Committed to the green economy

En+ GROUP

ANNUAL REPORT 2020

"In this unprecedented year, we have remained committed to our vision for a green economy and low-carbon future. A future where innovation creates products for tomorrow, energy is cleaner and where symbiosis drives cost leadership."

Rt Hon Lord Barker of Battle,
Executive Chairman

For more on sustainability
please visit our webpage at www.enplusgroup.com/en/sustainability/

We are committed to...

Aluminium for tomorrow

Generating clean energy

Protecting our people

Driving cost leadership

Strategic report

Corporate Governance

Financial statements

Appendix

Appendices

(provided as a separate document)

We are committed to...

Aluminium for tomorrow

Aluminium is a major contributor to the transition towards a low-carbon future. En+ is leading the way and contributing to the green economy with its products.

x3

times more recycling by 2050 according to the International Aluminium Institute (IAI)

150m

By 2050, the IAI expects the world demand for aluminium to exceed 150 million tonnes from the current 60 million

What we are doing

We are the world's largest producer of low-carbon aluminium. Aluminium is considered to be the material of the future as it has a tremendous potential to become a key material of a carbon-neutral and circular world. Aluminium is a game changer for the automotive industry, supporting the rise of electric and autonomous vehicles, and resulting in enhanced fuel savings and safety. The material also plays a vital role in the fast-evolving sustainable construction sector and green buildings. It is a key material for the healthcare sector, from medical equipment and oxygen bottles to drug packaging. Moreover, its hygienic properties and the need to drastically reduce the use of plastics increase the already important role of aluminium in the packaging and beverage industries. En+ Group remains strongly committed to leading the 'hard to abate' aluminium industry into the green economy via nine key initiatives, stated in the Group's Green Aluminium Vision published in July 2020.

How this contributes to a green economy

We lead the way to decarbonisation with our 'low-carbon' aluminium products, ALLOW, that help customers achieve emissions reduction targets and contribute to more transparent climate disclosure. Aluminium is widely recycled, making it a 'greener' material, and supporting global sustainability efforts. Its lightness and high recyclability contribute to reducing the carbon footprint of entire value chains and to scaling up the circular economy model. To lead the industry into the low-carbon economy, we aim to develop a new asset class of 'Green Aluminium' – a strategic material for a future-proof sustainable economy which includes low-carbon primary aluminium and recycled aluminium. We actively engage in the global discussion around the future of the aluminium industry and the growing demand for low-carbon aluminium, and are supporters of the London Metal Exchange's (LME) platform for the implementation of mandatory reporting on carbon emissions.

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Read more about our green vision in our manifesto 'The Green Aluminium Vision'

>98%

of En+ Group aluminium is made with hydropower

-35%

Our commitment is to cut greenhouse gas (GHG) emissions by at least 35% by 2030 (Scopes 1 & 2 against a 2018 baseline)

What we are doing

Our Power segment operates the largest and most cost-efficient network of power plants in the Siberian region, which allows us to efficiently and reliably cater to our core clients in Siberia, including the largest smelters operated by En+'s own Metals segment. This also allows the Group to engage in all major areas of the Russian power industry and makes En+ the largest independent hydropower producer globally.

Our Power segment is also investing in R&D in the power generating sector, including the development of new types of perovskite-based solar panels. We continuously undertake investment projects to improve the reliability and safety of the Group's hydropower plants, and increase the amount of energy produced from the same volumes of water passing through the hydropower turbines.

How this contributes to a green economy

Hydropower produces roughly 70% of all renewable electricity worldwide. Hydropower plants do not emit CO_2 in the atmosphere and help reduce greenhouse emissions, making it a carbon-free source of energy. We use this clean energy source to produce low-carbon and recyclable aluminium – ALLOW – with a certified carbon footprint. The latest IEA forecasts to 2023 project that hydropower will remain the largest source of renewable electricity, followed by wind and solar.

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We are committed to...

Generating clean energy

Hydropower generates the largest share of clean energy worldwide. En+ supports this energy transition and maintains its leading position as an independent hydropower producer.

We are committed to...

Protecting our people

Our global workforce is at the heart of what we do. Our success depends on building an inclusive and diverse environment where our employees can thrive.

c. 27%
female representation in 2020

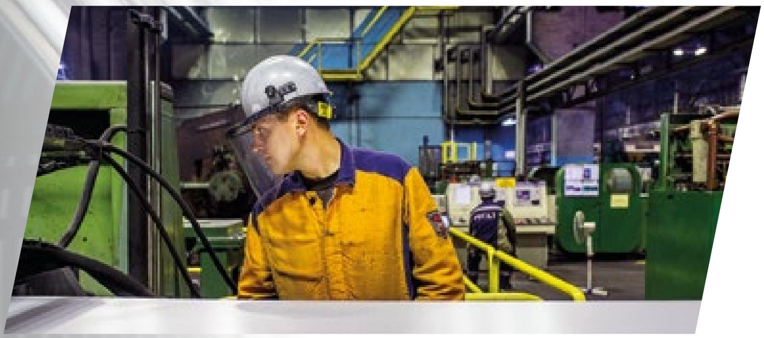
c. 90,000
total number of employees

What we are doing

En+ Group is one of the largest employers in Russia, as well as in other countries where the Group operates large industrial complexes, including Jamaica, Ireland and Guinea. The Company currently employs nearly 90,000 people across two business segments in 12 countries. We seek to build a diverse workforce and are constantly striving to build an inclusive environment. We make every effort to create a fair working environment, provide equal employment opportunities and reward excellent performance. The Group has personnel training and development systems in place. The entire training system focuses on the development of professional skills, meeting high standards, ensuring safety and pioneering long-term technological development in the industry. The Company aspires to attract the best talent, enhance their professional skills and provide them with a variety of high-quality training tools and programmes.

How this contributes to a green economy

By developing the competencies and leadership skills of our employees, we are creating leaders of the future. We comply with relevant legal obligations across host jurisdictions for people with disabilities, providing all our employees with the appropriate working conditions. We respect individual freedoms and human rights, provide equal opportunities to all employees and do not tolerate any form of discrimination or child labour. To this end, the Company respects all labour laws and contractual obligations to its employees. En+ Group adheres to the Russian Labour Code and the Russian Constitution and pledges to combat child labour and provide human rights protections to all. The Company has drawn up a comprehensive set of corporate documents to regulate ethical compliance.



p. 79 Our people

18%

Industry leading adjusted EBITDA margin (37% adjusted EBITDA margin in the Power segment, 10% adjusted EBITDA margin in the Metals segment)

c. 80%

self sufficiency in bauxites and nephelines; over 100% self sufficiency in alumina

What we are doing

The symbiosis of the Power and Metals segments ensures our cost leadership position and allows us to maintain cash flow resilience. Cost control focus is one of our strategic objectives and En+ runs ongoing cost optimisation initiatives across the Group. The Group's reliance on hydropower provides for exceptional financial efficiency. The combination with thermal power generation supports the fundamentals of En+ Group, providing additional revenue streams. Our Metals segment is among the three most cost-effective aluminium producers in the world, with RUSAL continuing to implement a comprehensive programme designed to control costs and optimise the production process. Costs in the Metals segment are minimised through long-term power and transport contracts, and by achieving full bauxite and nepheline self-sufficiency in the medium term. In-house R&D, engineering and design capabilities enable the Metals segment to develop new technologies that help to streamline production and cut capital and operation costs. Cost efficiency enables En+ to achieve better EBITDA margins, in line with leading levels for the industry globally.

How this contributes to a green economy

A substantial degree of vertical integration provides En+ Group with significant advantages and additional sources of growth. It also supports the Group's longer-term vision of a low-carbon world. Our investments in the modernisation of hydropower plants and environmental upgrades of our Metals segment's facilities further support a sustainable economy. From a commercial perspective, this means En+ Group is actively engaging in the global discussion around the future of the aluminium industry and the growing demand for low-carbon aluminium.

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We are committed to...

Driving cost leadership

Symbiosis of the Power and Metals segments of the En+ business ensures a cost leadership position for the Group and provides cash flow resilience.

Powering the future

Uniquely placed to drive the low-carbon economy of the future.

"We are doubling down on our commitment to a more sustainable economy."

Rt Hon Lord Barker of Battle,
Executive Chairman

Shaping the future of green aluminium

Our Green Aluminium Vision sets out our commitment to leading our industry into the green economy via nine key initiatives. These aim to continuously improve the status of aluminium as an environmentally friendly and climate-resilient material of the 21st century and represent our vision of aluminium as the right metal for a carbon-neutral and circular world. The initiatives which will enable the Green Aluminium Vision are:

1. Emissions reduction
2. 'Low-carbon' aluminium branding
3. Carbon footprint transparency
4. Circularity
5. Sustainability labelling
6. Liberalisation of trade in 'low-carbon' primary aluminium
7. Elimination of excess capacity to ensure fair and green trade
8. Facilitation of research and development
9. Support to a renewed multilateralism

Dear shareholders,

For all of us, 2020 was a testing and challenging year. At the En+ Group we have long benefited from the resilience of our vertically integrated business model, but 2020 was an extraordinary testament to the resilience of our outstanding employees, both in Russia and right around the world.

