**
Non-current	*62*	*316*	–	*378*
Current	*4*	*128*	*13*	*145*

(a) Pension liabilities

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 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 2021 and 2020 was 50,518 and 48,548, respectively. The number of pensioners in all jurisdictions as at 31 December 2021 and 2020 was 42,086 and 43,422, respectively.

The Group expects to pay under the defined benefit retirement plans an amount of USD4 million during the 12 month period beginning on 1 January 2021.

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 2021, 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 2021 % per annum	31 December 2020 % per annum
Discount rate	7.9	5.7
Future salary increases	8.7	7.1
Future pension increases	4.2	3.6
Staff turnover	4.7	4.7
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 2021 and 31 December 2020 the Group's obligations were fully uncovered as the Group has only wholly unfunded plans.

(b) 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.

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.

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 the statement of income. 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.

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 is estimated by discounting the risk-adjusted expected expenditure to its present value based on the following key assumptions:

	31 December 2021	31 December 2020
Timing of inflated cash outflows	2022: USD127 million 2023-2027: USD15 million 2028-2037: USD121 million after 2037: USD298 million	2021: USD47 million 2022-2026: USD21 million 2027-2036: USD101 million after 2036: USD312 million
Risk free discount rate after adjusting for inflation[(a)]	1.19%	0.73%

(a) The risk free rate for the year 2020-2021 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 environmental matters and concluded that the provisions and disclosures are adequate.

(c) Provisions for legal claims

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.

The Group's subsidiaries are subject to a variety of lawsuits and claims in the ordinary course of its business. As at 31 December 2021, 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 USD13 million (31 December 2020: USD17 million). The amount of claims, where management assesses outflow as possible approximates USD21 million (31 December 2020: USD21 million).

At each reporting date the Directors have assessed the provisions for litigation and claims and concluded that the provisions and disclosures are adequate.

(d) Tax provisions

The Group's accounting policy for taxation requires management's judgement in assessing whether deferred tax assets and certain deferred tax liabilities are recognised in 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 the statement of income.

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.

At the reporting date management has assessed the provisions for taxation and concluded that the provisions and disclosures are adequate.

21. Derivative Financial Assets/ 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 the statement of income 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 the statement of 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 the statement of income.

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 the statement of income 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 the statement of income.

Changes in the fair value of separated embedded derivatives and derivative financial instruments not designated for hedge accounting are recognised immediately in the statement of income.

Disclosures

	31 December 2021 USD million		31 December 2020 USD million	
	Derivative assets	Derivative liabilities	Derivative assets	Derivative liabilities
Petroleum coke supply contracts and other raw materials	24	15	31	43
Forward contracts for aluminium and other instruments	118	26	19	9
Cross currency swap	–	165	–	133
Total	**142**	**206**	**50**	**185**
Non-current	*22*	*61*	*20*	*28*
Current	*120*	*145*	*30*	*157*

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:

	2022	2023	2024	2025	2026
LME Al Cash, USD per tonne	2,795	2,658	2,466	2,315	2,272
Platt's FOB Brent, USD per barrel	76	71	68	66	65
Bloomberg's implied forward exchange rate, RUB per USD	75.15- 80.69	81.46-83.55			

The movement in the balance of Level 3 fair value measurements of derivatives is as follows:

	31 December	
	2021 USD million	2020 USD million
Balance at the beginning of the year	**(135)**	**54**
Unrealised changes in fair value recognised in statement of income (finance (expense)/income) during the period	(352)	(226)
Unrealised changes in fair value recognised in other comprehensive income (cash flow hedge) during the period	(28)	(53)
Realised portion of electricity, coke and raw material contracts and cross currency swap	451	90
Balance at the end of the year	**(64)**	**(135)**

During the year 2021 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.

The Group entered into various petroleum coke supply contracts and other raw materials where the price of coke is determined with reference to the Brent oil price, to the LME aluminium price and average monthly aluminium quotations. The Group also sells products to various third parties at prices that are influenced by changes in London Metal Exchange aluminium prices. From time to time the Group enters into forward sales and purchase contracts for a portion of its anticipated primary aluminium sales and purchases to reduce the risk of fluctuating prices on these sales. During the year ended 31 December 2021 the Group recognised a total net loss of USD352 million in relation to the above contracts (31 December 2020: loss of USD226 million).

Unrealised changes in fair value recognised in other comprehensive income (cash flow hedge) during the period are fully attributable to cross currency swap (note 19 (b)).

22. Financial Risk Management and Fair Values

(a) Fair values

Management believes that the fair values of short-term 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, short-term investments, current loans and borrowings and trade and other payables: the carrying amounts approximate fair value because of the short maturity period of the instruments.

Investments in equity securities: measured at fair value through profit and loss, so, its carrying amount is equal its fair value.

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. The fair value of the loans and borrowings with fixed and floating interest rate as at 31 December 2021, 2020 and 2019 was calculated based on the present value of future principal and interest cash flows, using discount interest rate that take into account the currency of the debt, expected maturity dates and credit risks associated with the Group that existed at the reporting date.

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.

The Group as at 31 December 2021

		Carrying amount				Fair value			
	Note	Derivatives USD million	Loans and receivables USD million	Other financial assets/ (liabilities) USD million	Total USD million	Level 1 USD million	Level 2 USD million	Level 3 USD million	Total USD million
Financial assets measured at fair value									
Petroleum coke supply contracts and other raw materials	21	24	–	–	**24**	–	–	24	**24**
Forward contracts for aluminium and other instruments	21	118	–	–	**118**	–	–	118	**118**
Investments in equity securities	17	–	–	315	**315**	315	–	–	**315**
		142	**–**	**315**	**457**	**315**	**–**	**142**	**457**
Financial assets not measured at fair value*									
Trade and other receivables	17	–	1,376	–	**1,376**	–	1,376	–	**1,376**
Other non-current assets	17	–	–	245	**245**	–	245	–	**245**
Short-term investments		–	167	–	**167**	–	167	–	**167**
Cash and cash equivalents	17	–	1,984	–	**1,984**	–	1,984	–	**1,984**
		–	**3,527**	**245**	**3,772**	**–**	**3,772**	**–**	**3,772**
Financial liabilities measured at fair value									
Cross-currency swaps	21	165	–	–	**165**	–	–	165	**165**
Petroleum coke supply contracts and other raw materials	21	15	–	–	**15**	–	–	15	**15**
Forward contracts for aluminium and other instruments	21	26	–	–	**26**	–	–	26	**26**
		206	**–**	**–**	**206**	**–**	**–**	**206**	**206**
Financial liabilities not measured at fair value*									
Secured bank loans and company loans	19	–	–	(3,886)	**(3,886)**	–	(4,027)	–	**(4,027)**
Unsecured bank loans	19	–	–	(413)	**(413)**	–	(409)	–	**(409)**
Unsecured bond issue	19	–	–	(2,434)	**(2,434)**	(941)	(1,524)	–	**(2,465)**
Trade and other payables	17	–	–	(1,292)	**(1,292)**	–	(1,292)	–	**(1,292)**
		–	**–**	**(8,025)**	**(8,025)**	**(941)**	**(7,252)**	**–**	**(8,193)**

* The Group considers that the carrying amounts of short-term trade receivables and payables are a reasonable approximation of fair values.

The Group as at 31 December 2020

	Note	Carrying amount				Fair value			
		Derivatives USD million	Loans and receivables USD million	Other financial liabilities USD million	Total USD million	Level 1 USD million	Level 2 USD million	Level 3 USD million	Total USD million
Financial assets measured at fair value									
Petroleum coke supply contracts and other raw materials	21	31	–	–	**31**	–	–	31	**31**
Forward contracts for aluminium and other instruments	21	19	–	–	**19**	–	–	19	**19**
Other non-currents assets	17	–	–	74	**74**	74	–	–	**74**
		50	**–**	**74**	**124**	**74**	**–**	**50**	**124**
Financial assets not measured at fair value*									
Trade and other receivables	17	–	941	–	**941**	–	941	–	**941**
Other non-current assets	17	–	–	124	**124**	–	124	–	**124**
Short-term investments		–	163	–	**163**	–	163	–	**163**
Cash and cash equivalents	17	–	2,229	–	**2,229**	–	2,229	–	**2,229**
		–	**3,333**	**124**	**3,457**	**–**	**3,457**	**–**	**3,457**
Financial liabilities measured at fair value									
Cross-currency swaps	21	(133)	–	–	**(133)**	–	–	(133)	**(133)**
Petroleum coke supply contracts and other raw materials	21	(43)	–	–	**(43)**	–	–	(43)	**(43)**
Forward contracts for aluminium and other instruments	21	(9)	–	–	**(9)**	–	–	(9)	**(9)**
		(185)	**–**	**–**	**(185)**	**–**	**–**	**(185)**	**(185)**
Financial liabilities not measured at fair value*									
Secured bank loans and company loans	19	–	–	(4,929)	**(4,929)**	–	(4,766)	–	**(4,766)**
Unsecured bank loans	19	–	–	(425)	**(425)**	–	(426)	–	**(426)**
Unsecured bond issue	19	–	–	(2,438)	**(2,438)**	(972)	(1,574)	–	**(2,546)**
Trade and other payables	17	–	–	(976)	**(976)**	–	(976)	–	**(976)**
		–	**–**	**(8,768)**	**(8,768)**	**(972)**	**(7,742)**	**–**	**(8,714)**

* The Group considers that the carrying amounts of short-term trade receivables and payables are a reasonable approximation of fair values.

(b) Financial risk management objectives and policies

The Group's principal financial instruments comprise bank loans, bonds 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 Board has established a risk management group within its Department of Internal Control, which is responsible for developing and monitoring the Group's risk management policies. The Department reports regularly to the Board of Directors on its activities.

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.

The Group's Audit Committee oversees how management monitors compliance with the Group's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. The Group's Audit Committee is assisted in its oversight role by the Group's Internal Audit function which undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Audit Committee.

(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) Commodity price risk

During the years ended 31 December 2021 and 2020, the Group has entered into certain long term electricity contracts and other commodity derivatives contracts in order to manage its exposure of commodity price risks. Details of the contracts are disclosed in notes 21 and 25(c).

(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 (refer to note 19). 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 borrowings at the reporting date.

	31 December 2021		31 December 2020	
	Effective interest rate %	USD million	Effective interest rate %	USD million
Fixed rate loans and borrowings				
Loans and borrowings	0.01-9.00%	2,809	0.01-9.00%	2,648
		2,809		**2,648**
Variable rate loans and borrowings				
Loans and borrowings	0.45-11.65%	3,871	0.67-6.22%	5,088
		3,871		**5,088**
		6,680		**7,736**

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 USD million	Effect on equity for the year, net of income tax USD million
As at 31 December 2021			
Basis percentage points	+100	(39)	(31)
Basis percentage points	-100	39	31
As at 31 December 2020			
Basis percentage points	+100	(51)	(41)
Basis percentage points	-100	51	41

(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.

As at 31 December	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	
	2021 USD million	2020 USD million	2021 USD million	2020 USD million	2021 USD million	2020 USD million	2021 USD million	2020 USD million
Non-current assets	–	–	38	–	–	1	–	–
Trade and other receivables	2	1	821	582	184	64	69	31
Cash and cash equivalents	–	1	428	508	81	104	50	25
Derivative financial assets	–	–	–	31	–	–	–	–
Loans and borrowings	–	(260)	(549)	(1,433)	(19)	–	–	–
Provisions	–	–	(84)	(78)	(21)	(27)	(18)	(12)
Derivative financial liabilities	–	–	(16)	(32)	–	(6)	–	–
Non-current liabilities	–	–	(1)	(1)	(6)	(6)	–	–
Income taxation	–	–	(24)	(2)	–	–	(1)	(6)
Short-term bonds	–	–	(1)	(1)	–	–	–	–
Trade and other payables	(1)	–	(1,080)	(404)	(104)	(49)	(135)	(88)
Net exposure arising from recognised assets and liabilities	**1**	**(258)**	**(468)**	**(830)**	**115**	**81**	**(35)**	**(50)**

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 2021

	Change in exchange rates	USD million Effect on profit before taxation for the year	USD million Effect on equity for the year
Depreciation of USD vs. RUB	15%	(70)	(70)
Depreciation of USD vs. EUR	10%	11	11
Depreciation of USD vs. other currencies	5%	(2)	(2)

Year ended 31 December 2020

	Change in exchange rates	USD million Effect on profit before taxation for the year	USD million Effect on equity for the year
Depreciation of USD vs. RUB	15%	(86)	(86)
Depreciation of USD vs. EUR	10%	8	8
Depreciation of USD vs. other currencies	5%	(3)	(3)

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 re-measure 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.

Where the Group enters into financial guarantee contracts to guarantee the indebtedness of other companies, controlled by the shareholder which is a beneficial owner of the Group at the reporting date, 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.

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.

31 December 2021

	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	1,134	–	–	–	**1,134**	1,134
Trade and other payables to related parties	158	–	–	–	**158**	158
Bonds, including interest payable	1,234	1,354	–	–	**2,588**	2,434
Loans and borrowings, including interest payable	945	584	1,919	1,704	**5,152**	4,299
Other contractual obligations	44	69	–	–	**113**	–
	3,515	**2,007**	**1,919**	**1,704**	**9,145**	**8,025**

31 December 2020

	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	876	–	–	–	**876**	876
Trade and other payables to related parties	100	–	–	–	**100**	100
Bonds, including interest payable	153	1,251	1,356	–	**2,760**	2,438
Loans and borrowings, including interest payable	864	553	2,214	2,670	**6,301**	5,354
Other contractual obligations	69	45	–	–	**114**	–
	2,062	**1,849**	**3,570**	**2,670**	**10,151**	**8,768**

At 31 December 2021 and 31 December 2020 the Group's contractual undertaking to provide loans under the loan agreement between the Group, PJSC RusHydro and BoAZ is included at maximum exposure for the Group in the liquidity risk disclosure above.

(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 credit loss is not significant. Goods are normally sold subject to retention of title clauses, so that in the event of non-payment 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 17. The extent of the Group's credit exposure is represented by the aggregate balance of financial assets and financial guarantees and loan commitments given.

At 31 December 2021 and 2020, the Group has certain concentration of credit risk as 14.3% and 7% of the total trade receivables were due from the Group's five largest customers. With respect to credit risk arising from guarantees, the Group's policy is to provide financial guarantees only to wholly-owned subsidiaries, associates and joint ventures.

(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. This is because the Group may not have any currently legally enforceable right to offset recognised amounts, because the right to offset may be enforceable only on the occurrence of future events.

There are no financial instruments that meet the offsetting criteria in the statement of financial position for the year ended 31 December 2021 and 31 December 2020.

23. Commitments

(a) Capital commitments

The Group has entered into contracts that result in contractual obligations primarily relating to various construction and capital repair works. The commitments at 31 December 2021 and 31 December 2020 approximated USD248 million and USD516 million, including VAT 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 2022-2034 under supply agreements are estimated from USD2,517 million to USD4,534 million at 31 December 2021 (31 December 2020: USD3,256 million to USD4,644 million) depending on the actual purchase volumes and applicable prices.

Commitments with related parties for purchases of primary aluminium, alloys and other purchases in 2022-2030 under supply agreements are estimated from USD5,733 million to USD7,540 million at 31 December 2021 (31 December 2020: USD4,741 million to USD6,964 million) depending on the actual purchase volumes and applicable prices. Electricity purchase commitments are disclosed in note 25.

(c) Sale commitments

Commitments with third parties for sales of alumina and other raw materials in 2022-2034 are estimated from USD1,187 million to USD1,596 million at 31 December 2021 (31 December 2020: from USD865 million to USD1,375 million) and will be settled at market prices at the date of delivery. There are no commitments with related parties for sales of alumina as at 31 December 2021.

Commitments with related parties for sales of primary aluminium and alloys in 2022 are estimated from USD563 million to USD688 million at 31 December 2021 (31 December 2020: from USD391 million to USD436 million). Commitments with third parties for sales of primary aluminium and alloys in 2022-2025 are estimated to range from USD8,842 million to USD12,148 million at 31 December 2021 (31 December 2020: from USD7,738 million to USD11,602 million).

(d) 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.

24. 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.

Both as at 31 December 2021 and 31 December 2020 management considers that there are no significant tax positions taken by the Group where 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.

(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 (refer to note 20). As at 31 December 2021 the amount of claims, where management assesses outflow as possible approximates USD21 million (31 December 2020: USD21 million).

(d) Other contingent liabilities

In September 2013 the Group and PJSC RusHydro entered into an agreement with BoAZ to provide loans, if the latter is unable to fulfil its obligations under its credit facilities. The aggregate exposure under the agreement is limited to RUB16.8 billion (31 December 2021 and 2020 USD226 million and USD227 million, respectively) and is split between the Group and PJSC RusHydro in equal proportion.

25. Related Party Transactions

(a) Transactions with management and close family members

Management remuneration

Key management received the following remuneration, which is included in personnel costs (refer to note 6(c)):

	Year ended 31 December	
	2021	2020
	USD million	USD million
Salaries and bonuses	63	65
	63	**65**

(b) Transactions with associates and joint ventures

Sales to associates and joint ventures are disclosed in note 5, purchases from associates and joint ventures are disclosed in note 6, accounts receivable from associates and joint ventures as well as accounts payable to associates and joint ventures are disclosed in note 17.