Safeguarding our employees, customers and communities was our number one priority during the year. I will explain in more detail the actions we took, but first I will highlight our strong business performance in 2020.

In a year of exceptional uncertainty caused by COVID-19, our Company demonstrated robust operational results against a backdrop of volatile prices and fluctuating economic trends. We benefited from our continuing strategic investment programme which reinforces our position as a global leader in low-carbon aluminium production and hydropower generation. Our commitment to lead the aluminium industry into the low-carbon economy, together with our world-class corporate governance, our focus on health & safety and our constant drive to improve efficiency, helped the En+ Group continue to enhance its appeal to investors and wider stakeholders.

Solid foundations provide strength in a challenging year

Challenging conditions and economic restrictions as a result of the pandemic impacted the Group's markets across the globe. New outbreaks and increasing numbers of cases stifled recovery trends, affecting our customers' businesses and leading to sharp movements in both demand and prices for aluminium. However, our Group's business model, our unique asset base and the efficiency of our operations meant we had solid foundations from which to face this turmoil. Meanwhile, crisis mitigation plans swiftly implemented by our leadership team successfully prevented any material impact by COVID-19 on the Group's operations.

During the year our Power segment increased low-carbon power generation at its HPPs due to favourable hydrological conditions. Aluminium production remained stable and we maintained effectively full production capacity utilisation. As well as our foundational strengths, we benefited from new and innovative approaches to marketing which led to better geographical diversification of sales and a high proportion of value-added products.

Our people and our communities

The Group has almost 90,000 employees across four continents and I am grateful to every single one of them for rising to the challenge of the last year. Their commitment, skills and resilience have supported and carried the Company through these difficult times and their flexibility and ingenuity has enabled us to continue to work efficiently and successfully.

The welfare of our En+ family was paramount as the pandemic emerged during the year. Among our first steps was to move more than 15,000 office-based staff to work from home. For those essential employees whose roles meant they could not work remotely, strict health and sanitation measures were implemented which complemented and enhanced our existing stringent health and safety protocols.

We also took very seriously our duty to the wider communities and regions in which we operate across the globe. We delivered food parcels to more than 16,000 elderly and retired employees in Russia and provided funding for healthcare services in Irkutsk where we provided medical equipment and PPE to seven hospitals, healthcare institutions and social services. In Kindia, Guinea we converted the Centre for Epidemic and Microbiological Research and Treatment into the country's first specialist COVID-19 diagnosis and treatment centre.

I am proud of the bravery and achievements of our people during an unprecedented year and thank them for all they have done. I am also proud that En+ Group was able to show such strong corporate purpose, reflecting our belief that responsible businesses are vital to achieving a stronger and more sustainable world. And I send my own sincere condolences to all employees, stakeholders and members of their families who have lost loved ones to this terrible pandemic.

Corporate governance to the fore

For a business to be responsible it must also adhere to the highest standards of corporate governance. It must act for the benefit of all stakeholders in a transparent and open manner.

'Build back better' was a major theme in 2020, and one which we fully endorse. Countries and responsible businesses are motivated more than ever to take action that will look after our planet after the pandemic. Collaboration of all types will be increasingly important to drive sector and industry progress towards meeting the Paris climate targets. In 2020 I signed the United Nations Global Compact (UNGC) backed CEO statement on 'Uniting Business and Governments to Recover Better', the largest ever UNGC backed climate advocacy initiative to urge governments to match private sector ambitions and commit to a net zero recovery from COVID-19.

The En+ Group also led a proactive campaign for low-carbon aluminium to help power Europe's COVID-19 recovery package and the European Union's climate transition strategy, which is threatened by the use of dangerously polluting high-carbon metals.

We are working hard engaging with regulators and other key decision makers in major aluminium markets to take measures that will incentivise producers to reduce the carbon footprint of their metals. I am proud that we are setting a new standard in this respect.

In January 2021 En+ Group announced its ambition to become net zero by 2050 and to reduce greenhouse gas (GHG) emissions by at least 35% by 2030. We believe those are the boldest carbon reduction targets yet seen in the global aluminium industry. This is our contribution to helping turn the tide on climate change. Greater transparency across the sector would further support this; empowering metals consumers and even end-product purchasers to choose, and drive demand for, products made with sustainably produced metals. To have a real impact, net zero strategies must drive right the way down supply chains.

The past year has taught us to never take anything for granted. But, during that time the performance of the En+ Group has been considerable and again, I thank all our people who have made that possible. We will continue to invest in world-beating research and development, improve the efficiency and productivity of our assets, innovate, and identify new markets. The work we have done in the last year has further strengthened our foundations and positioned us for future growth.

Having undergone comprehensive restructuring and updated its governance, En+ Group has proven its commitment to world class corporate governance standards, having a clear majority of Board positions occupied by highly experienced independent non-executive directors. Their exceptional guidance and counsel has proven invaluable during the last year and I am grateful for all their work.

Very sadly, one of our colleagues, Independent Non-Executive Director Dr Igor Lojevsky, lost his life to the pandemic during the year. He is greatly missed by all those of us who were privileged to know him.

During the year the Company moved to simplify its ownership structure with an innovative transaction which saw it acquire VTB Group's stake in En+ Group. We believe this action, together with the final completion of Glencore securities swap, which also happened in early 2020, further enhances the Company's attractiveness as an investment. The acquisition of shares from VTB also provides us with greater strategic optionality, subject to market conditions, to increase En+ Group's free float, thereby broadening institutional ownership and improving trading liquidity.

I am pleased that throughout 2020, and despite the challenges of remote working and travel restrictions, we maintained strong engagement with our stakeholders, including our customers, industry partners and also our investors. We continued to be recognised by ESG ratings agencies for both our sustainable business and approach, and our transparency – our Metals business receiving the top 'A' rating from CDP in December in recognition of climate risk mitigation across our entire supply chain was a particular highlight.

A leader of the low-carbon economy

As well as striving to ensure our own operations are as green and efficient as possible, En+ Group has a mission to lead its industry in sustainability and help drive the world towards a low-carbon future. Low-carbon aluminium is a crucial building block for the low-carbon economy. It is strong, durable, infinitely recyclable and adaptable for a range of industries from packaging and sustainable construction to electric vehicles and renewable energy. As an industry we need to make the transition to the low-carbon economy as simple and compelling as possible for our customers. That is why we have called for comprehensive labelling and universal standards for the carbon footprint of primary aluminium.

During 2020, the London Metal Exchange proposed voluntary disclosure of carbon-related metrics for aluminium and the launching of a new spot trading platform for low-carbon aluminium. While this was an important step forward, we feel the proposals did not go far enough. So we will continue to champion mandatory carbon emission disclosures as the only way to ensure total transparency for buyers.

While there are some encouraging signs that the pandemic is in retreat, with our confidence in the improved outlook for our business reflected in the intention to reinstate dividend payments in 2021, there will inevitably be setbacks and the economic environment will continue to remain volatile as countries around the world plan their post-COVID-19 recovery.

But COVID-19 is not the only challenge. Tackling climate change has never been more important and this year's COP26 summit, which will bring parties together to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change, is a vitally important event to which we will add our voice.

As the world builds back better from COVID-19 En+ Group is uniquely placed – and ready – to provide the materials and energy needed for a sustainable low-carbon recovery, while building and growing value for our shareholders.

Rt Hon Lord Barker of Battle,
Executive Chairman

En+ Group
@EnPlus_Group

En+ Group's sustainability goals are aligned with @sciencetargets and is proud to be a member of Business Ambition for 1.5 @globalcompact
#BuildBackBetter #greenaluminium

Science Based Targets @sciencetargets · 15 Dec 2020
"Under the #ScienceBasedTargets initiative, over 1,000 companies have committed to set emissions reduction targets based on the science, and more than 340 have committed to set #NetZero targets across their operations & value chains." fal.cn/3ceq3 @ecobusinesscom

29 Dec 2020 · Twitter for iPhone

For more tweets visit our Twitter:
En+ Group (@EnPlus_Group) / Twitter

En+ Group
@EnPlus_Group

Pioneering science on its own is not enough to decarbonise the #aluminium industry. #NetZero emissions requires a united front and collaboration w/ stakeholders across the value chain. @FT @ftcommodities from @GregBarkerUK ft.com/content/4c022e... #ClimateAction #netzero2050

Climate change

Decarbonising aluminium will require a united front

The world's largest industrial polluters must transform the way they do business

Aluminium is a key enabler on the path towards a more sustainable economy and a post-Covid 'green' recovery © Reuters

January 20, 2021 5:00 am by **Lord Barker** of Battle

20 Jan 2021 · Twitter for iPhone

En+ Group @EnPlus_Group · 3 Apr
The #aluminium sector can advance the global energy transition by:

- ✅Integrating renewables to produce #aluminum
- ✅Creating a new asset class for low-carbon **aluminium**
- ✅Labelling, transparency
- ✅Free, fair trade
- ✅Multilateralism and collaboration

➡️ enplusgroup.com/upload/iblock/...

Financial Times Live @ftlive · 9 Apr
What will it take to transition the real economy from brown to green?
Join us at #FTMoralMoney to hear more about how corporations can move their climate initiatives from policy to action. Book your ticket here: on.ft.com/3ss3zB1

En+ Group
@EnPlus_Group

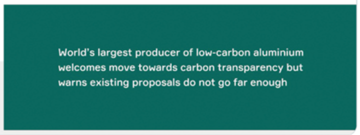
Replying to @EnPlus_Group

En+ Group is calling on the LME to ➡️require the disclosure of carbon content traded on the LME ➡️and on normal trading platforms to encourage widespread adoption ➡️and the creation of a separate low-carbon aluminium futures contract. More: enplusgroup.com/en/media/news/...

23 september, 2020

En+ Group urges London Metal Exchange to go further with sustainability proposals

PRESS RELEASES

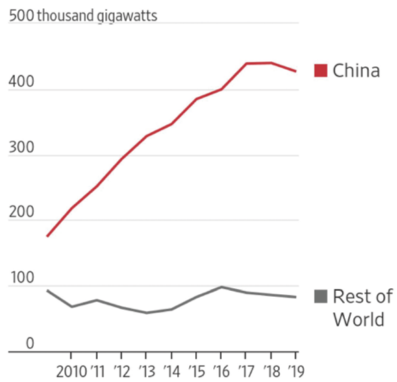


16 Dec 2020 · Twitter Web App

En+ Group
@EnPlus_Group

En+ Group and other producers are working to make #carbonfootprint data available to customers and consumers — and establish a new asset class for low-carbon #aluminium. Read more via @WSJ @WSJbusiness: wsj.com/articles/this-...

Amount of coal-fired electricity generated to produce aluminum



Source: International Aluminum Institute

15 Oct 2020 · Twitter for iPhone

We are committed to becoming a net zero Company by 2050

En+ Group is leading the aluminium industry into the low-carbon economy.

Our ambition

Setting a new standard for the global aluminium industry

Introducing innovative technologies throughout the production chain

Building partnerships to transform the industry together

Addressing and compensating hard-to-abate emissions

These targets cover absolute emissions across all operations including heat and electricity production. En+ Group has set a new standard for one of the 'hard to abate' industries in the global economy – the aluminium industry – and, critically, we support our customers on their own journeys towards emissions reduction.

To cut greenhouse gas (GHG) emissions by at least

35%

by 2030 (Scope 1 & 2 against a 2018 baseline)

2030

To achieve

net zero

GHG emissions by 2050

2050

Transforming the industry together

Our people from across the business speak about the importance of the new commitment.

"Sustainability is core to our business. We're committed to driving down emissions across our operations by 2050 — and know we can achieve #netzero because of the shared ambition of our 90,000 employees in 12 countries around the world!"

Kevin McMahon,
Lead Engineer of the Bauxite RUSAL Disposal Area, Aughinish Alumina, Ireland

"As one of the largest producers of aluminium #netzero2050 will require hard work, investment in science and tech, and modernisation improvements across our entire operations. It won't be easy, but we are ready to take on this challenge — for our people and for the planet!"

Tricia McCatty,
Corporate Environment Engineer, Jamaica

Watch Kevin at twitter.com/EnPlus_Group/status/1353552570418139137

Watch Tricia at twitter.com/EnPlus_Group/status/1359450320997351427

Pathway to net zero

The Climate Change Taskforce[1] will draw on global expertise to develop our detailed pathway to net zero, which we will publish in September 2021

RUSAL's ALLOW average smelter emissions[2]

2.4 t

of CO_2 equivalent per tonne of aluminium in 2019 compared to the industry average of 12.5 t CO_2e/t Al

Commitment to high standards
En+ Group is committed to global corporate governance standards that apply to both the Power and Metals segments.

Upgrade of production assets
The New Energy programme is one of the most ambitious programmes in the range of production asset upgrades that the Group continuously carries out. It will bring the Group's HPP efficiency to the world's best, providing better reliability and quality of the power supplied to Siberian consumers. Additionally, it will have a positive impact on the environment in the Siberian regions and help to mitigate any negative impact on water resources.

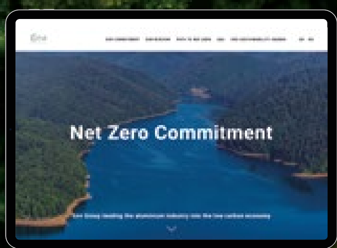
SBTi verification
In September 2019 En+ Group joined the Business Ambition for 1.5°C pledge and committed to science-based emissions reduction targets (or SBT). It is expected that the Metals segment's targets will be verified and approved by the SBTi by August 2021.

Partnerships
We work in partnership with stakeholders, including business and industrial associations, peer companies at all levels to stimulate the global transition to the low-carbon economy. The Group collaborates through its entire supply chain to extend the partnerships beyond technical cooperation on the quality to sustainability and decarbonisation.

Research & Development
RUSAL's innovative 'inert anode' technology is one of En+ Group's key scientific developments. Using inert anodes completely eliminates emissions of CO and CO_2, polyaromatic hydrocarbons, benzo(a)pyrene and sulphur from the reduction process. Another positive result of this technology is generating oxygen in the aluminium production process.

Reduction of environmental impact
As one of the leaders in climate action, En+ Group actively implements projects intended to reduce the environmental impact of its own production facilities and decrease air emissions. The Company also adheres to the principles of production transparency, where green certificates and voluntary carbon credits play an important role, as they reflect the environmental value of generated energy for consumers. In December 2020, the Group became the first energy producer and supplier in Russia to participate in the issuance of I-REC International Renewable Energy Certificates.

Renewable energy for aluminium
More than 98% of our aluminium is made using renewable hydropower. En+ Group continuously seeks to minimise its carbon footprint at all stages of its operations and complies with the requirements of ISO 14001, the international standard that sets out the criteria for an environmental management system.



More on our website: netzero.ru/en#agenda

1 To manage our journey to net zero, we have created the En+ Climate Change Taskforce.
2 Level 1 emissions. As defined in the Aluminium Carbon Footprint Technical Support Document (2018).

Driving positive change

Aluminium can offer intrinsic sustainability advantages compared with other materials, offer greenhouse gas emissions benefits and help meet the new generation's demand for low-carbon products. En+ is well-positioned to meet the consumers' demands and provide benefits of the new application of aluminum, driving the positive change for the future.

Where we are

En+ is the world's largest producer of low-carbon aluminium.

>98%

More than 98% of our aluminium is made using renewable hydropower

25%

We are responsible for 25% of the hydropower produced aluminium worldwide

11%

We reduced our GHG emissions of electrolysis operations by 11% in 2020 versus our 2014 baseline

2.4 CO_2/tAl t

We produce our ALLOW brand with 2.4 tonnes of CO_2 emissions per tonne of aluminium (Scope 1&2 smelters only) – 4 times lower than the industry average

USD 525 mn

We've invested USD 525 million in environmental initiatives over the past 5 years

Global demand

En+ partnered with YouGov on a consumer survey[1] to learn about the publics understanding and appetite for low-carbon products. Here's our key findings:

Automotive

- Aluminium's lightweight properties make it ideal for producing energy efficient vehicles
- Lightweight materials are particularly important for electric vehicles, which need to counterbalance the weight of their large batteries
- Low-carbon materials are essential if electric vehicles are to be considered a truly sustainable option.

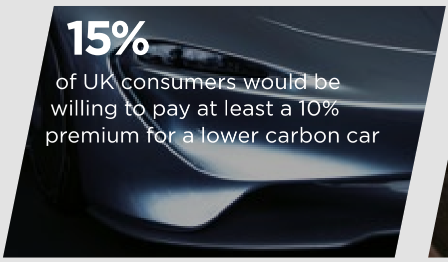
Consumer Goods

- Aluminium's recyclability gives it an important role in the circular economy and can help reduce carbon emissions
- Concerns about waste have increased aluminium demand, 1 in 6 UK consumers would be willing to pay at least a 10% premium for lower carbon household products.

Construction

- Aluminium is the second most commonly used construction material in the world
- Aluminium is a major component of infrastructure around the world, meaning decarbonisation can have a widespread impact.

1 www.enplusgroup.com/en/company/glance/carbon-clarity/



"We are determined to be at the leading edge of what this sector, being one of the hardest to abate, can do to transition to a low-carbon business model."

Joan MacNaughton, Chair of the Health, Safety and Environment Committee

Where we aim to be

En+ has committed to the UNGCs and Science Based Target's Business Ambition for 1.5C and recognises that we need to make major changes to the way we operate.

1.5°C

the Group joined Business Ambition's 1.5°C, committing the business to Science Based Targets on emissions reduction

net zero

to achieve net zero GHG emissions by 2050

-35%

to cut greenhouse gas (GHG) emissions by at least 35% by 2030 (Scopes 1 & 2 against a 2018 baseline)

How we are driving positive change

En+ is calling on the London Metal Exchange to implement mandatory reporting on carbon emissions. Here's why:

A global precedent

As a global exchange, the LME can set an important precedent for carbon disclosure and encourage others such as the Shanghai Futures Exchange and Chicago Metal Exchange to follow suit.