(c) Transactions with other related parties

The Group transacts with other related parties, the majority of which are companies related through parent company or under the control of SUAL Partners Limited or its controlling shareholders.

Sales to related parties for the year are disclosed in note 5, purchases from related parties are disclosed in note 6, accounts receivable from related parties as well as accounts payable to related parties are disclosed in note 17, commitments with related parties are disclosed in note 23, directors remuneration in notes 9 and 10 and other transactions with shareholders are disclosed in note 11.

Electricity contracts

In November 2016, the Group entered into the new long-term electricity contracts to supply several Group's smelters from En+ subsidiaries over the years 2016-2026. Purchases will be made under a price formula close to market prices. The volumes committed under the long-term electricity contracts are as follows:

Year	2022	2023	2024	2025	2026
Mln kWh	37,598	37,598	37,701	37,598	25,194
Mln USD	403	403	404	403	264

(d) Related parties balances

At 31 December 2021, included in non-current assets are balances of related parties – associates and joint ventures of USD2 million (31 December 2020: USD4 million). At 31 December 2021, included in non-current liabilities are balances of related parties – associates and joint ventures of USD14 million (31 December 2020: USD12 million).

At 31 December 2021, included in current assets as short-term investments are balances of related parties – companies related through parent company of USD50 million (31 December 2020: companies related through parent company of USD50 million).

(e) Pricing policies

Prices for transactions with related parties are determined on a case by case basis but are not necessarily at arm's length.

The Group has entered into three categories of related-party transactions: (i) those entered into on an arm's length basis, (ii) those entered into on non-arm's length terms but as part of a wider deal resulting from arms' length negotiations with unrelated third parties, and (iii) transactions unique to the Group and the counterparty.

(f) Connected transactions

Not all the related party transactions and balances disclosed above meet the definition of connected transactions as per Chapter 14 of the Listing Rules of Hong Kong Stock Exchange. For particulars of the continuing connected transactions please refer to the Director's Report section of the Annual Report of the Company for the year ended 31 December 2021.

26. Particulars of Subsidiaries

As at 31 December 2021 and 2020, the Company has direct and indirect interests in the following subsidiaries, which principally affected the results, assets and liabilities of the Group:

Name	Place of incorporation and operation	Date of incorporation	Particulars of issued and paid up capital	Attributable equity interest	Principal activities
Compagnie Des Bauxites De Kindia S.A.	Guinea	29 November 2000	2,000 shares of GNF 25,000 each	100.0%	Bauxite mining
Friguia SA	Guinea	9 February 1957	758,966,200,000 GNF	100.0%	Alumina
JSC RUSAL Achinsk	Russian Federation	20 April 1994	4,188,531 shares of RUB1 each	100.0%	Alumina
Mykolaiv Alumina Refinery Company Ltd	Ukraine	16 September 2004	1,524,126,720 UAH	100.0%	Alumina
JSC RUSAL Boxitogorsk Alumina	Russian Federation	27 October 1992	1,012,350 shares of RUB1 each	100.0%	Alumina
Eurallumina SpA	Italy	21 March 2002	10,000,000 shares of EUR1.55 each	100.0%	Alumina
PJSC RUSAL Bratsk	Russian Federation	26 November 1992	5,505,305 shares of RUB0.2 each	100.0%	Smelting

Name	Place of incorporation and operation	Date of incorporation	Particulars of issued and paid up capital	Attributable equity interest	Principal activities
JSC RUSAL Krasnoyarsk	Russian Federation	16 November 1992	85,478,536 shares of RUB20 each	100.0%	Smelting
JSC RUSAL Novokuznetsk	Russian Federation	26 June 1996	53,997,170 shares of RUB0.1 each	100.0%	Smelting
JSC RUSAL Sayanogorsk	Russian Federation	29 July 1999	208,102,580,438 shares of RUB0.068 each	100.0%	Smelting
RUSAL RESAL LLC	Russian Federation	15 November 1994	charter fund of RUB67,706,217.29	100.0%	Processing
JSC RUSAL SAYANAL	Russian Federation	29 December 2001	59,902,661,099 shares of RUB0.006 each	100.0%	Foil
CJSC RUSAL ARMENAL	Armenia	17 May 2000	36,699,295 shares of AMD 1,000 each	100.0%	Foil
RUS-Engineering LLC	Russian Federation	18 August 2005	charter fund of RUB 1,751,832,184	100.0%	Repairs and maintenance
JSC Russian Aluminium	Russian Federation	25 December 2000	23,124,000,000 shares of RUB1 each	100.0%	Holding company
Rusal Global Management B.V.	Netherlands	8 March 2001	charter fund of EUR25,000	100.0%	Management company
JSC United Company RUSAL Trading House	Russian Federation	15 March 2000	163,660 shares of RUB100 each	100.0%	Trading
Rusal America Corp.	USA	29 March 1999	1,000 shares of USD0.01 each	100.0%	Trading
RS International GmbH	Switzerland	22 May 2007	1 share with nominal value of CHF 20,000	100.0%	Trading
Rusal Marketing GmbH	Switzerland	22 May 2007	Capital quota of CHF2,000,000	100.0%	Trading
RTI Limited	Jersey	27 October 2006	978,492,901 shares of USD1 each	100.0%	Trading
Alumina & Bauxite Company Limited	British Virgin Islands	3 March 2004	231,179,727 shares of USD1 each	100.0%	Trading
JSC Bauxite-Timana	Russian Federation	29 December 1992	44,500,000 shares of RUB10 each	100.0%	Bauxite mining
JSC Severo-Uralsky Bauxite Mine	Russian Federation	24 October 1996	10,506,609 shares of RUB275.85 each	100.0%	Bauxite mining
JSC RUSAL Ural	Russian Federation	26 September 1996	2,542,941,932 shares of RUB1 each	100.0%	Primary aluminum and alumina production
SUAL-PM LLC	Russian Federation	20 October 1998	charter fund of RUB56,300,959	100.0%	Aluminum powders production
JSC Kremniy	Russian Federation	3 August 1998	320,644 shares of RUB1,000 each	100.0%	Silicon production
RUSAL-Kremniy-Ural LLC	Russian Federation	1 March 1999	charter fund of RUB8,763,098	100.0%	Silicon production
UC RUSAL Alumina Jamaica Limited	Jamaica	26 April 2001	1,000,000 shares of JMD1 each	100.0%	Alumina
Kubikenborg Aluminium AB	Sweden	26 January 1934	25,000 shares of SEK 1,000 each	100.0%	Smelting

Name	Place of incorporation and operation	Date of incorporation	Particulars of issued and paid up capital	Attributable equity interest	Principal activities
RFCL Limited (RFCL S.ar. l prior to 28 August 2020)	Cyprus	13 March 2013	90,000,000 RUB	100.0%	Finance services
International LLC AKTIVIUM (Aktivium B.V. prior to 6 December 2019)	Russian Federation	28 December 2010	215,458,134,321 shares of RUB1 each	100.0%	Holding and investment company
Aughinish Alumina Ltd	Ireland	22 September 1977	1,000 shares of EUR2 each	100.0%	Alumina
LLC RUSAL Energo	Russian Federation	26 December 2005	715,000,000 RUB	100.0%	Electric power
Limerick Alumina Refining Ltd.	Ireland	30 March 1995	54,019,819 shares of USD1 each	100.0%	Alumina
JSC RUSAL Management	Russian Federation	26 December 2018	1,000,000 shares of RUB1 each	100.0%	Management company
RUSAL Taishet LLC	Russian Federation	11 September 2006	Charter fund of RUB 12,158,878,747.58	100.0%	Smelting
UC RUSAL Anode Plant LLC	Russian Federation	9 April 2008	Charter fund of RUB1,064,280,000	100.0%	Anodes
RUSAL Products GmbH	Switzerland	27 December 2017	Charter fund of CHF20,000	100.0%	Trading
Casting and mechanical plant "SKAD" Ltd.	Russian Federation	29 August 2002	Charter fund of RUB 468,458,663.94	75.0%	Other aluminum production
"PGLZ" LLC	Russian Federation	4 April 2016	Charter fund of RUB 119,500,000	99.9%	Alumina

Trading entities are engaged in the sale of products to and from the production entities.

27. Statement of Financial Position of the Company as at 31 December 2021

	31 December 2021 USD million	1 January 2021 USD million
Assets		
Non-current assets		
Investments in subsidiaries	20,167	19,833
Other investments	191	–
Loans to related parties	1,295	1,187
Other non-current assets	44	–
Total non-current assets	**21,697**	**21,020**
Current assets		
Loans to related parties	1,696	1,258
Other receivables	112	167
Cash and cash equivalents	4	23
Total current assets	**1,812**	**1,448**
Total assets	**23,509**	**22,468**
Equity and liabilities		
Equity		
Share capital	152	152
Reserves	18,896	16,528
Total equity	**19,048**	**16,680**
Non-current liabilities		
Loans and borrowings	3,572	5,514
Total non-current liabilities	**3,572**	**5,514**
Current liabilities		
Loans and borrowings	884	223
Trade and other payables	8	51
Total current liabilities	**889**	**274**
Total liabilities	**4,461**	**5,788**
Total equity and liabilities	**23,509**	**22,468**
Net current assets	**923**	**1,174**
Total assets less current liabilities	**22,620**	**22,194**

28. Events Subsequent to the Reporting Date

The growing geopolitical tensions and the recent developments in Ukraine have had a negative impact on the Russian economy, including difficulties in obtaining international funding, significant increase in volatility on the securities and currency markets as well as significant devaluation of national currency and high inflation.

The United States of America and the European Union imposed sanctions against a number of Russian banks, which restrict their access to European financial markets, foreign assets were frozen for certain banks, and sanctions were introduced that restrict the access of Russian organisations to Euro and US dollar markets.

A number of other countries announced new packages of sanctions against certain Russian legal entities and personal sanctions against a number of individuals.

In March 2022 new temporary restrictive economic measures were introduced in Russian Federation, which include among others a prohibition to issue loans by residents to non-residents in foreign currency, deposit foreign currency to own bank accounts by residents in foreign currency, limitations on dividends and other payments on securities to foreign investors.

In March 2022 Australia has banned the export of alumina and bauxite to Russia. At the beginning of March 2022 the Group has temporarily suspended the production at Mykolaiv Alumina Refinery Company Ltd in view of developments in Ukraine. These measures and the events may influence the availability of alumina and bauxite or increase the purchase prices for Group. Major international shippers have suspended bookings to and from Russia which will cause the Group to rebuild the supply and sales chains and may lead to additional logistics costs.

If the situation persists or continues to develop significantly, including the loss of significant parts of foreign markets, which cannot be reallocated to new markets, it may affect the Group’s business, financial condition, prospects and results of operations.

The Group regards these events as non-adjusting events after the reporting period. Additional sanctions and restrictions on the business activity of Russian legal entities and individuals, as well as counter measures from Russian authorities might be introduced, the full range and possible consequences of which cannot be assessed.

STATEMENT OF RESPONSIBILITY FOR THIS ANNUAL REPORT

I, Evgenii Nikitin, declare, to the best of my knowledge, that the financial statements contained in this Annual Report have been prepared in accordance with applicable accounting principles and give a true and fair view of the business, results of operations and financial condition of the Company and the other entities to which the financial statements apply, and that the management report (comprising the Business Overview, Management Discussion and Analysis, Report of the Board of Directors and Corporate Governance Report sections) of this Annual Report presents a fair review of developments in the business, results of operations and financial conditions of the Company and the other entities to which the financial statements apply, as well as a description of the main risks and uncertainties that they are facing.

EVGENII NIKITIN

GENERAL DIRECTOR

FORWARD LOOKING STATEMENTS

This Annual Report contains certain statements that are, or may be deemed to be, "forward-looking statements". These forward-looking statements may be identified by the use of forward-looking terminology, including the terms "believes", "estimates", "plans", "projects", "anticipates", "seeks", "expects", "intends", "forecasts", "targets", "may", "will", "should", "could" and "potential" or, in each case, their negative or other variations, or comparable terminology, or by discussions of strategy, plans, objectives, goals, future events or intentions. These forward-looking statements include all matters that are not historical facts. They appear in a number of places throughout this Annual Report and include, but are not limited to, statements regarding the Group's intentions, beliefs or current expectations concerning, among other things, the Group's business, results of operations, financial position, liquidity, prospects, growth, strategies and the bauxite, alumina and aluminium industries.

By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances. Forward-looking statements are not guarantees of future performance and of the actual results of the Group's operations, financial position and liquidity, and the development of the markets and the industries in which the Group operates may differ materially from the development of those same industries as described in, or suggested by, the forward-looking statements contained in this Annual Report. In addition, even if the Group's results of operations, financial position and liquidity, and the development of the markets and the industries in which the Group operates, are consistent with the forward-looking statements contained in this Annual Report, those results or developments may not be indicative of results or developments in subsequent periods. A number of risks, uncertainties and other factors could cause results and developments to differ materially from those expressed or implied by the forward-looking statements including, without limitation:

- materially adverse changes in economic or industry conditions generally or in the markets served by the Group;
- changes in the supply and demand for and the price of aluminium, alumina, aluminium products and other products;
- fluctuations in inflation, interest rates and exchange rates;
- the Group's ability to repay pursuant to or comply with the terms of its credit facility agreements, or obtain further financing, refinancing or otherwise waiver of forbearance in respect of the Group's payment obligations under its facility of financing;
- changes in the costs of the materials required for the Group's production of aluminium and alumina;
- changes in the Group's operating costs, including the costs of energy and transportation;
- changes in the Group's capital expenditure requirements, including those relating to the Group's potential environmental liabilities or the ability of the Group to fund its capital expenditure requirements through borrowing or otherwise;
- the Group's ability to successfully and timely implement any of its business strategies;
- the Group's ability to obtain or extend the terms of the licences necessary for the operation of the Group's business;

– developments in, or changes to, laws, regulations, governmental policies, taxation or accounting standards or practices affecting the Group's operations;

– the Group's ability to recover its reserves or develop new resources and reserves;

– the Group's success in accurately identifying future risks to its business and managing the risks of the aforementioned factors; and

– other future events, risks, uncertainties, factors and assumptions discussed in the consolidated financial statements and other sections of this Annual Report.

Forward-looking statements may and often do differ materially from actual results. Any forward-looking statements in this Annual Report reflect the Group management's current view with respect to future events and are subject to risks relating to future events and other risks, uncertainties and assumptions relating to the Group's business, results of operations, financial position, liquidity, prospects, growth, strategies and the bauxite, alumina and aluminium industries. Investors should specifically consider the factors identified in this Annual Report, which could cause actual results to differ, before making any investment decision. Subject to the requirements of the applicable listing rules and except as may be required by applicable law, the Company undertakes no obligation to revise any forward-looking statements that appear in this Annual Report to reflect any change in the Company's expectations, or any events or circumstances, that may occur or arise after the date of this Annual Report.

All forward-looking statements in this Annual Report are qualified by reference to this cautionary statement.

GLOSSARY

"Achinsk Alumina Refinery", **"RUSAL Achinsk"**, "**JSC RUSAL Achinsk"** or **"AGK"** means Joint Stock Company "RUSAL Achinsk Alumina Refinery", a company incorporated under the laws of the Russian Federation, which is an indirect wholly-owned subsidiary of the Company.

"Adjusted EBITDA" for any period means the results from operating activities adjusted for amortisation and depreciation, impairment charges and loss on disposal of property, plant and equipment.

"Adjusted EBITDA margin" is calculated as Adjusted EBITDA to revenue for the relevant period.

"Adjusted Net Profit" for any period is defined as the net profit adjusted for the net effect from share in the results of Norilsk Nickel, the net effect of embedded derivative financial instruments, the difference between effective and nominal interest rate charge on restructured debt and net effect of non-current assets impairment.

"AGM" means annual general shareholders meeting that the Company shall hold once a year between two and six months after the end of a reporting year.

"AGM 2021" means the AGM that the Company held on 24 June 2021.

"Agreed Subsidiaries" means an agreed list of subsidiaries of the Company, as defined in the Shareholders' Agreement between Major Shareholders only.

"Alpart" means Alumina Partners of Jamaica.

"ALSCON" means Aluminium Smelter Company of Nigeria Plc, a company incorporated in Nigeria and in which the Company indirectly holds a 85% interest.

"Aluminium Division" means the Company's division comprising the smelters located in Russia and Sweden.

"Aluminium price per tonne quoted on the LME" or **"LME aluminium price"** represents the average daily closing official LME spot prices for each period.

"Annual Report" means this annual report dated 18 April 2022.

"Articles of Association" means the articles of association of the Company, conditionally adopted on 24 November 2009, effective on the Listing Date and subsequently amended on 22 November 2017, which was superseded by the Charter on 25 September 2020 after the Continuance.

"Associate(s)" has the meaning ascribed to such expression in the HKSE Listing Rules.

"Audit Committee" means the audit committee of the Board.

"Aughinish Alumina Refinery" means Aughinish Alumina Limited, a company incorporated in Ireland, which is an indirect wholly-owned subsidiary of the Company.