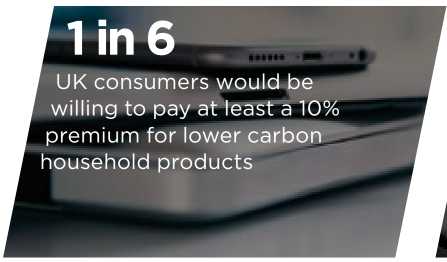
ESG accountability and transparency

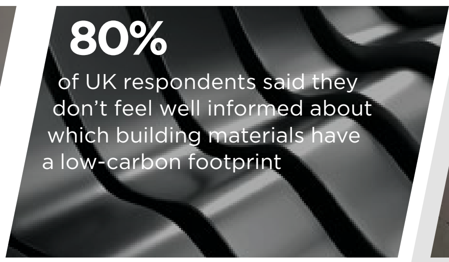
At present, carbon disclosure by aluminium producers occurs voluntarily and on a contract by contract basis. By setting a clear example for the industry, a low-carbon asset class on the LME would increase pressure for systematic carbon reporting not just on the exchange but also in private contacts. For a genuine sustainable industry transformation it is absolutely crucial to move towards certain minimum mandatory disclosures: carbon footprint, source of energy, Aluminium Stewardship Initiative (ASI) certification.

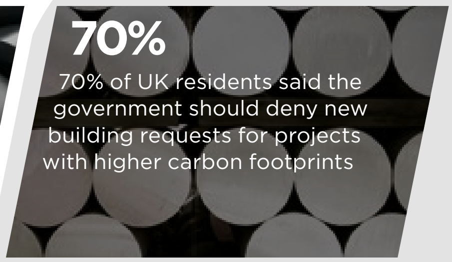
A credible standard for low-carbon

LME disclosure rules and definitions for low-carbon would provide a clear standard for the aluminium producers to meet and would help customers select the most sustainable materials.

p.66 Sustainability review
www.enplusgroup.com/en/company/glance/carbon-clarity/







Aluminium products for the future

En+ Group is the largest producer of low-carbon aluminium globally. We are unique among natural resources companies.

The En+ approach

The pure form of aluminium does not naturally occur in nature, so it remained largely unknown until as recently as 200 years ago. Creating aluminium using electricity was first developed in 1886 and is still used to this day. Today, the Company views its work on innovation as an investment in the future. The Company performs vast research and development activities to introduce environmentally friendly technologies into production cycles to save resources and reduce costs.

Power generation capabilities

In our power generating business, the Group is developing perovskite solar cell technology, a new generation of photovoltaics. We use hydropower from Siberian rivers to create low-carbon aluminium. We promote science-based analysis in order to address the Baikal issues correctly and in the most efficient ways, we joined forces with the leading Russian academics. The collaboration spans from the analysis of the contamination of the lake to creating new forecasting algorithms.

Applications of low-carbon aluminium

Since 2017, RUSAL offers customers ALLOW, its proprietary brand of low-carbon aluminium, crafted with renewable hydropower. ALLOW comes with average carbon footprint of 2.4 t CO_2e/t Al (Scope 1&2, at smelter). This is in line with the evolving market requirement for low-carbon aluminium of no more than 4 t CO_2 eq/t Al, which is several times lower than the global average of around 12.5 t (Scope 1&2, at smelter).

To ensure transparency, every shipment of ALLOW comes with independently verified carbon footprint statements from its smelter of origin, providing full traceability to source for customers.

Allow

www.enplusgroup.com/en/what-we-do/metals-segment/allow/

Power

According to IEA, renewable capacity additions are on track for a record expansion of nearly 10% in 2021. With this soaring growth, cable industry expects increased demand for high and extra-high voltage cable where aluminium is consumed. Europacable estimates this cable demand will reach 90,000 km driving up more than 150 billion investment by 2030. 'Green' aluminium is key to support this upswing in growing 'green' energy capacities, so that they can flow through 'green' cables.

Personal goods

In this segment, leading producers of electronics, beauty products, and other consumer goods, are becoming increasingly mindful of the lifecycle impacts of their products. This segment is tangibly close to the end consumers who become more selective with carbon footprint of the goods they purchase. Personal goods market has seen an upswing of carbon-neutral and environmentally friendly brands linked to corporate carbon neutrality/carbon negative commitments. Being able to measure the footprint of raw materials, including aluminium, is key in this regard.

The advantages of low-carbon aluminium

Abundant
Aluminium is the third most abundant element in the Earth's crust, making up 8%. After iron, it is the most widely used metal in the world.

Infinitely recyclable and durable
Aluminium retains its quality when recycled, making it almost endlessly recyclable without degradation of core properties. Approximately 75% of all the aluminium ever made is still in use.

Lightweight
Aluminium is extremely ductile and weighs a third of steel or copper, making it idea for bodywork of modern vehicles which require lightweight components for energy efficiency.

Conductive and reflective
Aluminium is an effective conductor of both heat and electricity. In relation to its weight, it is twice as conductive as copper and reflects 98% of infrared rays.

Corrosion-resistant and impermeable
Unlike iron which rusts, aluminium oxide sticks to the original metal, shielding it from corrosion. It is also highly impermeable so serves as a barrier for light, aroma, moisture and contamination.

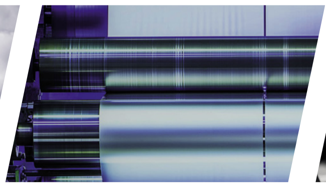
Aluminium refining and production facilities

We are working to develop our inert anode technology, which has the potential to drastically reduce the emissions associated with aluminium production. Inert anodes replace standard carbon anodes with inert, non-consumable materials – ceramics or alloys, which results in a reduction of emissions from the smelting process. Another breakthrough advantage of this technology is the release of oxygen in the process of producing aluminium. One cell using inert anode technology can generate the same volume of oxygen as 70 hectares of forest.

85%
In comparison to full-scope industry average emissions, metal produced with inert anodes has an 85% lower carbon footprint.

+50%
We have already achieved a reduction of greenhouse gas emissions associated with aluminium production of more than 50% compared to 1990 levels.

Aerospace and aviation
Light, strong and flexible, it proved an ideal material for building heavier-than-air aircraft. All modern spacecraft contain from 50% to 90% of aluminium alloys in their parts. Aluminium is used in the body of Space Shuttle vehicles, it is found in the telescopic antenna of the Hubble space telescope; hydrogen tanks used in rockets are made from aluminium, the tips of rockets use aluminium, as well as parts of launch vehicles, orbital stations, the fastening units for solar panels.



Packaging
Light, durable, stackable, resistant to transportation, and – what is most important – almost infinitely recyclable, aluminium is a key enabler of reduced lifecycle impacts in the packaging sector. For example, CAGR in cans market in the next 5 years is set to exceed 2%. Low-carbon footprint and broader ESG credentials of RUSAL's aluminium position our products to support this growth.

Automotive
Aluminium-intensive vehicles have 13% lower life cycle CO_2 emissions VS steel vehicles. Low-carbon aluminium further reduces life cycle emissions by 17%. ALLOW is a reliable partner for the emerging e-mobility and related infrastructure. What's more, there is future potential for aluminium-ion batteries.

Construction
Use of low-carbon aluminium can reduce embodied carbon of buildings by up to 20%. In commercial buildings with traditional structures and aluminium parts made with low-carbon aluminium can reduce footprint by 7%.

Driving change

Our performance in 2020 has only strengthened our confidence in business strategy focused on sustainable development. The balanced development of the Group meets the interests of our employees, shareholders, investors, and the local communities.

800,000

Medical-grade masks donated to hospitals

15,000

Office-based staff moved to work from home

16,000

Elderly and retired employees received food supplies

USD 71 mn

Social investments and charitable projects

"We have been very fortunate in being able safely to maintain our operations at up to full capacity throughout 2020."

Vladimir Kiriukhin,
Chief Executive Officer

Dear shareholders,
2020 has been an incredibly challenging year for the global community and economies across the world as we have lived through unprecedented times of uncertainty with the coronavirus pandemic. At the beginning of the year we saw border closures, we saw our customers shut down certain facilities, and imposed transport restrictions and reduced economic activity threatened the financial and operational performance of our business. Despite this we have remained resilient and continued to demonstrate industry leadership.

Our biggest challenge and our priority throughout the year has been maintaining the safety of our people. The majority of our employees began working remotely from March and I am pleased to say that this relatively seamless transition was supported by our superior IT systems, and also the flexibility and resourcefulness of all of my colleagues, to whom I am very grateful. As we provide energy for homes and businesses across Siberia, it has been essential that our hydropower plants continue to operate; similarly, our smelters cannot be left unattended.

For those colleagues needed to man these operations on site, we established comprehensive systems to ensure they remained safe from infection and that any outbreaks could be safely controlled. We have been very fortunate in being able safely to maintain our operations at up to full capacity throughout 2020.

Whilst taking every measure to keep our workforce safe, we also recognised our commitment to our customers and worked very hard to maintain deliveries to our sales markets across the world throughout this time.

A resilient performance in challenging times
I am proud to say that despite the numerous challenges related to the pandemic, En+ Group delivered a solid performance for the year. Our aluminium production remained stable and we increased sales of value-added products by 11% as compared to a year ago. The Power segment increased electricity output by 6%, and our HPP output increased by 8%. Our fully vertically-integrated model proved its resilience, and we continued to benefit from the combination of our unique

asset base, our integrated business model and operational excellence. In spite of the exceptional circumstances, we were able to maintain our leading position as the world's largest producer of low-carbon aluminium.