"BAZ" or **"Bogoslovsky aluminium smelter"** means a branch of RUSAL Ural JSC in Krasnoturyinsk, United Company RUSAL Krasnoturyinsk Aluminium Smelter.

"BEMO Project" means the Boguchanskoye Energy & Metals project involving the construction of the BEMO HPP and the Boguchansky aluminium smelter as described at pages 25 and 27 of this Annual Report.

"Board" means the Board of Directors of the Company.

"Boguchansky aluminium smelter" or **"BEMO aluminium smelter"** or **"BoAZ"** means the aluminium smelter project involving the construction of a 600 thousand tpa greenfield aluminium smelter on a 230 hectare site, located approximately 8 km to the south-east of the settlement of Tayozhny in the Krasnoyarsk region, and approximately 160 km (212 km by road) from the BEMO HPP, as described at pages 25 and 27 of this Annual Report.

"Bratsk aluminium smelter" or **"RUSAL Bratsk"** or **"BrAZ"** or PJSC **"RUSAL Bratsk"** means Public Joint Stock Company "RUSAL Bratsk Aluminium Smelter", a company incorporated under the laws of the Russian Federation, which is a wholly-owned indirect subsidiary of the Company.

"Bogoslovsky Alumina Refinery" or **"Boxitogorsk Alumina Refinery"** or **"JSC RUSAL Boxitogorsk Alumina"** means Joint Stock Company "RUSAL Boxitogorsk Alumina", a company incorporated under the laws of the Russian Federation, which is a wholly-owned subsidiary of the Group.

"Casting and mechanical plant "SKAD" Ltd." or **"SKAD"** means Limited Liability Company "Casting and mechanical plant 'SKAD'" (the short official name is "Casting and mechanical plant 'SKAD' Ltd."), a company incorporated under the laws of the Russian Federation, which is an indirect wholly-owned subsidiary of the Company.

"C.B.K" or **"Kindia"** means Compagnie des Beauxites de Kindia S.A., located in Guinea.

"Chairman" or **"Chairman of the Board"** means the chairman of the Board.

"Charter" means the new corporate charter of the Company which became effective on the Registration Date.

"Chief Financial Officer" means the chief financial officer of the Company.

"CIS" means the Commonwealth of Independent States.

"Code for Securities Transactions" means the Code for Securities Transactions by Directors of the Company adopted by the Board on 9 April 2010 and based on Appendix 10 to the HKSE Listing Rules.

"Company" or **"UC RUSAL"** or **"UC RUSAL, IPJSC"** means United Company RUSAL, international public joint-stock company (UC RUSAL, IPJSC) 俄鋁, a company incorporated under the laws of Jersey with limited liability and continued in the Russian Federation as an international company in accordance with the procedure established by the laws of the Russian Federation, in accordance with the Federal Law of the Russian Federation "On International Companies and International Funds". The full company name in Russian is Международная компания публичное акционерное общество "Объединённая Компания "РУСАЛ"", and the abbreviated company name in Russian is МКПАО "ОК РУСАЛ".

"Connected person(s)" has the meaning ascribed to such expression in the HKSE Listing Rules.

"Connected transaction(s)" has the meaning ascribed to such expression in the HKSE Listing Rules.

"Continuance" means the Company's continuance out of Jersey to the Russian Federation which became effective on the Registration Date.

"Controlling Shareholder" has the meaning ascribed to such expression in the HKSE Listing Rules.

"Corporate Governance and Nominations Committee" means the corporate governance and nominations committee established by the Board.

"Covenant EBITDA" has the meaning given to it in the PXF Facility 2019.

"Crispian" means Crispian Investment Limited, a company incorporated in Cyprus, to the best knowledge and belief of the Directors affiliated with Mr. Roman Abramovich.

"Directors" means the members of the Board of directors of the Company.

"EBITDA" means earnings before interest, taxes, depreciation, and amortisation.

"EGM" means extraordinary general shareholders meeting that the Company may hold.

"EGM 2021 April" means the EGM that the Company held on 7 April 2021.

"EGM 2021 September" means the EGM that the Company held on 9 September 2021.

"En+" means EN+ GROUP International public joint-stock company, a company registered in accordance with the procedure established by the laws of the Russian Federation, in accordance with the Federal Law of the Russian Federation "On International Companies and International Funds", and which is a Controlling Shareholder of the Company.

"EPCM" means Engineering, Procurement, Construction and Management.

"EUR" means Euros, the lawful currency of the relevant member states of the European Union that have adopted the Euro as their currency.

"Eurallumina" means the alumina refinery located in Portoscuso, on the southwest coast of Sardinia, Italy. During the year ended 31 December 2006, the Group entered into an agreement with Rio Tinto Aluminium Ltd and acquired a 56.2% interest in Eurallumina, the remaining 43.8% interest in Eurallumina was owned by Glencore and was acquired by the Group as part of the acquisition of SUAL and Glencore Businesses during the year ended 31 December 2007.

"Euronext Paris" means the Professional Segment of Euronext Paris.

"financial year" means the financial year ended 31 December 2021.

"Friguia" or **"Friguia Alumina Refinery"** means Friguia S.A., a company incorporated in Guinea, which is a wholly owned subsidiary of the Company.

"GBP" means Pounds Sterling, the lawful currency of the United Kingdom.

"General Director" means the General Director of the Company.

"Glencore" means Glencore Plc, a public company incorporated in Jersey and listed on the London Stock Exchange, with a secondary listing on the Johannesburg Stock Exchange, which is an indirect shareholder of the Company. Pursuant to the press release issued by En+ on 28 January 2019, En+ announced that it had entered into a securities exchange agreement and certain other related agreements with certain subsidiaries of Glencore, pursuant to which Glencore shall transfer the 8.75% of the Company's shares to En+ in consideration for En+ issuing new GDRs to Glencore representing approximately 10.55% of the enlarged share capital of En+. As announced by the Company on 3 February 2020, the aforementioned share swap was completed and Glencore ceased to have any shareholding in the Company.

"Group" or **"RUSAL Group"** or **"RUSAL"** means the Company and its subsidiaries from time to time, including a number of production, trading and other entities controlled by the Company directly or through its wholly-owned subsidiaries.

"GSM" means the general shareholders meeting, being the supreme management body of the Company.

"GWh" means gigawatts hours.

"HKSE CG Code" means the corporate governance code setting out, among others, the principles of good corporate governance practices as set out in Appendix 14 to the HKSE Listing Rules (as amended from time to time).

"Hong Kong" means the Hong Kong Special Administrative Region of the PRC.

"HKD" means Hong Kong dollars, the lawful currency of Hong Kong.

"HKSE Listing Rules" means the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange (as amended from time to time).

"Hong Kong Companies Ordinance" means the Hong Kong Companies Ordinance (Chapter 622 of the Laws of Hong Kong) (as amended from time to time).

"Hong Kong Stock Exchange" or **"HKSE"** means The Stock Exchange of Hong Kong Limited.

"IFRS" means the International Financial Reporting Standards.

"Indicated Mineral Resource" or **"Indicated"** means the part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

"Identified" means a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.

"Interros" means Interros International Investments Limited.

"Irkutsk aluminium smelter" or **"IrkAZ"** means a branch of RUSAL Bratsk in Shelekhov.

"IPO" means the initial public offering of the Company on the Hong Kong Stock Exchange and Euronext Paris.

"JORC" means Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australasian Institute of Geoscientists & the Minerals Council of Australia.

"Joint Stock Company "Boksit Timana"", **"JSC "Boksit Timana""**, **"Boksit Timana"** or **"Timan Bauxite"** means Joint Stock Company 'Boksit Timana', a company incorporated under the laws of the Russian Federation, which is a non-wholly owned subsidiary of the Company.

"JSC Irkutskenergo" means Irkutsk Public Joint Stock Company of Energetics and Electrification, a power generating company controlled by En+ as to more than 30% of its issued share capital.

"JSC Kremniy" means a company incorporated under the laws of the Russian Federation and a subsidiary of the Company.

"JSC "RUSAL SAYANAL"" or **"SAYANAL"** or **"Sayanal"** means Joint-Stock Company RUSAL SAYANAL, a company incorporated under the laws of the Russian Federation, which is an indirect wholly-owned subsidiary of the Company.

"JSC 'UC RUSAL TH'" or **"RUSAL TH"** means Joint-stock company 'United Company RUSAL Trading House', a company incorporated under the laws of the Russian Federation, which is an indirect wholly-owned subsidiary of the Company.

"JSC "Ural Foil"" or **"Ural Foil"** means Joint-Stock Company "Ural Foil", a company incorporated in Russia, which is an indirect wholly-owned subsidiary of the Company.

"kA" means kilo-amperes.

"Kandalaksha aluminium smelter" means a branch of RUSAL Ural, JSC, United Company RUSAL Kandalaksha Aluminium Smelter in Kandalaksha.

"Khakas aluminium smelter" or **"KhAZ"** means Closed Joint Stock Company "Khakas Aluminium Smelter", being merged with Sayanogorsk Aluminum Smelter since 30 July 2015.

"KPIs" means key performance indicators.

"KraMZ" or **""KraMZ" Ltd."** means Limited liability company 'Krasnoyarsk metallurgical plant' ("KraMZ" Ltd.), a company incorporated in the Russian Federation controlled by En+ as to more than 30% of its issued share capital.

"KraMZ-Auto" means KraMZ-Auto LLC, a company incorporated in the Russian Federation controlled by En+ as to more than 30% of its issued share capital.

"Krasnoyarsk aluminium smelter", **"RUSAL Krasnoyarsk"** or **"KrAZ"** means Joint Stock Company "RUSAL Krasnoyarsk Aluminium Smelter", a company incorporated under the laws of the Russian Federation, which is an indirect wholly-owned subsidiary of the Company.

"Krasnoyarskaya HPP" means JSC Krasnoyarsk Hydro-Power Plant, a hydroelectric power station controlled by En+ as to more than 30% of its issued share capital.

"kt" means kilotonnes.

"KUBAL" means Kubikenborg Aluminium AB, a company incorporated in Sweden, which is an indirect wholly-owned subsidiary of the Company.

"KUMZ JSC" or **"OAO KUMZ"** means branch of RUSAL Ural, JSC, United Company RUSAL Ural Aluminium Smelter in Kamensk Uralsky, a company incorporated under the laws of the Russian Federation.

"kWh" means kilowatt hour.

"Latest Practicable Date" means 15 April 2022, being the latest practicable date prior to the printing of this Annual Report for ascertaining certain information in this Annual Report.

"LIBOR" means in relation to any loan:

(a) the applicable screen rate (being the British Bankers' Association Interest Settlement Rate for dollars for the relevant period, displayed on the appropriate page of the Reuters screen); or

(b) (if no screen rate is available for dollars for the interest period of a particular loan) the arithmetic mean of the rates (rounded upwards to four decimal places) as supplied to the agent at its request quoted by the reference banks to leading banks in the London interbank market, as of the specified time (11:00 a.m. in most cases) on the quotation day (generally two business days before the first day of that period unless market practice differs in the Relevant Interbank Market, in which case the quotation day will be determined by the agent in accordance with market practice in the Relevant Interbank Market) for the offering of deposits in dollars and for a period comparable to the interest period for that loan.

"Listing" means the listing of the Shares on the Hong Kong Stock Exchange.

"Listing Date" means the date on which the Shares were listed on the Hong Kong Stock Exchange, being 27 January 2010.

"LLP Bogatyr Komir" or **"Bogatyr Coal"** Limited Liability Partnership means the joint venture between the Company and Samruk-Energo producing coal described at page 27 of this Annual Report.

"LME" means the London Metal Exchange.

"LTIFR" means the Lost Time Injury Frequency Rate which was calculated by the Group as a sum of fatalities and lost time injuries per 200,000 man-hours.

"Major Shareholders" means En+, SUAL Partners, Glencore (until it ceased to be a Shareholder on 3 February 2020) and Onexim (until it ceased to be a Shareholder on 16 January 2018).

"Major Shareholders' Shares" means the Shares held by the Major Shareholders and their respective wholly-owned subsidiaries.

"Management Company" or **"RUSAL Management Company"** means a subsidiary of the Group retained for accounting, general management, administration and secretarial functions.

"Market Council" means the non-commercial organization formed as a result of a non-commercial partnership, which is intended to unite energy market participants, as well as producers and major consumers of electrical energy through membership of that body. The council is intended to ensure the proper functioning of commercial market infrastructure and effective exchanges between the wholesale and retail electrical energy markets. Additionally, it is intended to promote investment in the electrical energy industry by creating a healthy market and even playing field for participants of both the wholesale and retail electrical energy markets, when drafting new rules and regulations concerning the electrical energy industry, and facilitate self-regulation of the wholesale and retail trade in electrical energy, power and other products and services which is permissible in the wholesale and retail electrical energy markets. The council's aim is to ensure the security of energy supply in the Russian Federation, unity within the economic space, economic freedom and competition in the wholesale and retail electrical energy markets, by striking a balance between the interests of suppliers and buyers and the needs of society in general in terms of having a reliable and stable source of electrical energy.

"Measured Mineral Resource" or **"Measured"** means a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

"Memorandum" means the memorandum of association of the Company conditionally adopted on 26 December 2009, and effective on the Listing Date, and subsequently amended on 22 November 2017.

"Moscow Exchange" or **"MOEX"** means Public Joint-Stock Company "Moscow Exchange MICEX-RTS" (short name "Moscow Exchange").

"MoEx Listing Rules" means the Rules Governing the Listing of Securities on the Moscow Exchange (as amended from time to time).

"Mineral Resource" means a concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

"Model Code" means the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the HKSE Listing Rules.

"mt" means million tonnes.

"MW" means megawatt.

"Net Debt" is calculated as Total Debt less cash and cash equivalents as at 31 December 2021.

"Nadvoitsy aluminium smelter" or **"NAZ"** means a branch of RUSAL Ural JSC in Nadvoitsy, United Company RUSAL Nadvoitsy Aluminium Smelter.

"Nikolaev Alumina Refinery" or **"Mykolaiv Alumina Refinery"** or **"NGZ"** means Mykolaiv Alumina Refinery Company Limited, a company incorporated under the laws of the Ukraine, which is a wholly-owned subsidiary of the Company.

"Norilsk Nickel" means PJSC "MMC "NORILSK NICKEL", a company incorporated under the laws of the Russian Federation.

"North Urals" means JSC Sevuralboksitruda, a company incorporated in Russia, which is a wholly-owned subsidiary of the Company.

"Novokuznetsk aluminium smelter" or **"NkAZ"** or **"RUSAL Novokuznetsk"** means Joint Stock Company "RUSAL Novokuznetsk Aluminium Smelter", a company incorporated under the laws of the Russian Federation, which is an indirect wholly -owned subsidiary of the Company.

"OFAC" means the Office of Foreign Assets Control of the Department of the U.S. Treasury.

"OFAC Sanctions" means the designation by OFAC of certain persons and certain companies into the SDN List.

"OHSAS 18001" means Occupational Health and Safety Specification (OHSAS) 18001.

"Onexim" means Onexim Holdings Limited, a company incorporated in Cyprus. According to disclosure of interests notices filed with the Company on 21 February 2018 pursuant to Part XV of the SFO, Onexim sold its entire shareholding in the Company (which represented approximately 6% shareholding in the issued share capital of the Company) and ceased to be a shareholder of the Company on 16 February 2018.

"Ore Reserves" means the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.

"PM Krasnoturyinsk" means SUAL-PM-Krasnoturyinsk, a branch of LLC 'SUAL-PM'.

"PRC" means The People's Republic of China.

"Probable Ore Reserve" means the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.

"Proved Ore Reserve" means the economically mineable part of a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.

"Prospectus" means the Company's prospectus for the Listing dated 31 December 2009. The Prospectus is available on the Company's website under the link https://rusal.ru/investors/info/docs/PROSPECTUS.pdf

"PXF Facility 2019" means up to USD1,085,000,000 Aluminium Pre-Export Finance Term Facility Agreement dated 25 October 2019, among inter alias, RUSAL as Borrower and ING Bank N.V. as Facility Agent and Security Agent and Natixis as Offtake Agent.

"QAL" means Queensland Alumina Limited, a company incorporated in Queensland, Australia, in which the Company indirectly holds a 20% equity interest.

"JSC Russian Aluminium" means Joint Stock Company "RUSSIAN ALUMINIUM", a company incorporated under the laws of the Russian Federation, which is an indirect wholly-owned subsidiary of the Company.

"Registration Date" means 25 September 2020, the date when the Company was registered as an international public joint-stock company in the Unified State Register of Legal Entities of the Russian Federation, changed its jurisdiction of incorporation from Jersey to the Russian Federation, changed its corporate name from UC RUSAL Plc to UC RUSAL, IPJSC and when its Memorandum of association and Articles of Association governed by Jersey laws were superseded by the Charter.

"related party" of an entity means a party who is:

(a) directly, or indirectly through one or more intermediates, a party which:

i. controls, is controlled by, or is under common control with, the entity (this includes parents, subsidiaries and fellow subsidiaries);

ii. has an interest in the entity that gives it significant influence over the entity; or

iii. has joint control over the entity;

(b) an associate of the entity;

(c) a joint venture in which the entity is a venturer;

(d) a member of the key management personnel of the entity or its parent;

(e) a close member of the family of any individual referred to in (a) or (b) above;

(f) an entity that is controlled, jointly controlled or significantly influenced by, or for which significant voting power in such entity resides with, directly or indirectly, any individual referred to in (d) or (e) above;

(g) a post-employment benefit plan for the benefit of employees of the entity, or of any entity that is a related party of the entity.

"related party transaction" means a transfer of resources, services or obligations between related parties, regardless of whether the price is charged.

"Recurring Net Profit" for any period means Adjusted Net Profit plus the Company's effective share of Norilsk Nickel's profits, net of tax.

"Relevant Officer" means any employee of the Company or a director or employee of a subsidiary of the Company.

"Relevant Officers Code" means the code for Securities Transactions by Relevant Officers of the Company.

"Remuneration Committee" means the remuneration committee established by the Board.

"Review Period" means the period commencing from 1 January 2021 and ending on 31 December 2021.

"Risk Map" means a systematic list of all risks of the Company with a description of the each risk, probability of its occurrence, financial assessment of the risk, consequences of its occurrence, responsible persons and risk control procedures.

"RUB" or **"Ruble"** means Rubles, the lawful currency of the Russian Federation.

"RUSAL ARMENAL" CJSC or **"RUSAL ARMENAL"** or **"ARMENAL"** means Closed Joint Stock Company "RUSAL ARMENAL", an indirect wholly-owned subsidiary of the Company.

"RUSAL Global" or **"RUSAL Global Management B.V."** means RUSAL Global Management B.V., a company incorporated under the laws of the Netherlands, an indirect wholly-owned subsidiary of the Company.

"RUSAL RESAL LLC" means Limited Liability Company "RUSAL RESAL", a company incorporated under the laws of the Russian Federation, which is an indirect wholly-owned subsidiary of the Company.

"RUSAL-Sayana Foil" LLC or **"Sayana Foil"** means Limited Liability Company "RUSAL-Sayana Foil", a company incorporated under the laws of the Russian Federation, an indirect wholly-owned subsidiary of the Company.

"RUSAL Ural JSC" means Joint Stock Company 'United Company RUSAL Ural Aluminium', formerly JSC "Siberian-Urals Aluminium Company" (official short name JSC "SUAL"), a company incorporated under the laws of the Russian Federation, an indirect wholly-owned subsidiary of the Company.

"RUS-Engineering" means RUS-Engineering LLC, a company incorporated under the laws of the Russian Federation, an indirect wholly-owned subsidiary of the Company.

"RusHydro" means PJSC "RusHydro" ("Public Joint-Stock Company Federal Hydro-Generating Company – RusHydro"), a company organized under the laws of the Russian Federation, which is an independent third party.

"Russian CG Code" corporate governance code approved by the Board of Directors of the Bank of Russia on 21 March 2014.

"R&D" means research and development or the Research and Development Centres operated by the Company, as the context requires.

"Samruk-Energo" means Samruk-Energo, a company incorporated in Kazakhstan, which is an independent third party.

"Samruk-Kazyna" means the Kazakhstan state controlled national welfare fund.

"Sayanogorsk aluminium smelter", **"RUSAL Sayanogorsk"** or **"SAZ"** means Joint Stock Company "RUSAL Sayanogorsk", a company incorporated under the laws of the Russian Federation, which is an indirect wholly-owned subsidiary of the Company.

"SDN List" means the Specially Designated Nationals List published by OFAC. U.S. persons are generally prohibited from dealing with assets of persons designated in the SDN List which are subject to the U.S. jurisdiction, subject to certain exemptions and exclusions set out in licenses issued by OFAC.

"SFO" means the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) (as amended from time to time).

"Share(s)" means the ordinary share(s) with nominal value of USD0.01 each in the share capital of the Company. From 25 September 2020 onwards, means ordinary share(s) with nominal value of RUB 0.656517 each in the share capital of the Company.

"Shareholder(s)" means the holders of Shares.

"Shareholders' Agreement between Major Shareholders only" means the shareholders' agreement dated 22 January 2010 between the Major Shareholders.

"Shareholders' Agreement with the Company" means the shareholders' agreement dated 22 January 2010 between the Major Shareholders and the Company.

"Shareholding Changes in 2019" means the following changes to the shareholding in the Company which has been notified to the Company:

En+ announced in its press release dated 28 January 2019 that it had entered into a securities exchange agreement and certain other related agreements with certain subsidiaries of Glencore pursuant to which Glencore shall transfer 8.75% of Shares to En+ (of which En+ announced on 1 February 2019 that approximately 2% has been transferred, and En+ announced on 3 February 2020 that the remaining 6.75% has been transferred) in consideration for En+ issuing new global depositary receipts to Glencore representing approximately 10.55% of the enlarged share capital of En+.

Based on the disclosure of interests notice filed with the Company, the interests of Glencore decreased to approximately 6.78% in the issued share capital of the Company on 31 January 2019. The Company understands that this was due to the transfer of approximately 2% Shares pursuant to the aforementioned securities exchange agreement following the removal of En+ from the SDN List on 27 January 2019.

Based on the disclosure of interests notice filed with the Company, the interests of En+ increased to approximately 56.88% in the issued share capital of the Company on 3 February 2020.

"Shareholding Changes in 2018" means the following change to the shareholding in the Company which has been notified to the Company:

According to disclosure of interests notices filed with the Company on 21 February 2018 pursuant to Part XV of the SFO, Onexim sold its entire shareholding in the Company (which represented approximately 6% shareholding in the issued share capital of the Company) and ceased to be a shareholder of the Company on 16 February 2018.

"South Ural Cryolite Plant" or **"Cryolite"** means Joint-Stock Company "South Ural Cryolite Plant", an indirect non wholly-owned subsidiary of the Company.

"STIP" means the Company's Short-Term Incentive Program.

"Limited Liability Company 'United Company RUSAL Ural Silicon'" or **"LLC RUSAL Silicon Ural"** means RUSAL Silicon Ural LLC (formerly SU-Silicon LLC), an indirect non wholly-owned subsidiary of the Company.

"SUAL Partners" means "SUAL PARTNERS" INTERNATIONAL LIMITED LIABILITY COMPANY, a company incorporated under the laws of the Bahamas as SUAL Partners Limited and continued in the Russian Federation as an international company in accordance with the procedure established by the laws of the Russian Federation, in accordance with the Federal Law of the Russian Federation "On International Companies and International Funds", which is a Substantial Shareholder of the Company.

"Substantial Shareholder(s)" has the meaning ascribed to such expression under the HKSE Listing Rules.

"SUAL – PM LLC" or **"LLC 'SUAL-PM'"** means SUAL-PM Limited Liability Company, an indirect wholly-owned subsidiary of the Company.

"Limited Liability Company 'RUSAL Taishet Aluminium Smelter'", **"RUSAL Taishet"** LLC, **"Taishet"**, **"Taishet aluminium smelter"** or **"TAZ"** means Limited Liability Company "RUSAL Taishet Aluminium Smelter", a company incorporated in Russia, which is an indirect wholly-owned subsidiary of the Company.

"total attributable alumina output" is calculated based on pro rata share of the Group's ownership in corresponding alumina refineries.

"total attributable bauxite output" is calculated based on pro rata shares of the Group's ownership in corresponding bauxite mines and mining complexes, including the total production of Timan and Bauxite Co. De Guyana., notwithstanding that minority interests in these subsidiaries are held by third parties.

"Total Debt" means the Company's loans and borrowing at the end of the period.

"Total Net Debt" has the meaning given to it in the PXF Facility 2019.

"tpa" means tonnes per annum.

"TSA" means Trading System Administrator of Wholesale Electricity Market Transactions.

"UC RUSAL Anode Plant LLC" means Limited Liability Company United Company RUSAL Anode Plant, a company incorporated in Russia, which is an indirect wholly-owned subsidiary of the Company.

"Urals aluminium smelter", **"Urals Alumina Refinery"**, **"UAZ"** means Urals Aluminium Smelter, a branch of RUSAL Ural JSC.

"US" means the United States of America.

"USD" or **"US dollar"** means United States dollars, the lawful currency of the United States of America.

"U.S. Treasury" means the Treasury of the United States of America.

"VAP" means value added products. VAP include wire rod, foundry alloys, billets, slabs, high purity and other VAP.

"VAT" means value added tax.

"Volgograd aluminium smelter" or **"VgAZ"** means a branch of RUSAL Ural JSC in Volgograd, United Company RUSAL Volgograd Aluminium Smelter.

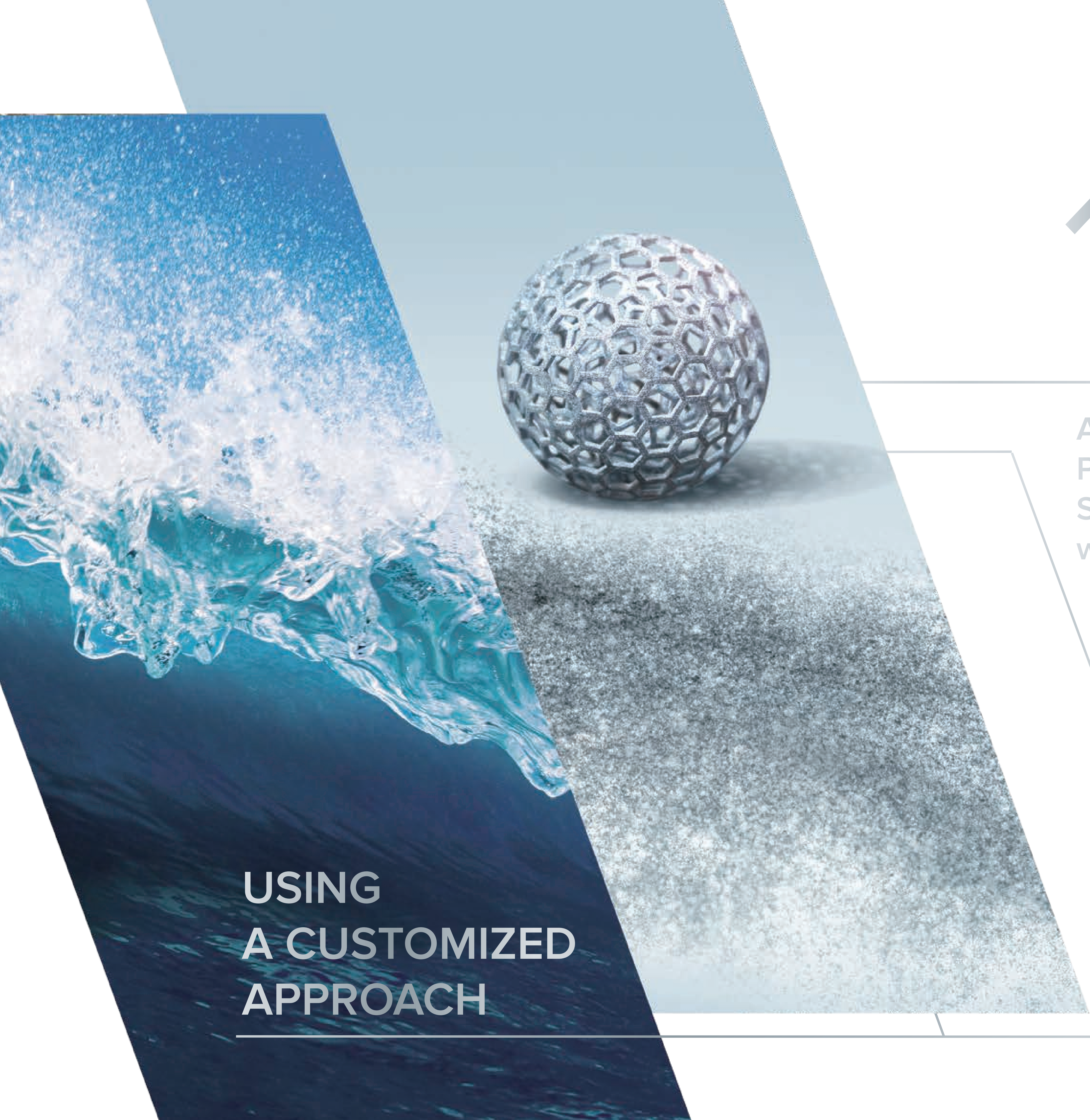
"Volkhov aluminium smelter" or **"VAZ"** means a branch of RUSAL Ural JSC in Volkhov, United Company RUSAL Volkhov Aluminium Smelter.

"Wholesale Electricity Market" means the wholesale market for the sale of electrical energy and power within the confines of the "Russian United Energy System" in the unified economic space of the Russian Federation. Large suppliers and purchasers of electrical energy and power participate in this market, as well as other participants which have obtained the status of wholesale market participants and act in accordance with the Wholesale Electricity Market Rules.

"Wholesale Electricity Market Rules" means the regulatory act (passed according to the Decree of the Government of the Russian Federation of 27 December 2010 No. 1172 "On approval of the Rules for the wholesale electricity and capacity market and on amending some acts of the Government of the Russian Federation on the organization of the functioning of the wholesale electricity and capacity market" as specified in the Federal law N 35-FZ "On the Electric Energy Industry" dated 26 March 2003), which regulates the sale of electrical energy and power in the Wholesale Electricity Market.

"Windalco" means West Indies Alumina Company, a company incorporated in Jamaica, in which the Company indirectly holds a 100% interest.

"Working Capital" means trade and other receivables and inventories less trade and other payables.



11

Appendix A – Principal Terms of the Shareholders' Agreement with the Company

APPENDIX A – PRINCIPAL TERMS OF THE SHAREHOLDERS' AGREEMENT WITH THE COMPANY

The principal terms of the Shareholders' Agreement with the Company are described below. Unless otherwise stated, references to En+, SUAL Partners, Glencore and Onexim are deemed to include reference to other entities controlled by those Major Shareholders (other than any member of the Group).

Right of first refusal – bauxite, alumina, aluminium

The Major Shareholders must offer the Company a right of first refusal in respect of any assets or development opportunities related to the production of bauxite, alumina or aluminium ("**Industrial Assets**") that they wish to acquire where such Industrial Asset or a group of related Industrial Assets has a value in excess of an amount determined by reference to the prevailing LME (high grade premium aluminium three month offer side) price of aluminium at the time of the proposed acquisition. If that LME price is USD1,500 per tonne or less then the trigger value is USD500 million, if it is USD4,500 or more then the trigger price is USD1 billion and if it is between these two prices then the trigger price is prorated on a straight line basis.

Each Major Shareholder must disclose to the Company any opportunity which has come to their (or their associates') respective attentions to acquire Industrial Assets of whatever value.

Relationship between the Company and the Major Shareholders

Each Major Shareholder must ensure that any contract between it or any of its associates and any member of the Group is entered into on an arms' length commercial basis and on terms that are not unfairly prejudicial to the interests of any Major Shareholder or the Group.

If there is a dispute between a Major Shareholder or any of its associates and the Company, that Shareholder will not, and will procure that any Directors appointed by it will not, do anything to prevent or hinder the Company's handling of the dispute.

The Major Shareholders agree to act in good faith in relation to the Group and in a manner that is not unfairly prejudicial to the interests of the Shareholders generally, and that the Group will be operated in accordance with the corporate governance standards set out in the HKSE CG Code.

Termination for particular Shareholders

Under the Shareholders' Agreement, upon any Major Shareholder ceasing to hold at least 3% of the total Shares in issue, for whatever reason, it shall lose all of its rights and obligations under the Shareholders' Agreement with the Company.

Effect of Shareholding Changes

As a result of the Shareholding Changes in 2018 and Shareholding Changes in 2019, Onexim and Glencore ceased to have any rights under the Shareholders' Agreement with the Company.

12

APPENDIX B – Principal Terms of the Shareholders' Agreement between Major Shareholders only

APPENDIX B – PRINCIPAL TERMS OF THE SHAREHOLDERS' AGREEMENT BETWEEN MAJOR SHAREHOLDERS ONLY

The principal terms of the Shareholders' Agreement between Major Shareholders only are described below. Unless otherwise stated, references to En+, SUAL Partners, Glencore and Onexim are deemed to include reference to other entities controlled by those Major Shareholders (other than any member of the Group).

Board of the Company

For as long as En+ holds at least 30% of the Major Shareholders' Shares, the Major Shareholders have agreed to use their respective voting and other rights to procure, so far as they are able, that the Board shall consist of a minimum of 16 and a maximum of 18 Directors and that Directors proposed for nomination or removal under the Articles of Association or otherwise by the shareholders of the Company will be appointed to or removed from the Board to achieve the following:

- For as long as En+ holds at least 40% of the Major Shareholders' Shares, Directors representing at least 50% of the Board shall be Directors proposed by En+ (excluding independent Directors), one of whom shall be the Vice Chairman of the Board. For as long as En+ holds at least 30% of the Major Shareholders' Shares, En+ shall have the right to nominate for appointment and removal the CEO. The appointment of the CEO will be subject to approval by a majority of the Board and the Board will retain the ability to remove the CEO. The number of Directors (other than independent Directors) that En+ is entitled to propose for nomination to and removal from the Board shall reduce by one for as long as its shareholding, as a percentage of the Major Shareholders' Shares, is between 35% and 40%, and by two for as long as such percentage is between 30% and 35%. In addition, En+ shall be entitled to propose for nomination and removal two independent Directors for as long as it holds at least 40% of the Major Shareholders' Shares and one independent Director for as long as that percentage remains between 10% and 40%. En+ shall have the right to veto the appointment of any independent Director nominated by SUAL Partners on the grounds set out in the Shareholders' Agreement among Major Shareholders only.