In response to the challenging market environment caused by COVID-19, the Metals segment successfully adjusted its sales mix, with a material increase in sales to geographies where demand was stronger, and an increase in VAP sales to 44% of total sales, accompanied by an 8% increase in realised premiums. The end of 2020 was marked by a recovery in global aluminium demand, with a positive impact on aluminium prices. Aluminium prices ended the year above $2,000/t, compared to an LME average price of $1,702/t over 2020.

Continuing to invest for the sustainable future

We also continued to make progress in key strategic areas, including investments to improve the efficiency and environmental performance of our operations and ongoing innovations that will help us reduce the carbon footprint of our aluminium even further.

In 2020 we continued our comprehensive New Energy programme, modernising our HPPs on the Angara and Yenisei cascade. We were able to reduce emissions further whilst increasing hydropower production. The upgraded equipment at the Group's Bratsk, Ust-Ilimsk and Krasnoyarsk HPPs supported an increase in hydropower production of 454.2 GWh in 4Q 2020 (1,712.1 GWh in 2020), helping to prevent greenhouse gas emissions by approximately 526 thousand tonnes of CO_2e, due to the partial replacement of prior thermal power generation volumes (1,984 thousand tonnes of CO_2e for the full year 2020). In November we announced the completed replacement of Hydroelectric Unit No.2 at our Irkutsk HPP, resulting in an increased capacity of 105.7 MW, compared to the previous capacity of 82.8 MW. The ongoing modernisation of our HPPs' equipment will increase their efficiency, reduce the cost of repair work, and improve the performance of the units and stations in general. We expect the New Energy programme to result in a reduction to the Group's greenhouse gas emissions of 2.3 million tonnes per year by 2022.

In our Metals segment – where our ALLOW low-carbon aluminium brand continues to grow – we announced plans to invest in modernising the Sayanogorsk and Khakas aluminium smelters to ensure their continued high-quality sustainable production.

We have maintained our commitment to innovation throughout this period as this is critical to helping us and the industry at large make a step change in our contribution to the Paris climate goals. We announced plans to completely switch the reduction area of the Krasnoyarsk aluminium smelter to a new type of raw material, an eco-friendly pitch. During the year Krasnoyarsk also completed its transition to Eco-Søderberg technology. It also began testing a pilot industrial electrolytic cell with inert anodes, which completely eliminates emissions of greenhouse gases (CO and CO_2), polyaromatic hydrocarbons, benzo(a)pyrene and sulphur from the reduction process. Another positive result of this unique technology is generating oxygen in the aluminium production process. This process is a game changer for our industry, making carbon emissions-free aluminium production a genuine possibility.

We plan to continue with the Aluminium Stewardship Initiative (ASI) certification of our facilities, in our drive to provide our customers and stakeholders with as much transparency as possible. A further five of the Group's aluminium smelters were successfully certified to meet the ASI standards.

We also explored new sales opportunities. We launched a new foundry complex at the Boguchany aluminium smelter; with an annual capacity of 120 thousand tonnes, it will produce advanced alloys, which are in high demand by the automotive industry globally. We also announced a partnership with BitRiver, operator of the largest data centre offering colocation services for bitcoin mining in Russia, to form Bit+, a joint venture for mining cryptocurrencies at low cost with a low-carbon footprint. The first phase of Bit+'s new facility, with 10 MW of electricity committed by En+, is currently operational, with plans to scale the facility to approximately 40 MW.

Outlook

The global COVID-19 situation remains unpredictable in the near term, and our key priorities remain unchanged: these are the health and safety of our workforce, maintaining uninterrupted operations at our facilities and continuing to fulfil our contractual obligations. In light of the current circumstances, it is critical that En+ Group continues to demonstrate operational stability and the resilience of its business model.

We remain confident in the fundamental long-term drivers for demand for our low-carbon aluminium. The trend towards sustainable infrastructure has strengthened as the COVID-19 pandemic brought into focus for all the fragility of the world around us. We are ideally positioned to help all of our customers meet more ambitious decarbonisation targets as we offer them a sustainable, traceable and entirely transparent raw material in our low-carbon aluminium.

Vladimir Kiriukhin,
Chief Executive Officer

Our focus on growth and leadership

The Group's strategy concentrates on organic growth with a focus on capital discipline and deleveraging. We focus on vertical integration, cost-efficiency and industry leadership.

Our strategy

We are committed to the Group's green development strategy – to achieve vertical integration and self-sufficiency across the aluminium value chain (energy, raw materials and finished products), maintain and grow our high-margin, low-risk aluminium production, maintain robust financial strength and grow total shareholder returns, including the payment of sustainable and attractive dividends.

Our strategic objectives

Vertical integration to unlock maximum value

Our smelters are almost fully powered by our own energy, which also generates revenues through base electricity demand. We plan to strengthen the synergies between our Metals and Power segments by grouping CAPEX within our core operations.

>98%

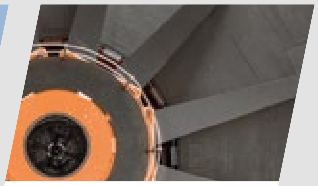
use of hydropower for aluminium smelting in 2020

Focus on cost control

We run ongoing cost optimisation initiatives across the Group. Costs in the Metals segment are minimised through long-term power and transport contracts, and by achieving full bauxite and nepheline self-sufficiency in the medium term.

18%

Adj. EBITDA margins for 2020



Growing production efficiency and operating margins

The Metals segment is focused on low-risk brownfield expansion and increasing the share of value-added products in its sales mix. It will also collaborate with partners to stimulate growth in aluminium consumption.

44%

share of VAPs in total sales of aluminium in 2020

Most relevant UN SDGs

p. 68 UN SDGs

Vertical integration to unlock maximum value	Focus on cost control	Growing production efficiency and operating margins
8 DECENT WORK AND ECONOMIC GROWTH; 17 PARTNERSHIPS FOR THE GOALS	7 AFFORDABLE AND CLEAN ENERGY; 17 PARTNERSHIPS FOR THE GOALS	12 RESPONSIBLE CONSUMPTION AND PRODUCTION; 17 PARTNERSHIPS FOR THE GOALS

Find out more

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"Our commitment to the highest standards of corporate governance and social responsibility supports our strategy."

Vladimir Kiriukhin, Chief Executive Officer

Explore power industry development opportunities

The Power segment conducts R&D on smart grids, solar energy, and small HPPs. It has piloted a solar plant in Abakan, Russia, designed solar roof panels and produced components for solar plants, and is also constructing small HPPs.

1.7 TWh

additional hydropower production by modernised HPPs in 2020

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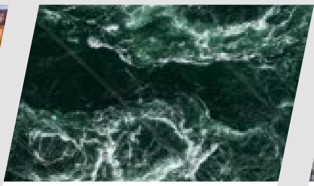

Deleverage and support dividend payments through FCF generation

En+ allocates capital conservatively and is focused on deleveraging. In making recommendations to the general shareholders meeting on dividend payments, the Board will take into account current trading and economic conditions in the context of the previously announced policy.

21.37%

of VTB's stake in the Group acquired for USD 1.6 bn in 2020

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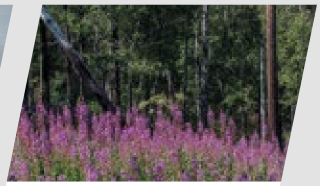
Continuous improvement in environmental performance

In 2020, the Metals segment's emissions fell to 2.04 tCO_2e/tAl[1] – 11% down from a 2014 baseline (Scope 1 here includes only electrolysis). At the beginning of 2021, the Company announced its ambition to become net zero by 2050 and to reduce GHG emissions by at least 35% by 2030 (Scope 1 and 2, as benchmarked against the Group's 2018 GHG emissions).

11%

reduction in GHG emissions at smelter in 2020[1] compared to 2014 baseline

p. 71 Performance



Operate sustainably

En+ Group is committed to both health and safety, and the preservation of the natural environment. Our CHPs are legacy assets – using fossil fuels to heat Siberian communities where there is no alternative. We are, however, developing an emissions reduction roadmap.

2.4 tCO_2/tAL

average carbon footprint for ALLOW aluminium (Scope 1 & 2, at smelter)

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1 Preliminary data, being verified as part of En+ Group 2020 Sustainability report preparation.

Our presence and scale

We have a well-established presence across five continents a robust operational hub in Siberia, and about 90 thousand people employed.

Metals segment

	Aluminium[1]	Alumina	Bauxite
Number of facilities	10 aluminium smelters	10 alumina refineries	7 bauxite mines
Total capacity	3.8 mtpa	10.6 mtpa[2]	20.6 mtpa
Production level in 2020	3.8 mt	8.2 mt	14.8 mt

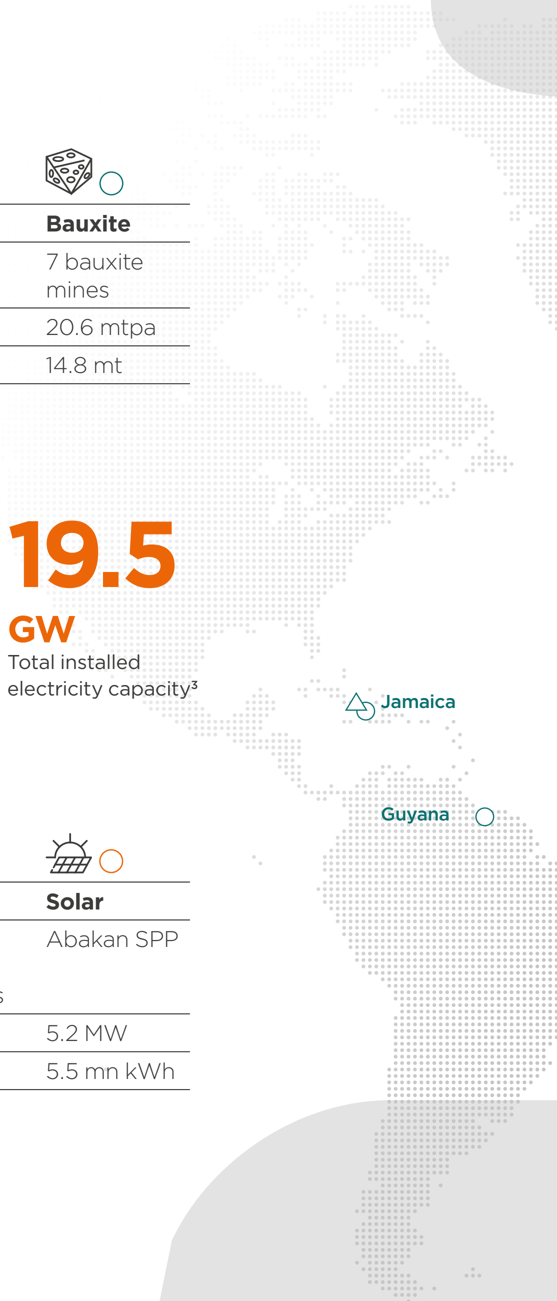
p. 55 Our Metals segment

No.1
aluminium producer excluding China

6.5%
of the world's alumina production

69.3 TWh
low-carbon hydropower generation[4]

19.5 GW
Total installed electricity capacity[3]



Power segment

	Hydropower	Thermal	Solar
Number of facilities	5 hydropower plants[3]	16 combined heat and power plants	Abakan SPP
Total capacity	15.1 GW[3]	4.4 GW	5.2 MW
Production level in 2020	69.3 TWh[4]	12.9 TWh	5.5 mn kWh

p. 57 Our Power segment

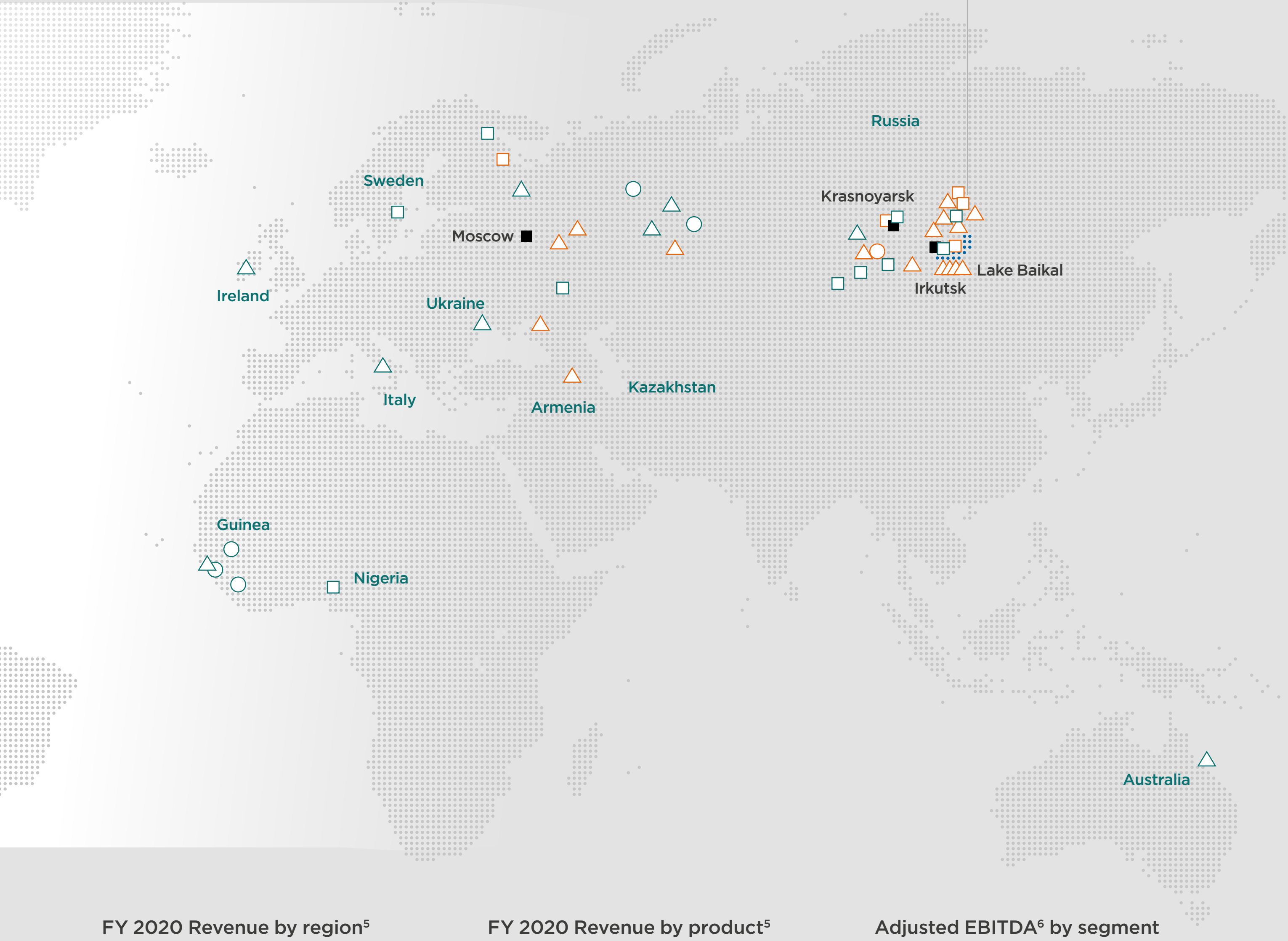
1 Excluding Boguchany Aluminium Smelter (BoAZ), a joint 50/50 project of RUSAL and RusHydro.
2 RUSAL attributable capacity.
3 Including Onda HPP.
4 Excluding Onda HPP with installed power capacity 0.08 GW and production level of 0.5 TWh in 2020 (located in the European part of Russia, leased to RUSAL).
5 From external customers.
6 Adjusted EBITDA for any period represents the results from operating activities adjusted for amortisation and depreciation, impairment charges and loss on disposal of property, plant and equipment for the relevant period.
7 After consolidation adjustments.

The importance of Lake Baikal

Declared a UNESCO World Heritage site in 1996, Eastern Siberia's Lake Baikal is the largest and deepest freshwater lake in the world. The lake itself and the area along its shores provide a unique habitat for a large number of plant and animal species, many of which are endemic to the region. The Group's key HPPs are located on the Angara River, the only river flowing from Lake Baikal, and committed to harnessing the natural power in a sustainable and responsible way.

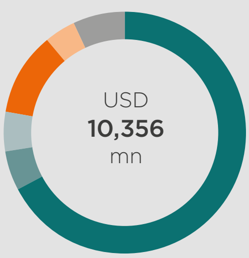
www.enplusgroup.com/en/company/glance/baikal/

p. 74 Read more in the Sustainable Economic Development section

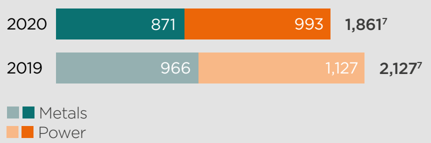


FY 2020 Revenue by region[5]

FY 2020 Revenue by product[5]



Adjusted EBITDA[6] by segment
(USD mn)



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The power of our integrated and sustainable business

En+ Group benefits from its unique base of tightly-integrated assets that results in a fully integrated and highly self-sufficient green business model. A substantial degree of vertical integration provides the Group with significant advantages and additional sources of growth.

Inputs

Assets
We have a total installed electricity capacity of 19.5 GW (15. 1 GW from low-carbon hydropower generation and 4.4 GW from thermal power). Our aluminium production capacity is 3.8 mtpa.

Research and development
The Company performs vast research and development activities to introduce environmentally friendly technologies into production cycles to save resources and reduce costs.

Raw materials
Bauxite production capacity 20.6 mtpa and alumina production capacity 10.6 mtpa. The Group is c.80% self-sufficient in bauxites and nephelines. More than 98% aluminium production energy needs are met by hydro and other carbon-free power sources.

People
We have c.90,000 employees across over 60 sites in 12 countries, and considered one of the largest employer in Russia.

Financial
Strong and resilient cash flow with industry leading EBITDA margins.

27.8%
Strategic investment in Norilsk Nickel (USD 14.1 bn).