- For as long as SUAL Partners holds at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue), SUAL Partners shall have the right to propose for nomination and removal three Directors, one of whom shall be independent, and to veto the appointment of any independent Director nominated by En+ on the grounds set out in the Shareholders' Agreement among Major Shareholders only.

- For as long as En+ holds less than 30% of the Major Shareholders' Shares, the Major Shareholders have agreed to use their respective voting and other rights to procure, so far as they are able, that the Board shall consist of between 15 and 19 directors comprising:

  - four independent Directors, to be nominated in accordance with the rights of proposal of En+ and SUAL Partners described above (if relevant) and, to the extent required, by the Corporate Governance and Nomination Committee; and

  - Directors (other than independent Directors) who shall be proposed for nomination and removal by the Major Shareholders in proportion to their respective holdings of Shares from time to time.

Boards of Subsidiaries

The Major Shareholders have agreed to use their respective voting and other rights to procure, so far as they are able, that the Directors proposed for nomination or dismissal by the shareholders of the Company will be appointed to or removed from the boards of the Agreed Subsidiaries to achieve the following:

- The board of each of RUSAL Global and RUSAL America Corp. shall comprise:

  - four directors proposed by En+, for as long as the shareholding of En+ as a percentage of the Major Shareholders' Shares is at least 40%, provided that the number of directors to be proposed by En+ shall be three where such percentage is between 30% and 40%, shall be two where it is between 20% and 30% and shall be one where it is less than 20%; and

  - one director proposed by SUAL Partners, for as long as in each case SUAL Partners holds at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue).

- The board of each other Agreed Subsidiary shall comprise:

  - three directors proposed by En+ for as long as the shareholding of En+ as a percentage of the Major Shareholders' Shares is at least 40%, provided that the number of directors to be proposed by En+ shall be two where such percentage is between 20% and 40% and shall be one where it is less than 20%; and

  - one director proposed by SUAL Partners, for as long as SUAL Partners holds at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue).

Committees of the Board

The Major Shareholders have agreed to procure, so far as they are able, that certain committees of the Board are to be established, as follows:

- An audit committee, remuneration committee and corporate governance and nomination committee, each to be established in accordance with the requirements of the HKSE CG Code.

- A health, safety and environmental committee, whose composition, functions and terms of reference are to be determined from time to time by the Board, a marketing committee and a standing committee.

- Summaries of the functions of these committees are set out in "Corporate Governance Report".

Veto rights

- The Major Shareholders have agreed to exercise their voting rights with a view to giving the Major Shareholders effective veto rights as set out below, by procuring that Directors proposed by them for appointment vote against any resolution in respect of which a Major Shareholder has exercised its "veto":

  - Each of En+ and SUAL Partners is given a right of veto in relation to any related party transaction (or amendment to or renewal of an existing related party transaction).

- Each of En+ and SUAL Partners is given a right of veto in respect of any matter proposed to be undertaken by the Company or any of its subsidiaries which would require a special resolution were the Company or the relevant subsidiary incorporated in England and Wales (e.g., alteration of Articles of Association; change of name; re-registration of a private company as a public company; re-registration of an unlimited company as limited; re-registration of a public company as a private company; offer to issue shares or rights to subscribe for shares other than pro rata to existing shareholders by disapplying statutory pre-emption rights; reduction of share capital; to give, revoke, renew or vary the authority for the Company to purchase (off market) shares in itself; and to redeem or purchase own shares out of capital).

- The Company does not believe that these veto rights will have any material impact on the operation of the Company.

Matters inconsistent with the Shareholders' Agreement between Major Shareholders only

The Major Shareholders have agreed that they shall use their voting and other rights available to them to procure that no resolutions are passed or actions taken or refrained from being taken by the Company or any other member of the Group to the extent that they would be inconsistent with the terms of the Shareholders' Agreement between Major Shareholders only.

KraMZ/OAO KUMZ supply agreements and agreements with Glencore

- The Major Shareholders have agreed to use their voting and other rights available to them to procure that all Board and shareholder approvals and resolutions which are required under the HKSE Listing Rules in respect of the supply agreement entered into between the Group and OAO KUMZ, and the supply agreement entered into between the Group and KraMZ group companies, a group of companies are passed in accordance with those laws and rules.

- If the entry into, amendment of or exercise of any rights under any agreements between the Group and Glencore approved by the Board require shareholder approval under the HKSE Listing Rules, the Major Shareholders have agreed to use their voting and other rights available to them to procure that such approvals and resolutions are passed in accordance with those laws and rules.

Dividend policy

The Major Shareholders have agreed to procure compliance by the Group with a dividend policy, to the extent permissible under the terms of the credit facility agreements, under which not less than 50% of the annual consolidated net profits of the Group in each financial year are distributed to Shareholders within four months after the end of the relevant financial year, subject to any applicable legislation.

Rights of first refusal – SUAL Partners Shares

- Subject to certain exceptions, if SUAL Partners wishes to sell any of its holding of Shares in an onmarket transaction, it must serve notice on En+, offering it a right of first refusal. The price at which En+ will be entitled to acquire the Shares offered by SUAL Partners is the volume weighted average price per Share for the three trading days prior to the date on which the relevant notice is sent by SUAL Partners.

- SUAL Partners will not be obliged to offer En+ a right of first refusal in respect of Shares sold by it to the extent that:

- the aggregate number of Shares sold in any one trading day by SUAL Partners does not exceed 20% of the daily average trading volume for the 30 trading days immediately preceding that trading day; and

- the aggregate number of Shares sold within the above limits does not in any period of four months exceed 0.5% of the total Shares in issue at the time of the relevant sale.

Share placing

To the extent that the Company proposes to undertake a bookbuild placing or underwritten offering of Shares of in excess of 1% of the issued share capital of the Company, the Major Shareholders have agreed to use their voting and other rights to procure that the Major Shareholders are also entitled to sell a pro rata proportion of their Shares as part of such placing or offering.

No mandatory offer

The Major Shareholders have agreed not to acquire or dispose of any voting rights which would be exercisable at a general meeting of the Company, if such acquisition or disposal would trigger a mandatory obligation under the Hong Kong Codes on Takeovers and Mergers and Share Repurchases to make an offer for Shares and have undertaken to indemnify each other in the event of a breach of such undertaking.

Termination for particular shareholders

The Shareholders' Agreement between Major Shareholders only shall terminate in respect of the relevant Major Shareholder in the following circumstances:

- Upon SUAL Partners ceasing to hold at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue) SUAL Partners (as the case may be) shall lose their rights to propose Directors for nomination to the Board, and upon such shareholdings falling below 50% of the relevant minimum shareholding stated above they shall lose their respective veto rights as described above.
- Upon En+ ceasing to hold at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue), it shall lose any rights to propose Directors for nomination to the Board, and upon such shareholding falling below 50% of the relevant minimum shareholding stated above, it shall lose its veto rights as described above.
- Upon any Major Shareholder ceasing to hold at least 3% of the total Shares in issue, for whatever reason, it shall lose all of its rights and obligations under the Shareholders' Agreement between Major Shareholders only.

Effect of Shareholding Changes

As a result of the Shareholding Changes in 2018, the Shareholders' Agreement among Major Shareholders has terminated in respect of Onexim from the date it ceased to be a Shareholder on 16 January 2018 and Onexim ceased to have any rights or obligations under the Shareholders' Agreement among Major Shareholders only.

Starting 3 February 2020, upon completion of the share swap contemplated by the securities exchange agreement entered into between En+ and Glencore on 28 January 2019, Glencore ceased to have any rights under the Shareholders' Agreement between Major Shareholders only.

13

APPENDIX C – Report on Compliance with the Russian Corporate Governance Code

HAVING FULL CIRCLE OF PRODUCTION

APPENDIX C – REPORT ON COMPLIANCE WITH THE RUSSIAN CORPORATE GOVERNANCE CODE

This Report on Compliance with the Russian CG Code was considered by the Board of Directors of United Company RUSAL, international public joint-stock company (the “Company”) on 18 April 2022 (Minutes of the Meeting of the Board of Directors No. 220401 dated 18 April 2022).

The Board of Directors believes that the Company currently complies with the majority of principles and recommendations of the Russian CG Code. The Board of Directors confirms that the data provided in the present report contain complete and accurate information on the Company’s compliance with the Russian CG Code for 2021.

Most of the cases when the criteria are partially met or not met result, inter alia, from the fact that the Company was registered as an international company in accordance with the Federal Law No. 290-FZ “On International Companies and International Funds” dated 03.08.2018 on 25 September 2020 (the “Registration Date”). Taking into account the need to achieve a balance and compliance with all the requirements applicable to the Company whose shares are traded simultaneously on the Moscow and Hong Kong stock exchanges, the assessment, development and implementation of a number of documents and practices requires additional time to assess a range of circumstances in dynamics of development. Explanation of the key reasons, factors and (or) circumstances due to which the Company does not comply or does not fully comply with the principles of corporate governance enshrined in the Russian CG Code, a description of the mechanisms and tools of corporate governance that are used by the Company instead of those recommended by the Russian CG Code, the planned (proposed) actions and measures to improve the model and practice of corporate governance are contained below in the 5th column of the table of the present report.

The compliance assessment against the recommendations of the CG Code is presented below using the table template included in the Bank of Russia’s Letter No. IN-06-28/102 dated 27 December 2021 and follows the filling out guidelines described in the letter. The result is based on self-assessment, taking into account the existing integrated data on the Company’s approach to incorporating Russian CG Code requirements and the reasons for non-compliance (following the “comply or explain” principle).

The Company confirms its commitment to high standards of corporate governance.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
1.1.	**The company will ensure equal and fair treatment of all shareholders when they exercise their right to participate in the management of the company.**			
1.1.1.	The company creates the most favourable conditions for the shareholders to participate in the general meeting, conditions for the development of a reasonable position on the issues on the agenda of the general meeting, coordination of their actions, as well as the opportunity to express their opinion on the issues under consideration.	1. The company provides an available means of communication with the company, such as a 'hotline', e-mail or a forum in Internet, which allows the shareholders to express their opinions and send questions regarding the agenda in the course of the preparation for and during the general meeting. These methods of communication were organized and provided as available to shareholders by the company in the process of preparation of each general meeting held during the reporting period.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
1.1.2.	The procedure for notification of the general meeting and submission of materials for the general meeting provides the shareholders with the opportunity to properly prepare for the participation in the general meeting.	1. During the reporting period, the notice of the general meeting of shareholders is disclosed (published) on the company's website not later than 30 days prior to the date of the general meeting, unless longer period provided by law. 2. The notice of the meeting indicates the documents required for the access to the premises. 3. The shareholders were provided with access to the information on who had proposed the issues on the agenda and who had nominated candidates to the company's board of directors and the company's internal audit commission (if its creation is required by the charter of the company).	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is partially met. Notice of the general meeting of shareholders is disclosed (published) in accordance with the provisions of the Company's Charter and the applicable requirements of the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange (the "HKSE Listing Rules"). During the reporting period, the Company held three general meetings of shareholders – the annual general meeting of shareholders on 24 June 2021 (the "AGM") and two extraordinary general meetings of shareholders on 7 April 2021 (the "EGM 1") and 9 September 2021 (the "EGM 2"). The Notice of the AGM was disclosed (published) on the Company's website on 24 May 2021, i.e. 30 days prior to the date of the AGM. The notice of the EGM 1 was disclosed (published) on 15 March, 2021, i.e. 22 days before the EGM 1. The notice of the EGM 2 was disclosed (published) on 20 July 2021, i.e. 50 days before the EGM 2, because one of the agenda items was on early termination of powers of the members of the Company's Board of Directors. Criteria 2 and 3 are fully met.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
1.1.3.	During the preparation and holding of the general meeting, the shareholders had the opportunity to freely and timely receive information on the meeting and materials for the meeting, put questions to the company's executive bodies and the members of the company's board of directors, and communicate with each other.	1. During the reporting period, the shareholders were given the opportunity to put questions to the members of the company's executive bodies and the members of the company's board of directors in preparation of and during the general meeting. 2. The position of the board of directors (including the separate opinions included in the minutes, if there are any) on each item on the agenda of the general meetings held during the reporting period was included in the materials for the general meeting. 3. The company provided the eligible shareholders with access to the list of persons entitled to participate in the general meeting, starting from the date of its receipt by the company, in all cases of holding general meetings in the reporting period.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
1.1.4.	The exercise of the shareholder's right to request the convening of the general meeting, to nominate candidates for the management bodies and to make proposals for the inclusion in the agenda of the general meeting was not associated with unjustified difficulties.	1. The company's charter stipulates a deadline for submission of proposals for the inclusion in the agenda of the annual general meeting by shareholders, which is within at least 60 days after the end of the relevant calendar year. 2. In the reporting period, the company did not refuse to accept proposals for the agenda or candidates for the company's bodies due to typos and other insignificant shortcomings in the shareholder's proposal.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 was not met, because the Company's Charter stipulates a deadline for shareholders to make proposals for inclusion on the agenda of the annual general meeting similar to the term, prescribed by para 1 article 53 of the Federal Law dated 26 December 1995N 208-FZ "On Joint-Stock Companies" (the "JSC Law"). Criterion 2 was fully met.
1.1.5.	Each shareholder had the opportunity to freely exercise the right to vote in the simplest and most convenient way.	1. The company's charter provide the possibility to fill in the electronic form of the ballot on the Internet site, the address of which is specified in the notice of the general meeting of shareholders.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
1.1.6.	The procedure established by the company for conducting the general meeting provides an equal opportunity for all persons present at the meeting to express their opinions and ask questions.	1. When holding general meetings of shareholders in the form of a meeting (physical presence of shareholders) during the reporting period, sufficient time was provided for reports on the issues on the agenda and for discussing these issues and shareholders were given the opportunity to express their opinions and ask questions about the agenda. 2. Candidates for the company's management and control bodies were invited and all necessary measures have been taken to ensure their participation in the general meeting of shareholders, at which their candidacies were put to the vote. Candidates for the company's management and control bodies, participated in the general meeting of shareholders, were available to answers the questions from shareholders. 3. The sole executive body, the person responsible for accounting, the chairman or other members of the audit committee of the board of directors were available to answer the questions from shareholders at general meetings of shareholders held during the reporting period. 4. During the reporting period, the company used telecommunication means to ensure remote access of the shareholders to participate in the general meetings or the board of directors made a reasonable decision on the absence of the need (possibility) to use such means in the reporting period.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	During the reporting period Criteria 1, 2 and 4 were fully met. Criterion 3 is partially met, because the sole executive body, the person responsible for accounting, the Chairman or other members of the Audit committee of the Board of Directors were not available at all three general meetings of the Company's shareholders held during the reporting period.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
1.2.	**The shareholders are given an equal and fair opportunity to share the company's profits by receiving dividends.**			
1.2.1.	The company developed and implemented a transparent and comprehensible mechanism for determining the amount of dividends and their payment.	1. The regulations on dividend policy was adopted by the company, approved by the board of directors and disclosed on the company's Internet site. 2. If the company prepares consolidated financial statements and its dividend policy uses the results of the company's financial statements to determine the amount of dividends, the relevant provisions of the dividend policy take into account the consolidated results of financial statements. 3. The substantiation of the proposed distribution of net profit, including the payment of dividends and the company's own needs, and the assessment of its compliance with the dividend policy adopted by the company, with explanations and economic substantiation of the need to distribute a certain portion of net profit to its own were included in the materials for the general meeting of shareholders, the agenda of which includes an item on profit distribution (including the payment (declaration) of dividends) during the reporting period.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criteria 1 and 2 were fully met. Criterion 3 was not formally met, since in 2021 the Company made no decisions on the distribution of net profit, including the payment of dividends and to the Company's own needs.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
1.2.2.	The company does not make a decision to pay dividends if such decision, formally not violating the restrictions established by law, is economically unjustified and may lead to misrepresentation of the company's activities.	1. The company's regulations on dividend policy, in addition to the restrictions imposed by law, defines financial/economic circumstances under which the company will not decide on the payment of dividends.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
1.2.3.	The company acts without prejudice to the dividend rights of the existing shareholders.	1. In the reporting period, the company acted without prejudice to the dividend rights of the existing shareholders.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
1.2.4.	The company seeks to exclude the use by its shareholders of other methods of obtaining profit (income) at the company's expense, in addition to dividends and liquidation value.	1. The other methods of obtaining profit (income) at the expense of the company by persons controlling the company other than dividends (for example, through transfer pricing, unjustified provision of services to the company by the controlling person at inflated prices, through internal loans substituting for dividends to the controlling person and (or) his controlled persons) were not used during the reporting period.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
1.3.	**The corporate governance system and practice ensure equal conditions for all shareholders holding shares of the same category (type), including minority shareholders and foreign shareholders, and equal treatment of them by the company.**			
1.3.1.	The company created conditions for fair treatment of each shareholder by the company's management bodies and controlling persons, including conditions that ensure the prohibition of abuse by major shareholders in relation to minority shareholders.	1. During the reporting period, the company's controlling persons did not abuse the rights with respect to the company's shareholders, and there were no conflicts between the company's controlling persons and the company's shareholders, and the board of directors paid appropriate attention to such incidents, if any.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
1.3.2.	The company does not take actions that lead or may lead to an artificial redistribution of corporate control.	1. Quasi-treasury shares did not exist or did not participate in voting during the reporting period.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
1.4.	**Shareholders are provided with reliable and effective methods of accounting for the rights to shares, as well as the possibility of free disposal of their shares without any hindrance**			
1.4.1.	Shareholders are provided with reliable and effective methods of accounting for the rights to shares, as well as the possibility of free disposal of their shares without any hindrance.	1. The technologies and terms of services used by the company's registrar meet the needs of the company and its shareholders, ensure the keeping of records of rights to shares and the realization of shareholder rights in the most effective way.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.1.	**The board of directors carries out strategic management of the company, determines the main principles and approaches to the organisation of the risk management and internal control system in the company, exercises control over the activities of the company's executive bodies, and performs other key functions.**			
2.1.1.	The board of directors is responsible for making decisions related to the appointment and dismissal of executive bodies, including in connection with the improper performance of their duties. The board of directors also monitors that the company's executive bodies act in accordance with the company's approved development strategy and main activities.	1. The board of directors has the powers stipulated in the Charter to appoint, dismiss and determine the terms and conditions of contracts with respect to members of the executive bodies. 2. During the reporting period, the nominations (appointments, human resources) committee reviewed the compliance of the professional qualifications, skills and experience of the members of the executive bodies with the current and expected needs of the company, dictated by the approved strategy of the company. 3. During the reporting period, the board of directors reviewed the report(s) of the sole executive body and members of the collegiate executive body (if any) on the implementation of the company's strategy.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is partially met. The Company's sole executive body of the Company (the General director) manages day-to-day activity. In accordance with the Charter of the Company, approved by more than 90% of the votes of shareholders, the General director of the Company is appointed by the decision of the general meeting of shareholders of the Company. In accordance with the Company's Charter, the Board of Directors determines the terms of a contract with the sole executive body. The applicable approach is fully compliant with applicable law. Criterion 2 is partially met. The management of the Company's day-to-day activities is performed by the sole executive body of the Company (General director). The General director's professional qualifications, skills and experience are assessed by means of the General director's KPI targets achievement assessment conducted by the remuneration committee and the board of directors on an annual basis. The Board of Directors regularly reviewed the reports of the General director on the company's activities, containing, among other things, information on the achievement of the company's strategic goals. At the same time, during the reporting period, the Board of Directors did not review a separate report on the implementation of the Company's strategy.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.1.2.	The board of directors sets the main guidelines for the company's long-term activities, evaluates and approves the company's key performance indicators and main business goals, evaluates and approves the company's strategy and business plans for its main activities.	1. During the reporting period, the board of directors considered issues related to the implementation and updating of the strategy, the approval of the company's financial and economic plan (budget), as well as the review of the criteria and indicators (including interim ones) for the implementation of the company's strategy and business plans.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is partially met by the Company, since the Board of Directors did not consider issues related to updating the Company's strategy. The Board of Directors regularly reviewed the General directors's reports on the Company's activities, which contained, among other things, information on the achievement of the Company's strategic goals, thereby confirming the relevance of the Company's strategy and the lack of the need to update it at the present time. During the reporting period, the Board of Directors considered issues related to the approval of the Company's budget, and the results of the implementation of the Company's business plan.
2.1.3.	The board of directors determines the principles and approaches to the organisation of the risk management and internal control system at the company.	1. The principles and approaches to the organisation of the risk management and internal control system at the company determined by the board of directors and adopted in the company's internal documents, which determine risk management and internal control policy of the company. 2. During the reporting period, the board of directors approved (revised) an acceptable amount of risks (risk appetite) of the company or the audit committee and (or) risk committee (if any) considered the expediency of submitting the issue of revising the risk appetite of the Company for consideration by the Board of Directors.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.1.4.	The board of directors determines the company's policy on remuneration and/or reimbursement of expenses (compensation) to members of the company's board of directors, executive bodies of the company and other key executives of the company.	1. The company developed, approved by the board of directors and implemented the policy(ies) on remuneration and reimbursement of expenses (compensations) to members of the company's board of directors, executive bodies and other key executives. 2. During the reporting period, the board of directors considered issues related to this policy(ies).	☐ Compliant ☐ Partially compliant ☑ Non-compliant	Criteria 1 and 2 are not met, since the Company has no separate policy document in place to regulate remuneration and reimbursement of expenses (compensation) of members of the Board of Directors, executive bodies of the Company and other key executives of the Company. During the reporting period, the Board of Directors made decisions on issues related to the remuneration and reimbursement of expenses (compensation) to the General director of the Company. In accordance with the Company's Charter, during the reporting period the General Meeting of Shareholders made decisions regarding remuneration and reimbursement of expenses (compensations) to members of the Board of Directors. The Company is assessing the viability of implementing such policy taking into account all applicable requirements.
2.1.5.	The board of directors plays a key role in preventing, identifying and resolving internal conflicts between the company's bodies, shareholders and employees.	1. The board of directors plays a key role in preventing, identifying and resolving internal conflicts. 2. The company established the system for identifying transactions involving conflicts of interest and the system of measures aimed at resolving such conflicts	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.1.6.	The board of directors plays a key role in ensuring the company's transparency, timely and complete disclosure of information by the company, and easy access of the shareholders to the company's documents.	1. The company's internal documents determine the persons responsible for implementing the information policy.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.1.7.	The board of directors exercises control over the company's corporate governance practices and plays a key role in the company's substantial corporate events.	1. During the reporting period, the board of directors considered the matter of self-assessment and/or external assessment of the corporate governance practices in the company.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.2.	**The board of directors is accountable to the company's shareholders.**			
2.2.1	Information on the work of the board of directors is disclosed and provided to the shareholders.	1. The company's annual report for the reporting period includes information on the attendance of meetings of the board of directors and committees by each member of the board. 2. The annual report contains information on the main results of the assessment (self-assessment) of quality of the work of the board of directors conducted in the reporting period.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.2.2	The chairman of the board of directors is available for the communication with the company's shareholders.	1. The company has a transparent procedure that provides the shareholders with the opportunity to send requests and receive feedback, related thereto, to the chairman of the board of directors (and, if apply, to the senior independent director).	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.3.	**The board of directors is an effective and professional management body of the company, capable of making objective independent judgments and making decisions that meet the interests of the company and its shareholders.**			
2.3.1.	Only persons who have an impeccable business and personal reputation and possess the knowledge, skills and experience necessary for making decisions within the competence of the board of directors and required for the effective performance of its functions are elected members of the board of directors.	1. During the reporting period, the board of directors (or its nomination committee) evaluated candidates for the board of directors in terms of their necessary experience, knowledge, business reputation, lack of conflicts of interest, and etc.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.3.2.	Members of the company's board of directors are elected through a transparent procedure that allows shareholders to obtain sufficient information on the candidates to form an idea of their personal and professional qualities.	1. In all cases of holding the general meeting of shareholders during the reporting period, the agenda of which included the issues of the election of the board of directors, the company provided the shareholders with the biographical data of all candidate members of the board of directors, the results of compliance evaluation of professional qualification, experience and skills of the candidates with current and expected needs of the company, conducted by the board of directors (or its nomination committee), as well as information on whether the candidate meets the criteria of independence, in accordance with recommendations 102-107 of the Russian CG Code and information about presence of the written consent of the candidates to the election to the board of directors.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.3.3.	The composition of the board of directors is balanced, including in terms of the qualifications of its members, their experience, knowledge and business qualities, and enjoys the trust of the shareholders.	1. During the reporting period, the board of directors analyzed its needs in the field of professional qualifications, experience and skills, and identified the competencies needed by the board of directors in the short and long term.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	During the reporting period, as part of the self-assessment procedure, the Board of Directors analyzed its own professional qualifications, experience and skills needs and concluded that the Board of Directors has the necessary skills and knowledge to solve the tasks facing the Company. The Board of Directors did not assess the competencies required in the long term perspective.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.3.4.	The quantitative composition of the company's board of directors makes it possible to organise the activities of the board of directors in the most effective way, including the possibility of forming committees of the board of directors, and also provides substantial minority shareholders of the company with the opportunity to elect the candidate to the board of directors for whom they vote.	1. During the reporting period, the board of directors considered the issue of whether the quantitative composition of the board of directors met the needs of the company and the interests of its shareholders.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.4.	**The board of directors includes a sufficient number of independent directors.**			
2.4.1.	An independent director is a person who has sufficient professionalism, experience and independence to form his or her own position, is able to make objective and bona fide judgments, independent from the influence of the company's executive bodies, specific groups of shareholders or other interested parties. It should also be noted that under normal conditions, a candidate (an elected member of the board of directors) who is associated with the company, its substantial shareholder, the company's substantial counterparty or competitor or associated with the state may not be considered independent.	1. During the reporting period, all independent members of the board of directors met all the independence criteria specified in recommendations 102-107 of the Russian CG Code, or were recognised as independent by the decision of the board of directors.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.4.2.	The candidates to the board of directors are evaluated for their compliance with the independence criteria, and the independent members of the board of directors are regularly reviewed for their compliance with the independence criteria. When conducting such assessment, the content prevails over the form.	1. During the reporting period, the board of directors (or the nomination committee of the board of directors) formed an opinion on the independence of each candidate to the board of directors and submitted the corresponding opinion to the shareholders. 2. During the reporting period, the board of directors (or the nomination committee of the board of directors) considered at least once the matter on independence of the current members of the board of directors (after their election). 3. The company developed procedures determining the necessary actions to be taken by a member of the board of directors when such member ceases to be independent, including the obligations to timely notify the board of directors thereof.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.4.3.	Independent directors constitute at least one-third of the elected members of the board of directors.	1. Independent directors constitute at least one-third of the members of the board of directors.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.4.4.	Independent directors play a key role in preventing internal conflicts at the company and carrying out substantial corporate actions by the company.	1. Independent directors (who did not have a conflict of interest) during the reporting period have been evaluating substantial corporate actions related to a possible conflict of interest, and the results of such evaluation were provided to the board of directors.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is partially met, since the Company's Charter does not provide for the concept of "substantial corporate actions". Nevertheless, the Charter provide for a special procedure aimed at preventing risks associated with transactions and corporate actions that involve a conflict of interest: in accordance with Section 23.5 of the Charter, a member of the Board of Directors is obliged to promptly inform other members of the Board of Directors about the nature and extent of his/her interest, if he/she has a material interest of any nature (direct or indirect, including, but not limited to, his/her relationship with any of his/her close associates) in a transaction, arrangement or contract with the Company which is significant for the Company's business. Independent directors actively participate in the Board of Directors' review of key issues, including significant transactions.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.5.	**The chairman of the board of directors contributes to the most effective implementation of the functions assigned to the board of directors.**			
2.5.1.	An independent director was elected as a chairman of the board of directors, or a senior independent director was chosen from among the elected independent directors to coordinate the work of the independent directors and interact with the chairman of the board of directors.	1. The board of directors is chaired by an independent director, or a senior independent director is appointed from among the independent directors. 2. The role, rights and duties of the chairman of the board of directors (and, if applicable, of the senior independent director) are duly set out in the company's internal documents.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is met. The Company formally does not meet Criterion 2, since the Company has no separate internal document in place defining the role, rights and obligations of the Chairman of the Board of Directors. Currently, the role, rights and obligations of the Chairman of the Board of Directors are defined by the Charter of the Company. The Company is assessing the possibility of adopting the relevant internal document.
2.5.2.	The chairman of the board of directors ensures a constructive environment at meetings, free discussion of issues included in the agenda of the meeting, and control over the implementation of decisions taken by the board of directors.	1. The performance of the chairman of the board of directors was evaluated as part of the procedure for assessment (self-assessment) of the effectiveness of the board of directors in the reporting period.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.5.3.	The chairman of the board of directors takes the necessary measures to provide the members of the board of directors with the information necessary for making decisions on the issues on the agenda in a timely manner.	1. The duty of the chairman of the board of directors to take measures to ensure the timely provision of full and accurate information to the members of the board of directors on the issues on the agenda of the meeting of the board of directors is set out in the company's internal documents.	☐ Compliant ☐ Partially compliant ☑ Non-compliant	The Company formally does not meet Criterion 1, since it has no internal document in place to establish the obligation of the Chairman of the Board of Directors to take measures to ensure timely provision of materials to members of the Board of Directors on issues of the agenda of the meeting of the Board of Directors. However, despite the fact that this obligation is not formally established in any internal documents, in practice, the Chairman of the Board of Directors takes such measures. According to the Company's Charter, the Chairman of the Board of Directors organizes the work of the Board of Directors. The Company is assessing the possibility of adopting the relevant internal document.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.6.	**The members of the board of directors act in good faith and reasonably in the interests of the company and its shareholders on the basis of sufficient information, with due diligence and care.**			
2.6.1.	The members of the board of directors make decisions taking into account all available information, without conflict of interest, subject to equal treatment of the company's shareholders, within the framework of normal business risk.	1. The company's internal documents set out that a member of the board of directors shall notify the board of directors if the member has a conflict of interest in relation to any issue on the agenda of the meeting of the board of directors or the committee of the board of directors, prior to the discussion of the relevant issue on the agenda. 2. The company's internal documents provide that a member of the board of directors shall abstain from voting on any issue in which the member has a conflict of interest. 3. The company established the procedure allowing the board of directors to receive professional advice on issues within its competence at the company's expense.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	The Company formally does not meet criteria 1 and 2, since the Company has no separate internal document in place to regulate these issues. The issues under consideration are partially regulated by the Company's Charter: In accordance with clause 23.5 of the Company's Charter, a member of the Board of Directors is obliged to promptly inform other members of the Board of Directors about the nature and extent of his/her interest, if he/she has a material interest of any nature (direct or indirect, including, but not limited to, his/her relationship with any of his/her close associates) in a transaction, arrangement or contract with the Company which is significant for the Company's business. A member of the Board of Directors does not vote when the Board of Directors makes a decision with respect to any contract, arrangement or any proposal he/she or any close associate of him/her has a significant degree of interest in, except as set forth in the Charter. Criterion 3 is met.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.6.2.	The rights and obligations of the members of the board of directors are clearly formulated and laid down in the company's internal documents.	1. The company adopted and published an internal document clearly determining the rights and obligations of the members of the board of directors.	☐ Compliant ☐ Partially compliant ☑ Non-compliant	Criterion 1 is formally not met because the Company has no separate internal document in place determining the rights and obligations of members of the Board of Directors. However, the rights and obligations of members of the Board of Directors are determined by the Charter of the Company. The Company is assessing the possibility of adopting the relevant internal document.
2.6.3.	The members of the board of directors have sufficient time to perform their duties.	1. Individual attendance at meetings of the board of directors and committees, as well as sufficiency of the time spent for for participation in functioning of the board as well as its committees, was analyzed by the assessment (self-assessment) of the effectiveness of the board of directors in the reporting period. 2. In accordance with the company's internal documents, the members of the board of directors are obliged to notify the board of directors of their intention to join the management bodies of other organisations (other than controlled organisations of the company), as well as of the fact of such appointment.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is met. With regard to Criterion 2, the Company explains that the Company has no document in place regulating the activities of the Board of Directors, except for the Charter. In order to prevent conflicts of interest, the Charter of the Company include provisions on the obligation of a member of the Board of Directors to promptly inform other members of the Board of Directors about the nature and extent of his/her interest. The Company is assessing the possibility of adopting the relevant internal document.
2.6.4.	All members of the board of directors have equal access to the company's documents and information. The newly elected members of the board of directors are provided with sufficient information about the company and the work of the board of directors as soon as possible.	1 In accordance with the company's internal documents, the members of the board of directors have the right to receive information and documents, concerning the company and its controlled organizations and necessary for the members of the board of directors of the company to perform their duties, and the company's executive bodies are obliged to provide access to the relevant information and documents. 2. The company realizes a formalized orientation program for newly elected members of the board of directors.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	With regard to Criterion 1, the Company explains that formally, it has no internal document in place to establish the right of the members of the Board of Directors to access information and documents, concerning the company and its controlled organizations, and necessary for the members of the board of directors of the company to perform their duties and the obligation of the Company's executive bodies to provide access to the relevant information and documents. Criterion 2 is met.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.7.	**Meetings of the board of directors, preparation for and participation of the members of the board of directors in such meetings ensure the effective functioning of the board of directors.**			
2.7.1.	Meetings of the board of directors are held as necessary, taking into account the scope of activities and the tasks the company faces at specific times.	1. The board of directors held at least six meetings in the reporting year.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.7.2.	The company's internal documents set out the procedure for preparing and holding meetings of the board of directors, which provides the members of the board of directors with the opportunity to properly prepare for the meeting.	1. The company approved an internal document defining the procedure for preparing and holding meetings of the board of directors. The document stipulates, among other things, that, as a rule, notification of the meeting will be made at least five days before the date of the meeting. 2. During the reporting period, members of the board of directors who were absent from the place of the meeting were given the opportunity to participate in the discussion of agenda items and voting remotely via conference- and video conference call.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is formally not met because the Company has not approved an internal document to establish the procedure for preparing and holding meetings of the Board of Directors. The Charter of the Company establish general provisions for holding meetings of the Board of Directors. Criterion 2 is met.
2.7.3.	The form of the meeting of the board of directors is determined taking into account the importance of the issues on the agenda. The most important issues are resolved at meetings held in person.	1. The company's charter or internal document provide that the most important issues (inter alia the list given in recommendation 168 of the Russian CG Code) will be considered at meetings of the board of directors held in person.	☐ Compliant ☐ Partially compliant ☑ Non-compliant	The Company does not meet criterion 1. The Company has not approved any internal document according to which the most important issues (inter alia the list given in recommendation 168 of the Russian CG Code) should be considered at meetings of the Board of Directors held in person. The Charter of the Company also do not contain the relevant provisions. Despite this, in practice, the most important issues are considered at meetings of the Board of Directors held in person.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.7.4.	Resolutions on the most important issues of the company's activities are approved at a meeting of the board of directors by a special majority or a simple majority of votes of all elected members of the board of directors.	1. The company's charter provide that resolutions on the most important issues, including those are set out in recommendation 170 of the Russian CG Code, will be approved at a meeting of the board of directors by a special majority of at 3/4 of the votes, or by a simple majority of all elected members of the board of directors.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is partially met. The Company's Charter do not provide for resolutions on the most important issues, including those are set out in recommendation 170 of the Russian CG Code to be approved at meetings of the Board of Directors by a qualified majority of at least 3/4 of the votes, or by a simple majority of all elected members of the Board of Directors. However, according to clause 26.3 of the Company's Charter, resolutions at meetings of the Board of Directors are approved by votes of at least ten members of the Board of Directors participating in a meeting, except for individual resolutions on issues provided for by this clause of the Charter, on which resolutions are approved by a simple majority of the members of the Board of Directors participating in a meeting.
2.8.	**The board of directors establishes committees for preliminary consideration of the most important issues of the company's activities.**			
2.8.1.	The audit committee consisting of independent directors was established for the preliminary consideration of issues related to the control of the company's financial and economic activities.	1. The board of directors formed an audit committee consisting of independent directors only. 2. The company's internal documents define the tasks of the audit committee, inter alia, the tasks contained in recommendation 172 of the Russian CG Code. 3. At least one member of the audit committee, who is an independent director, has experience and knowledge in the preparation, analysis, evaluation and audit of accounting (financial) statements. 4. Meetings of the audit committee were held at least once a quarter during the reporting period.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.8.2.	The remunerations committee, consisting of independent directors and headed by an independent director who is not the chairman of the board of directors, was established for the preliminary consideration of issues related to the formation of the effective and transparent remuneration practices.	1. The board of directors established the remunerations committee consisting of independent directors only. 2. The chairman of the remunerations committee is an independent director who is not the chairman of the board of directors. 3. The company's internal documents define the tasks of the remunerations committee, including, inter alia, the tasks contained in recommendation 180 of the Russian CG Code, as well as the conditions (events) upon the occurrence of which the remuneration committee considers the issue of revising the company's policy on remuneration of the board of directors members, executive bodies and other key executives	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criteria 1 and 2 are met. Criterion 3 is partially met. The internal documents of the Company define the tasks of the remuneration committee, as well as the need of periodic review of the Company's policy on remuneration. At the same time, the Company internal documents do not specify the conditions (events) upon the occurrence of which the remuneration committee considers the issue of revising the Company policy on remuneration of the Board of Directors members, executive bodies and other key executives. The Company assesses the possibility of making appropriate changes in the Company's internal documents.
2.8.3.	The nomination committee (the committee for appointments and personnel), most members of which are independent directors, was established for the preliminary consideration of issues related to the implementation of personnel planning (succession planning), professional composition and performance of the board of directors.	1. The board of directors established the nomination committee (or its tasks specified in recommendation 186 of the Russian CG Code are implemented within the framework of another committee), the majority of whose members were independent directors. 2. The company's internal documents define the tasks of the nomination committee (or the relevant committee with combined functions), including, inter alia, the tasks contained in recommendation 186 of the Russian CG Code. 3. In order to form the board of directors that best meets the company's goals and tasks, in the reporting period, the nomination committee independently or jointly with other committees of the board of directors or the company's authorized shareholder relations unit organized interaction with shareholders, not limited to the largest shareholders, in the context of selecting candidates for the company's board of directors.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criteria 1 and 2 are met. Criterion 3 is not met. In accordance with the Company's Charter, the Company's shareholders holding in the aggregate at least 2% of the Company's voting shares, are entitled to nominate candidates to the Company's Board of Directors.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.8.4.	Given the scope of activities and the level of risk, the company's board of directors made sure that the composition of its committees fully met the company's objectives. Additional committees were either formed or were not deemed necessary (strategy committee, corporate governance committee, ethics committee, risk management committee, budget committee, health, safety and environment committee, etc.).	1. During the reporting period, the company's board of directors considered the issue of whether the composition of the board of directors is sufficient for the tasks, the scale and nature of business, aims of activities and needs, and the risk profile of the company. Additional committees were either formed or were not deemed necessary.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.8.5.	The composition of the committees is designed so as to allow for a comprehensive discussion of the issues under consideration in advance, taking into account different views.	1. The audit committee, the remuneration committee, the nomination committee (or a corresponding committee with combined functions) were chaired in the reporting period by independent directors. 2. The company's internal documents (policies) provide for that persons who are not members of the audit committee, the nomination committee (or a corresponding committee with combined functions) and the remuneration committee may attend committee meetings only at the invitation of the chairman of the relevant committee.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
2.8.6.	The chairmen of the committees regularly inform the board of directors and its chairman about the work of their committees.	1. During the reporting period, the chairmen of the committees regularly reported on the work of the committees to the board of directors.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
2.9.	**The board of directors ensures that the quality of the work of the board of directors, its committees and members of the board of directors is assessed.**			
2.9.1.	The assessment of the quality of the work of the board of directors is aimed at determining the degree of effectiveness of the board of directors, committees and members of the board of directors, the compliance of their work with the company's development needs, at encouraging the work of the board of directors and at identifying the areas in which their work might be improved.	1. The company's internal documents provide procedures for assessment (self-assessment) of quality of the work of the board of directors. 2. The assessment (self-assessment) of quality of the work of the board of directors conducted during the reporting period included the assessment of the work of the committees, individual assessment of each members of the board of directors and the board of directors as a whole. 3. The results of the assessment (self-assessment) of the board of directors conducted during the reporting period were reviewed at a meeting of the board of directors held in person.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is not met. The Company does not have internal documents defining the procedures for assessment (self-assessment) of quality of the work of the board of directors. The Company carries out an annual self-assessment of the quality of the Board of Directors' work on the basis of the relevant resolution of the Board of Directors. Criteria 2 and 3 are met.
2.9.2.	The work of the board of directors, committees and members of the board of directors is evaluated on a regular basis at least once a year. An external organisation (advisor) is engaged to conduct an independent evaluation of the quality of the work of the board of directors at least once every three years.	1. During the last three reporting periods, the company engaged an external organisation (advisor) at least once to conduct an independent assessment of the quality of the work of the board of directors.	☐ Compliant ☐ Partially compliant ☑ Non-compliant	The Company does not meet Criterion 1, since during the previous three years, no external organisation has been engaged to assess the performance of the Board of Directors, as the relevant recommendation was not applicable to the Company prior to the Registration Date. The Company is considering the possibility of engaging an external organization to conduct an independent assessment of the quality of the Board of Directors' work for the year 2022. The performance of the Board of Directors, committees and members of the Board of Directors is assessed on a regular basis once a year. The Corporate Governance and Nominations Committee conducts an annual detailed formalized self-assessment or external assessment of the performance of the Board of Directors and its members, as well as the committees of the Board of Directors. If necessary, the committee will engage independent professional consultants to carry out its duties.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
3.1.	**The company's corporate secretary provide effective ongoing interaction with shareholders, coordinates the company's actions to protect the rights and interests of shareholders, and provides support to the effective work of the board of directors.**			
3.1.1.	The corporate secretary has sufficient knowledge, experience and qualification to perform the duties assigned to the corporate secretary, an impeccable reputation and enjoys the trust of shareholders.	1. The company's website and the annual report provide biographical information on the corporate secretary (including information about age, education, qualifications, experience), as well as information about positions in management bodies of other legal entities held by the corporate secretary for at least the last five years.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
3.1.2.	The corporate secretary has sufficient independence from the company's executive bodies and the necessary powers and resources to perform the tasks assigned to the corporate secretary.	1. The company has adopted and disclosed an internal document – the regulations on the corporate secretary. 2. The board of directors approves the candidate for the position of the corporate secretary and terminates his (her) powers, considers the issue of paying him (her) additional remuneration. 3. The company's internal documents stipulate the corporate secretary's right to request and receive documents and information from the company's management bodies, structural subdivisions and officials (employees).	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
4.1.	**The level of remuneration paid by the company is sufficient to attract, motivate and retain persons with the necessary competence and qualifications for the company. Remuneration is paid to the members of the company's board of directors, executive bodies and other key executives in accordance with the remuneration policy adopted by the company.**			
4.1.1.	The level of remuneration provided by the company to the members of the board of directors, executive bodies and other key executives creates sufficient motivation for their effective work, allowing the company to attract and retain competent and qualified specialists. At the same time, the company avoids a level of remuneration, higher than necessary, as well as an unjustifiably large gap between the remuneration levels of these persons and the company's employees.	1. Remuneration of the members of the board of directors, executive bodies and other key executives is defined taking into account the results of a comparative analysis of the level of remuneration in comparable companies.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
4.1.2.	The company's remuneration policy was developed by the remunerations committee and approved by the company's board of directors. The board of directors, with the support of the remunerations committee, exercises control over the introduction and implementation of the remuneration policy at the company, and, if necessary, reviews and makes adjustments thereto.	1. During the reporting period, the remunerations committee reviewed the remuneration policy(ies) and (or) its (their) implementation practice, evaluated its effectiveness and transparency and, if necessary, made the relevant recommendations to the board of directors on review of such policy(ies).	☐ Compliant ☐ Partially compliant ☑ Non-compliant	The Company formally does not meet Criterion 1, since the Company has no separate internal document – policy on remuneration. During the reporting period, the Shareholders decided on the amount of remuneration for members of the Board of Directors and committees by the recommendation of the Board of Directors and the Remuneration Committee.
4.1.3.	The company's remuneration policy contains transparent mechanisms for determining the amount of remuneration payable to the members of the company's board of directors, executive bodies and other key executives, as well as regulates all types of payments, benefits and privileges granted to these persons.	1. The company's remuneration policy (ies) contain(s) transparent mechanisms for determining the amount of remuneration payable to the members of the company's board of directors, executive bodies and other key executives, as well as regulate(s) all types of payments, benefits and privileges granted to these persons.	☐ Compliant ☐ Partially compliant ☑ Non-compliant	The Company formally does not meet Criterion 1, since the Company has no separate internal document – policy on remuneration of members of the Board of Directors, executive bodies, and other key executives of the Company. The decisions adopted by the authorised management bodies of the Company established the amount of remuneration for the Chairman and members of the Board of Directors, chairmen of committees and members of committees of the Board of Directors and the sole executive body, and determined the grounds for bonuses.
4.1.4.	The company determines the policy of reimbursement of expenses (compensation), specifying the list of expenses to be reimbursed, and the level of service which the members of the company's board of directors, executive bodies and other key executives may claim. This policy may be an integral part of the company's remuneration policy.	1. The company's remuneration policy (ies) or other internal documents establish the rules for reimbursement of expenses of the members of the company's board of directors, executive bodies and other key executives.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	The Company partially meets Criterion 1, since the Company does not have a unified remuneration policy. The rules for reimbursing the expenses of members of the Board of Directors are determined based on resolutions of general meetings of the shareholders, and in respect to executive bodies – are determined by the decisions of the Board of Directors of the Company. The rules for reimbursing the expenses of other employees of the Company are established by the decisions of the authorised management bodies of the Company.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
4.2.	**The remuneration system for the members of the board of directors ensures that the financial interests of the directors are aligned with the long-term financial interests of the shareholders.**			
4.2.1.	The company pays a fixed annual remuneration to the members of the board of directors. The company does not pay remuneration for participation in specific meetings of the board of directors or committees of the board of directors. The company does not apply forms of short-term motivation and additional financial incentives to the members of the board of directors.	1. During the reported period, the Company paid remuneration for the members of the board of directors in accordance with remuneration policy, adopted by the company. 2. During the reporting period, the company did not apply any forms of short-term incentives or additional financial incentives to the members of the board of directors, which depended on the results (indicators) of the company's activities. Payment of remuneration for participation in specific meetings of the board or committees of the board of directors were not carried out.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 formally is not met, since the Company has not adopted a separate internal document – the policy on remuneration. In the reporting period, the Company paid remuneration to the members of the Board of Directors in accordance with the resolution of the General Meeting of the Shareholders of the Company. Criterion 2 is met.
4.2.2.	Long-term ownership of the company's shares mostly contributes to the alignment of the financial interests of the members of the board of directors and the long-term interests of the shareholders. At the same time, the company does not condition the right to sell shares by achieving certain performance indicators, and the members of the board of directors do not participate in option programmes.	1. If the internal document(s) – the company's remuneration policy(ies) stipulate(s) that shares are to be provided to the members of the board of directors, clear rules of ownership of shares by members of the board of directors, aimed at encouraging long-term ownership of such shares, will be adopted and disclosed.	☐ Compliant ☐ Partially compliant ☑ Non-compliant	Criterion 1 is not met, since the Company does not have a unified policy on remuneration, envisaging the provision of Company Shares to members of the Board of Directors.
4.2.3.	The company does not provide for any additional payments or compensation in the event of early termination of powers of the members of the board of directors in connection with the transfer of control over the company or other circumstances.	1. The company does not provide for any additional payments or compensation in the event of early termination of powers of the members of the board of directors in connection with the transfer of control over the company or other circumstances.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
4.3.	**The system of remuneration payable to the members of the company's executive bodies and other key executives provides for the dependence of remuneration on the result of the company's work and their personal contribution to achieving this result.**			
4.3.1.	Remuneration payable to the members of the company's executive bodies and other key executives is determined so as to ensure a reasonable and justified ratio of the fixed part of the remuneration and the variable part of the remuneration depending on the company's performance and the employee's personal (individual) contribution to the final result.	1. During the reporting period, annual performance results indicators approved by the board of directors were used to determine the amount of the variable part of remuneration due to members of executive bodies and other key executives of the company. 2. During the latest assessment of the system of remuneration of members of executive bodies and other key executives of the company, the board of directors (remuneration committee) made sure that the company applies efficient ratio of the fixed and variable parts of remuneration. 3. When determining the amount of remuneration to be paid to members of executive bodies and other key executives of the company, the risks borne by the company are taken into account in order to avoid creating incentives for taking excessively risky management decisions.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	The Company partially meets Criterion 1 in terms of remuneration of key executives, since the Board of Directors did not approve list of persons belonging to the category of key executives of the Company. The annual performance indicators approved by the Board of Directors were taken into account in determining the variable remuneration of the General director of the Company. The Company does not meet Criterion 2, since during the reporting period, the Board of Directors did not assess the effectiveness of the ratio of the fixed part of remuneration and the variable part of remuneration of the members of executive bodies and other key executives of the Company. The Company does not meet Criterion 3, since the Company has no established rules for determining the level of remuneration commensurate with the risks that the Company may incur as a result of management decisions.
4.3.2.	The company implemented a long-term incentive programme for the members of the company's executive bodies and other key executives using the company's shares (options or other derivative financial instruments, the underlying asset of which is the company's shares).	1. In case, the company implemented a long-term incentive program for the members of the company's executive bodies and other key executives using the company's shares (financial instruments based on the company's shares), the program provides that the right to sell such shares and other financial instruments arises no earlier than three years after the date of their provision. At the same time, the right to sell shares is conditioned by the achievement of certain performance indicators by the company.	☐ Compliant ☐ Partially compliant ☑ Non-compliant	The Company does not have existing long-term incentive programs, they were terminated in accordance with the terms of the respective plans. The feasibility of introducing new programs is assessed by the Company.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
4.3.3.	The amount of compensation (the "golden parachute") paid by the company in the event of early termination of powers to the members of the executive bodies or key executives at the initiative of the company and in the absence of unfair actions on their part does not exceed the double amount of the fixed part of the annual remuneration.	1. The amount of compensation (the "golden parachute") paid by the company in the event of early termination of powers to the members of the executive bodies or key executives at the initiative of the company and in the absence of unfair actions on their part did not exceed the double amount of the fixed part of the annual remuneration in the reporting period.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
5.1.	**The company established an effective risk management and internal control system aimed at providing reasonable confidence in achieving the company's goals.**			
5.1.1.	The company's board of directors determined the principles and approaches to the organisation of the risk management and internal control system at the company.	1. The functions of the company's various management bodies and business units in the risk management and internal control system are clearly defined in the company's internal documents/relevant policy approved by the board of directors.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
5.1.2.	The company's executive bodies ensure the establishment and maintenance of the effective risk management and internal control system in the company.	1. The company's executive bodies ensured the distribution of responsibilities, powers and liability in relation to risk management and internal control among the heads of business units and departments accountable to them.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
5.1.3.	The company's risk management and internal control system ensures an objective, fair and clear view of the current state and prospects of the company, the integrity and transparency of the company's reporting, and the reasonableness and acceptability of the risks taken by the company.	1. The company approved the anti-corruption policy. 2. The company has arranged for secure, confidential and accessible means (hotline) of notifying the board of directors or the audit committee of the board of directors about violations of the laws, internal procedures, and the company's code of ethics.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
5.1.4.	The company's board of directors takes the necessary measures to ensure that the company's risk management and internal control system complies with the principles and approaches to its organisation determined by the board of directors and effectively functions.	1. During the reporting period, the board of directors (the audit committee and (or) risk committee (if any)) organized an assessment of the reliability and effectiveness of the company's risk management and internal control system. 2. During the reporting period the board of directors reviewed the results of the assessment of the reliability and effectiveness of the company's risk management and internal control system and the information on results of review were included in the company's annual report.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
5.2.	**The company organises conducting of an internal audit for a systematic independent evaluation of the reliability and effectiveness of the risk management and internal control system and corporate governance practices.**			
5.2.1.	The company established a separate structural unit or engaged an independent external organisation to conduct an internal audit. The functional and administrative accountability of the internal audit unit are differentiated. The internal audit unit is functionally subordinate to the board of directors.	1. In order to conduct an internal audit, the company established a separate structural internal audit unit that is functionally accountable to the board of directors, or engaged an independent external organisation with the same principle of accountability.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
5.2.2.	The internal audit unit evaluates the effectiveness of the internal control system, assesses the reliability and effectiveness of the risk management and internal control system, as well as assesses the corporate governance system, applies generally accepted standards of internal audit.	1. In the reporting period, the reliability and effectiveness of the risk management and internal control system was assessed as part of the internal audit. 2. In the reporting period, internal audit assessed corporate governance practices (individual practices), including information interaction procedures (including those related to internal control and risk management) at all management levels of the company, as well as interaction with related parties.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	
6.1.	**The company and its activities are transparent to shareholders, investors and other concerned parties.**			
6.1.1.	The company developed and implemented an information policy that ensures effective information interaction between the company, shareholders, investors and other concerned parties.	1. The company's board of directors approved the company's information policy developed subject to the recommendations of the Russian CG Code. 2. During the reporting period, the board of directors (or one of its committees) considered issues related to effectiveness of informational interaction between the company, its shareholders, investors and other related parties, and the feasibility (necessity) of revision of information policy of the company.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is partially met. Prior to the Registration Date, the Board of Directors approved the communication policy of the Company, which ensures effective communication between the Company, shareholders, investors and other concerned parties. At the same time, the Russian CG Code was not applicable to the Company prior to the Date of Registration. Criterion 2 is not met by the Company. The Board of Directors of the Company did not consider this issue.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
6.1.2.	The company discloses information on the corporate governance system and practices, including detailed information on compliance with the principles and recommendations of the Russian CG Code.	1. The company discloses information on the company's corporate governance system and the general principles of corporate governance applied by the company, including by disclosure on the company's website. 2. The company discloses information on the members of the executive bodies and the board of directors, the independence of the members of the board of directors and their membership in the committees of the board of directors (in accordance with the definition of the Russian CG Code). 3. If there is a person controlling the company, the company publishes a memorandum of the controlling person regarding the plans of this person in relation to the company's corporate governance.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	The Company fully meets Criteria 1 and 2. The Company does not meet Criterion 3, since there is not any controlling entity's memorandums regarding the plans of the controlling entity in relation to corporate governance in the Company.
6.2.	**The company timely discloses complete, up-to-date and reliable information on the company in order to enable the company's shareholders and investors to make informed decisions.**			
6.2.1.	The company discloses information in accordance with the principles of regularity, consistency and efficiency, as well as availability, reliability, completeness and comparability of disclosed data.	1. The company has established a procedure that ensures coordination of the work of all structural subdivisions and employees of the company who are related to information disclosure or whose activities may result in the need to disclose information. 2. If the company's securities are traded in foreign organised markets, the material information is disclosed in the Russian Federation and in such markets on a synchronous and equivalent basis during the reporting year. 3. If foreign shareholders own a substantial number of shares in the company, then during the reporting year, the information was disclosed not only in Russian, but also in one of the most commonly used foreign languages.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
6.2.2.	The company avoids a formal approach by disclosure of information and discloses material information on its activities, even if the disclosure of such information is not provided for by law.	1. The company's information policy defines approaches to the disclosure of information about other events (actions) that have a significant impact on the price or quotation of its securities, the disclosure of which is not required by law. 2. The company discloses information on the company's capital structure in accordance with Recommendation 290 of the Russian CG Code in the annual report and on the Company's website in the Internet. 3. The company discloses information on the controlled entities, which are significant for it, including the key areas of their activities, mechanisms ensuring accountability of the controlled entities, the authority of the company's board of directors to determine the strategy and assess the results of the controlled entities' activities. 4. The company discloses a non-financial report – a sustainability report, environmental report, corporate social responsibility report or other report containing non-financial information, including factors related to the environment (including environmental factors and factors related to climate change), society (social factors) and corporate governance, except for the issuer of equity securities and the company's annual report.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 formally is not met. Approaches to the disclosure of information about other events (actions) that have a significant impact on the price or quotations of its securities are set forth in the internal documents at the Group level. The Company discloses information in accordance with the applicable requirements of the Russian Federation regulation and the HKSE Listing Rules. The company partially meets Criterion 2, as in the reporting period the company disclosed information on the capital structure in the Annual Report and on the Company's website, in accordance with the applicable requirements. The Company partially meets Criterion 3. The Company discloses information on controlled entities that are material to the Company in accordance with applicable requirements. The Company fully meets Criterion 4.
6.2.3.	The annual report, being one of the most important tools for information interaction with the shareholders and other concerned parties, contains information that allows to evaluate the company's annual performance.	1. The company's annual report contains information on results of assessment of effectiveness of external and internal audit process, conducted by the audit committee. 2. The company's annual report contains information on the company's policy in environmental protection and social policy.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
6.3.	**The company provides information and documents as requested by the shareholders in accordance with the principles of equal and unhindered access.**			
6.3.1.	Exercise by shareholders of their right of access to the company's documents and information is not unreasonably difficult.	1. The company's information policy (internal documents, defining informational policy) defines an unhindered procedure for providing by the shareholders' requests access to information and the company's documents, including information on legal entities controlled by the company, as requested by the shareholders. 2. The information policy (internal documents, defining the information policy) contains provisions stipulating that if a shareholder requests information on organizations controlled by the company, the company shall make the necessary efforts to obtain such information from the relevant organizations controlled by the company.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is partially met. The Company's Communication policy, which was approved by the Board of Directors prior to the Registration Date, defines an unhindered procedure for providing shareholders with access to information. Currently, the Company provides shareholders with access to information in accordance with the Charter. Criterion 2 is not met. The Company's Charter, approved by more than 90% of the votes of shareholders, contain a list of documents to which the Company provides access at the request of any shareholder.
6.3.2.	When the company provides information to its shareholders, a reasonable balance is ensured between the interests of specific shareholders and the interests of the company itself, which is interested in maintaining the confidentiality of important commercial information that may have a substantial impact on its competitiveness.	1. During the reporting period, the company did not refuse to satisfy the shareholders' requests for information, or such refusals were reasoned. 2. In cases defined by the company's information policy, the shareholders are warned about the confidential nature of the information and assume the obligation to maintain its confidentiality.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	The Company meets Criterion 1. The Company does not meet Criterion 2, since the cases in which shareholders are warned about the confidential nature of information and assume the obligation to maintain its confidentiality are not defined in the Company's communication policy. Nevertheless, clause 5.5.3 of the Charter stipulates that the shareholders of the Company are obliged to comply with the confidentiality regime with respect to the Company's information that constitutes a trade secret.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
7.1.	**Actions that significantly affect or may affect the structure of the company's share capital and its financial condition and, accordingly, the position of its shareholders (substantial corporate actions) are carried out on fair terms that ensure compliance with the rights and interests of the shareholders, as well as other concerned parties.**			
7.1.1.	Substantial corporate actions include the following: reorganisation of the company, acquisition of 30 percent or more of the company's voting shares (takeover), substantial transactions, increase or decrease in the company's registered capital, listing and delisting of the company's shares, as well as other actions that may lead to a substantial change in the rights of the shareholders or violation of their interests. The company's charter define a list (criteria) of transactions or other actions that are substantial corporate actions, and consideration of such actions is within the competence of the company's board of directors.	1. The company's Charter defines the list (criteria) of transactions or other actions that are substantial corporate actions. Making decisions on substantial corporate actions falls within the competence of the board of directors and it is stipulated in the company's charter. In those cases where the implementation of these corporate actions is directly referred by law to the competence of the general meeting of shareholders, the board of directors provides the shareholders with appropriate recommendations.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	The Company partially meets Criterion 1, since the Charter does not provide for the concept of 'substantial corporate actions'. However, most of the substantial corporate actions listed in the Russian CG Code fall within the competence of the General meeting of shareholders or the Board of Directors of the Company.
7.1.2.	The board of directors plays a key role in making resolutions or making recommendations regarding substantial corporate actions, and the board of directors relies on the position of the company's independent directors.	1. The company provides for the procedure under which independent directors declare their position on substantial corporate actions before their approval.	☐ Compliant ☐ Partially compliant ☑ Non-compliant	The Company formally does not meet Criterion 1, since the Company formally does not have a separate procedure for the independent directors to declare their position on substantial corporate actions prior to ther approval. At the same time, the independent directors play a key role in all resolutions of the Board of Directors as 8 out of the 14 members of the Board of Directors are independent directors.