Power segment

Water
5[1]
hydropower plants harness the potential of one of the world's largest river systems in Siberia

Coal
13.5 mt
coal production in 2020

16
combined heat and power plants

Hydropower
69.3 TWh
of electricity production in 2020

Thermal power
12.9 TWh
of electricity production in 2020

26.9 mn
Gcal of heat production in 2020

Hydropower from the Power segment is used to refine raw materials and produce aluminium by the Metals segment in Siberia. More than 98% of aluminium production energy needs are met by carbon-free power sources.

Electricity transmission and distribution
+41,000 km
of power lines in our networks

48 TWh
of electricity distributed

Electricity trading and retail
- Capturing additional margin
- Direct access to consumers

17.2 TWh
sales in 2020

- USD 1,169 mn electricity
- USD 426 mn heat

A commitment to high international standards of corporate governance and social responsibility underpins our business model and strategy.

1 Including Onda HPP
2 Preliminary data, being verified as part of En+ Group 2020 Sustainability report preparation.
3 Excluding Boguchany Aluminium Smelter (BoAZ), a joint 50/50 project of RUSAL and RusHydro.

Metals segment

Bauxite
14.8 mt
production in 2020

Nepheline
4.6 mt
production in 2020

Alumina
8.2 mt
production in 2020

>100%
% self sufficiency in alumina

Primary aluminium production
3.8 mt[3]
production in 2020

Total aluminium and VAP sales

3.9 mt
aluminium sales

1.7 mt
VAP sales

- USD 6,969 mn primary aluminium and alloys
- USD 534 mn alumina and bauxite
- USD 547 mn semi-finished products and foil

Outputs

Social

The Group remained focused on ensuring the health and safety of its employees, maintaining stable operations and providing support to the regions of operations. In 2020, the Company purchased substantial amounts of personal protective equipment, medical equipment and medicines for medical institutions in the regions, in which we operate. We conducted free testing and initiated a vaccination programme for employees in Russia and other countries.

c. USD 71 mn
total social investments and charitable projects in 2020

Environmental

En+ Group places a special emphasis on environmental protection and global climate change issues as sustainable development priorities. In 2020, there were no significant environmental incidents that led to major contamination of soil, air, water and led to court penalties (after all stages of appeal) with an amount of damage in excess of USD 1 million in 2020.

11%
reduction in GHG emissions at smelter in 2020 compared to 2014[2]

Financial

Against a backdrop of lower aluminium prices and foreign exchange headwinds, Adjusted EBITDA was USD 1.9 billion, supported by a strong operational performance, with stable aluminium output from the Metals segment and increased output from the Power segment. The Group's EBITDA margin remained strong at 18.0% reflecting the cost benefits of the Group's vertically integrated model.

USD 10.4 bn
revenue

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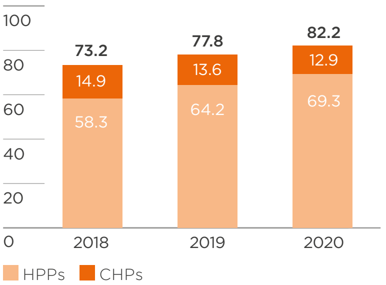
Measuring our progress

We assess our performance across a wide range of measures that are consistent with our strategy. Our key performance indicators (KPIs) provide a set of operational, financial and sustainability metrics that help the Board and executive management assess performance against our strategic priorities.

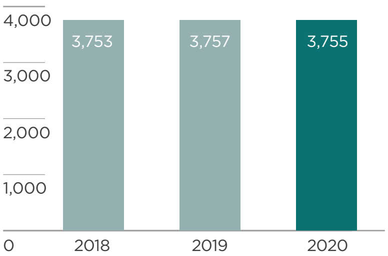
Operating

Total electricity production[1]
(TWh)



In 2020, we observed favorable hydrological conditions – increased water reserves in the reservoirs in the Angara cascade and Krasnoyarsk reservoir. The Power segment increased electricity output by 6%, and our HPP output increased by 8%.

Total aluminium production
(kt)



In 2020, aluminium production remained stable and amounted to 3,755 thousand tonnes (down 0.1% y-o-y). Aluminium sales decreased 6.0% y-o-y totalling 3,926 thousand tonnes.

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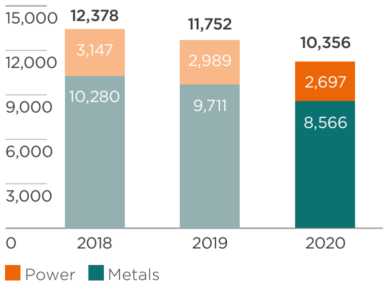
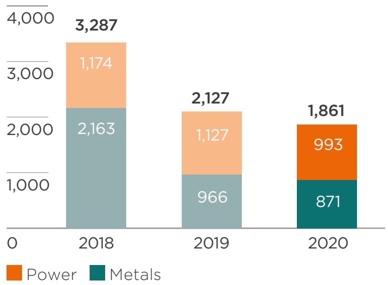
Financial

Revenue
(USD mn)



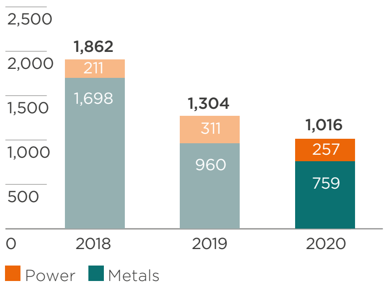
In 2020, revenue decreased by 11.9% y-o-y to USD 10,356 million, reflecting a 5.0% decline in the average LME aluminium price during the period, a 6.0% decline in sales volumes of primary aluminium and alloys given normalised levels of inventories of primary aluminium in 2020. The revenues from the Power segment were impacted by 11.4% rouble depreciation.

Adjusted EBITDA[2]
(USD mn)



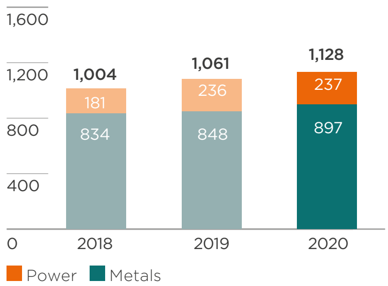
In 2020, the Group's Adjusted EBITDA decreased 12.5% y-o-y to USD 1,861 million, reflecting the revenue impacts, offset by tight cost control and the positive effect of rouble depreciation on production costs. The Group's Adjusted EBITDA margin for the reporting period remained almost unchanged at 18.0%.

Net Profit
(USD mn)



Net profit decreased by 22.1% in 2020 to USD 1,016 million (USD 1,304 million in 2019). The decrease was driven mainly by the same factors that influenced the decrease in EBITDA, as well as a decrease in the share of profit obtained by the Group from its associates and joint ventures, impacted by provisions made in respect of environmental costs.

Capital expenditure[3]
(USD mn)



The Group's capital expenditure amounted to USD 1,128 million in 2020 (up 6.3% y-o-y). The Power segment's capital expenditure accounted for USD 237 million in 2020, as compared to USD 236 million in 2019. The Metals segment's capital expenditure amounted to USD 897 million in 2020 as compared to USD 848 million in 2019.

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Note: The Group's financial data are provided after consolidation adjustments.

1 Excluding Onda HPP (installed capacity 0.08 GW), located in the European part of the Russian Federation, leased to RUSAL since October 2014.

2 Adjusted EBITDA for any period represents the results from operating activities adjusted for amortisation and depreciation, impairment charges and loss on disposal of property, plant and equipment for the relevant period.

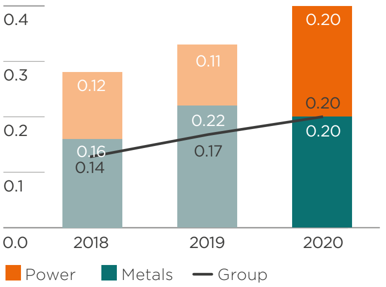
3 Capital expenditure represents cash flow related to investing activities – acquisition of property, plant and equipment and acquisition of intangible assets, the total level of capital expenditure is provided after intersegmental elimination.

4 Preliminary data, being verified as part of En+ Group 2020 Sustainability report preparation.

Non-financial[4]

Lost time injury frequency rate

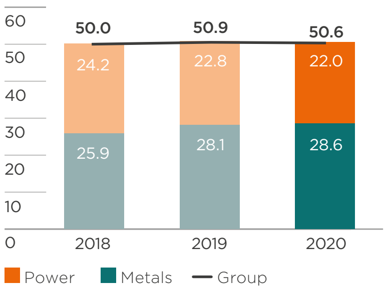
(LTIFR, per 200,000 hours worked)



Lost time injury frequency rate decreased in the Metals segment, while this indicator for the Group overall has increased in 2020 as compared to 2019 due to accident involving a bus carrying Group employees in Ust-Ilimsk.

GHG emissions (Scope 1 and 2)

$MtCO_2e$[7]



The reduction of GHG emissions in the Power segment was due to reduction of fossil fuels consumption on CHPs caused by the structure and volume of heat and electric loads in 2020. The growth of GHG emissions in the Metals segment was due to the growth of alumina production volumes, as well as the introduction of the new capacity.