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
7.1.3.	When carrying out substantial corporate actions affecting the rights and legitimate interests of the shareholders, equal conditions are ensured for all shareholders, and if statutory mechanisms to protect shareholder rights are not sufficient, additional measures are provided for the protection of the rights and legitimate interests of the shareholders. In this case, the company is guided not only by compliance with the statutory formal requirements but also by the corporate governance principles set out in the Russian CG Code.	1. The company's charter, taking into account the specifics of the company's activities, refers to the competence of the board of directors approval of transactions, inter alia those provided for by law, which were material for the company. 2. During the reporting period, all substantial corporate actions were approved prior to their implementation.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	The Company partially meets Criterion 1. Due to the fact that the Company was registered as an international company in accordance with the procedure stipulated by the Federal Law No. 290-FZ of 03.08.2012 "On International Companies and International Funds" the provisions of Jersey law and the HKSE Listing Rules are applicable to the Company. Despite the fact that the Company is not subject to the provisions of the JSC Law on approval of interested-party transactions and major transactions, the Charter stipulates that consideration of transactions amounting up to USD75 mln to which the Company is a party, as well as consideration of any transactions of the members of the Company's Group that are recognized as connected transactions in terms of the HKSE Listing Rules is within the authority of the Board of Directors. Criterion 2 is not met on formal grounds, since the Company's Charter do not provide for the concept of "substantial corporate actions".
7.2.	**The company ensures the procedure for implementing substantial corporate actions that allows its shareholders to receive full information on such actions in a timely manner, provides them with the opportunity to influence the implementation of such actions, and guarantees compliance and an adequate level of protection of their rights when implementing such actions.**			
7.2.1.	Information on the substantial corporate actions is disclosed with an explanation of the reasons, conditions and consequences of such actions.	1. In case, during the reporting period, there were substantial corporate actions, the company disclosed detailed information on these actions in a timely and detailed manner, including the causes and conditions of realization of such actions, and consequences for the shareholders.	☑ Compliant ☐ Partially compliant ☐ Non-compliant	

No.	Corporate governance principles	Criteria for evaluating compliance with the corporate governance principle	Status of compliance with the corporate governance principle	Comments
7.2.2.	The rules and procedures related to the company's substantial corporate actions are set out in the company's internal documents.	1. The company's internal documents determine events and procedure for engaging an appraiser to determine the value of property to be disposed of or acquired under a major transaction or a interested-party transaction. 2. The company's internal documents provide for the procedure for engaging an appraiser to assess the cost of the acquisition and buyback of the company's shares. 3. In the absence of formal interest of a member of the board of directors, sole executive body, member of collegial executive body of a company or a person who is a controlling person of a company or a person having the right to give instructions binding for a company, in transactions of a company, but in case of presence of conflict of interests or their other actual interest, internal documents of a company stipulate that such persons shall not participate in voting on approval of such transaction.	☐ Compliant ☑ Partially compliant ☐ Non-compliant	Criterion 1 is not applicable to the Company, the Company meets criterion 2 partially, since the Company is not subject to the provisions of the JSC Law regarding the approval of interested-party transactions and major transaction, as well as buyback of shares at the shareholders' request. However, internal documents and procedures stipulate the need to engage an independent appraiser (independent financial advisor) to carry out the required evaluations. Internal documents regulate an extended list of grounds on which persons are recognized as related parties to the Company's transactions. Meanwhile, the provisions of the JSC Law regarding the approval of interested-party transactions are not applicable for the Company. Criterion 3 is met.

INFORMATION ON THE COMPANY

UNITED COMPANY RUSAL, INTERNATIONAL PUBLIC JOINT-STOCK COMPANY

俄鋁

(Incorporated under the laws of Jersey with limited liability and continued in the Russian Federation as an international company)

BOARD OF DIRECTORS

Executive Directors

Mr. Evgeny Kuryanov

Mr. Evgenii Nikitin (General Director)

Mr. Evgenii Vavilov

Non-executive Directors

Mr. Vladimir Kolmogorov

Mr. Marco Musetti

Mr. Vyacheslav Solomin

Independent non-executive Directors

Mr. Christopher Burnham

Mr. Nicholas Jordan

Mr. Randolph N. Reynolds

Mr. Kevin Parker

Dr. Evgeny Shvarts

Ms. Anna Vasilenko

Mr. Dmitry Vasiliev

Mr. Bernard Zonneveld (Chairman of the Board)

REGISTERED OFFICE IN RUSSIA

Office 410, 8, Oktyabrskaya street,

Kaliningrad region,

Kaliningrad 236006,

Russian Federation

PLACE OF BUSINESS IN HONG KONG

3806 Central Plaza

18 Harbour Road

Wanchai Hong Kong

HONG KONG COMPANY SECRETARY

Ms. Aby Wong Po Ying

3806 Central Plaza

18 Harbour Road

Wanchai Hong Kong

AUDITORS

Ernst & Young LLC (which was subsequently renamed to TSATR – Audit Services LLC with effect from 12 April 2022)

Public Interest Entity Auditor recognised in accordance with the Financial Reporting Council Ordinance

Russian Federation, 115035, Moscow, Sadovnicheskaya naberezhnaya, 77, building 1.

AUTHORISED REPRESENTATIVES

Mr. Evgenii Nikitin

Ms. Aby Wong Po Ying

Mr. Eugene Choi

PRINCIPAL SHARE REGISTRAR

Joint Stock Company "Interregional Registration Center"

Podsosensky pereulok, 26, str.2, Moscow, 105062, Russian Federation

HONG KONG BRANCH SHARE REGISTRAR

Link Market Services (Hong Kong) Pty Limited

Suite 1601, 16/F., Central Tower

28 Queen's Road Central

Hong Kong

AUDIT COMMITTEE MEMBERS

Mr. Kevin Parker (chairman)

Ms. Anna Vasilenko

Mr. Dmitry Vasiliev

Mr. Bernard Zonneveld

CORPORATE GOVERNANCE AND NOMINATION COMMITTEE MEMBERS

Mr. Dmitry Vasiliev (chairman)

Mr. Christopher Burnham

Mr. Randolph N. Reynolds

Mr. Bernard Zonneveld

REMUNERATION COMMITTEE MEMBERS

Mr. Nicholas Jordan (chairman)

Mr. Randolph N. Reynolds

Ms. Anna Vasilenko

Mr. Dmitry Vasiliev

INVESTOR RELATIONS CONTACT

Moscow

IR team

1 Vasilisy Kozhinoy str. Moscow 121096

Russian Federation

InvestorRelations@rusal.com

Hong Kong

Karen Li Wai-Yin

Suite 3301, 33rd Floor,

Jardine House

1 Connaught Place

Central

Hong Kong

Karen.Li@rusal.com

COMPANY WEBSITE

www.rusal.com

APPROVAL OF THE REPORT

This Annual Report was preliminary approved by the Board of Directors of the Company on 18 April 2022 (Minutes No. 220401 dated 18 April 2022). In accordance with the requirements of the Hong Kong Stock Exchange, the annual report must be published by 30 April 2022 (subject to clause 35.5 of the Company's Charter). Approval of the Annual Report by the General Meeting of Shareholders is scheduled for June 2022 (the final date of the meeting will be disclosed in due course).

RUSAL

REACHING BALANCE

ANNUAL REPORT 2021