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2020

February

3 The Group completed the second stage of the share swap transaction with Glencore

12 En+ Group completed the acquisition of VTB's stake in the Company

17 En+ Group listed ordinary shares on the Level One Quotation List of the Moscow Exchange

April

20 The Company's GDRs were delisted from the Moscow Exchange (17 April 2020 was the last trading date for the GDRs on MOEX)

30 En+ Group's Call for Carbon Disclosure was Recognised as one of Fast Company's 2020 World Changing Ideas

June

2 The Group's Metals segment, RUSAL, completed a 10-year rouble denominated bonds placement

July

1 En+ Group launched its 'Green Aluminium Vision'[5]

August

4 En+ Group completed a unique project to install a hydraulic unit rotor at the Irkutsk HPP

September

25 The Group's Metals segment, RUSAL, completed the redomiciliation process

November

5 En+ Group and BitRiver announced a JV for low-carbon cryptocurrency mining: Bit+

9 En+ Group began the upgrade of Hydroelectric Unit No. 4 at Krasnoyarsk HPP

23 En+ Group launched the new Hydroelectric Unit No. 2 at Irkutsk HPP as part of the New Energy programme

December

10 The Metals segment of En+ Group extended ASI certification

11 En+ Group started the replacement of Hydraulic Unit No.1 at the Irkutsk HPP

14 The Group's Metals segment, RUSAL, became the first aluminium producer globally to receive an 'A' level rating from CDP

21 En+ Group commenced trading International Renewable Energy Certificates

2021

January

18 The Company announced targets of at least a 35% reduction in GHG emissions by 2030 and to be net zero by 2050[6]

19 En+ Group's Metals segment and Mingtai Aluminium partnered to produce low-carbon products

February

3 En+ Group's Metals segment and Hodaka agreed a low-carbon aluminium partnership

11 The Metals segment, RUSAL, announced the acquisition of the business and assets of Aluminium Rheinfelden GmbH

19 En+ Group's Metals segment raised USD 200 million under a new pre-export financing linked to the sustainability performance indicators

March

1 En+ Group's Metals segment attracted a 45 billion rouble loan to finance Taishet aluminium smelter construction

10 En+ Group commenced the supply of electricity to the Taishet aluminium smelter

February (continued)

25 En+ Group began the replacement of six hydroelectric units at the Bratsk HPP

5 www.enplusgroup.com/en/media/news/in-focus/en-group-launches-green-aluminium-vision/?sphrase_id=7135
6 Scope 1 and 2, as benchmarked against the Group's 2018 GHG emissions
7 Figures for Power segment were recalculated because of improvement in methodology. Preliminary data, being verified as part of En+ Group 2020 Sustainability report preparation.

Our competitive advantages

The nature of the Group's assets and activities – in terms of the industries and the concentrated geographies in which we operate – delivers powerful strategic synergies and competitive strengths to our Power and Metals segments.

"Best in class" equity story characteristics
En+ Group is the world's largest producer of low-carbon aluminium. Our vertically integrated business model allows the Group to achieve unparalleled operational efficiency.

Industry position

En+ Group is a global leader in low-carbon aluminium production and renewable energy generation. The Company has a well-established presence across five continents and a robust operational hub in Siberia. En+ employs about 90 thousand people all over the world.

World class asset – global benchmark in aluminium market

No.1
aluminium producer by production volumes in the world (ex-China)[1]

No.1
independent hydropower producer globally[2]

p. 32 Industry positioning

Cost leadership

The Company is fully self-sufficient in alumina capacity (with potential to supply more to third parties) and about 80% self-sufficient in bauxites and nephelines. More than 98% aluminium production energy needs are met by hydro and other carbon-free. The Group aims to achieve vertical integration and self-sufficiency across the aluminium value chain, including energy, raw materials, and finished products.

Lowest cash curve position on integrated basis

Vertically integrated green business model – unique world-class power and aluminium asset base

p. 26 Business model

1 According to CRU estimates.
2 Based on the Company's internal data and peer companies' publicly available results, announcements, reports and other information.

"We are confident in both the long and the short-term drivers for demand for low-carbon aluminium across a growing range of end use markets. As the world looks to 'build back better' from the economic crisis left by the pandemic our clean metals will be a vital and sustainable resource."

Lord Barker of Battle, Executive Chairman

Strong fundamentals of end market

Aluminium is a key enabler of more sustainable economic development and 'green' recovery worldwide. Light, durable, and almost infinitely recyclable, aluminium is a critical material of our more sustainable future.

We are seeing increasing demand for low-carbon aluminium across multiple sectors worldwide, including building and construction, packaging and of course electric vehicles.

Fundamental aluminium demand drivers – structural shifts in electric vehicles and power infrastructure

Continued impact from Chinese government environmental measures

p. 22 Our strategy
p. 34 and **43** Market overview

Cash generation and growth potential

The Company supports its financial and operational resilience based on complementary and agility of its business model.

We continue to invest in scientific advances and critical industrial process improvements.

Strong cash flow resiliency and robust margins on the back of wellinvested operationally efficient asset base

Potential for shareholder friendly capital allocation

p. 28 Key performance indicators
p. 50 Financial review

Corporate governance and management

Having undergone comprehensive restructuring and updated its governance, En+ has proven its commitment to the highest standards or corporate accountability.

Robust corporate governance – highly experienced majority independent Board

Strong management team – proven capability of delivering on complex projects and operations

p. 96 Corporate Governance

Industry positioning

En+ Group is a market-leading, vertically integrated low-carbon aluminium and hydroelectric power producer.

With a well-established presence across five continents and a strong operational hub in Siberia, combining the assets of both our Metals and Power segments, the Group is able to capture commercial opportunities arising from its world-class assets and scale.

Metals segment

En+ Group's Metals segment, represented by RUSAL, produced approximately 5.8% of global aluminium output in 2020, and around 6.5% of the world's alumina production. In 2020, RUSAL remained among the largest producers of primary aluminium and alloys globally.

RUSAL is fully self-sufficient in alumina capacity (with potential to supply more to third parties) and about 80% self-sufficient in bauxites and nephelines.

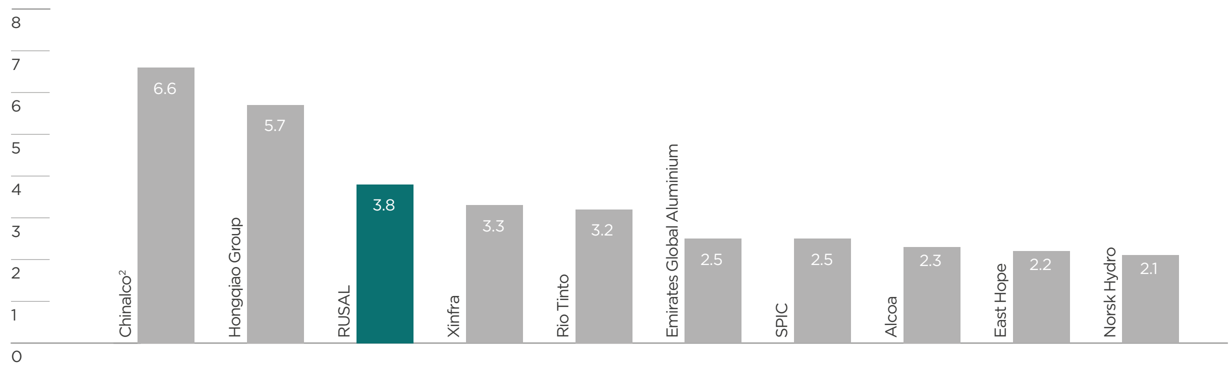
RUSAL's production chain includes bauxite and nepheline ore mines, alumina refineries, aluminium smelters and casting houses, foil mills, packaging and wheel production centres.

RUSAL is actively developing a groundbreaking inert anode technology. Introducing this state-of-the-art technology into the production process will lead to complete the 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. The efficient smelting technologies together with low-cost input material and utilities mix secure the Company's global leadership on the cost curve.

RUSAL has a diversified product mix with a strong share of VAP in the portfolio (1.72 million tonnes per annum out of 3.93 million tonnes of total sales).

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

Top aluminium producers globally, 2020 (mt)[1]



1 Based on the Company's internal data and peer companies' publicly available results, announcements, reports and other information.
2 Up to 2018, Chinalco was consolidating the production of Chalco. Since 2019, Chinalco consolidates the production of Chalco and Yunnan Aluminium Co. Ltd.

The Group's Metals segment has a well-diversified sales platform which allows it to access and operate efficiently i n all key aluminium markets, including the United States, Western Europe, Japan and South East Asia. At the same time, the Power segment operates the largest and most cost-efficient network of hydroelectric power plants in the Siberian region, which allows it to cater efficiently and reliably to its core clients in Siberia, including the largest smelters operated by the Metals segment.

The composition of the Group's assets and operations, both in terms of industries and geographies, enables it to achieve strategic synergies. En+ Group's scale allows it actively to manage the flow of aluminium products, alumina and other raw materials within the Company and proactively plan electricity production and consumption targets. This allows the Group to optimise capacity utilisation and maximise efficiency at smelters, refineries and generating assets.

Based on the current management structure and internal reporting system, the Group has defined two business segments:

- **Metals segment:** Comprising RUSAL, including the power assets of RUSAL
- **Power segment:** Mainly comprising power assets

Power segment

En+ Group's Power segment is the largest independent power producer in Russia by installed capacity and the largest independent hydropower generator globally.

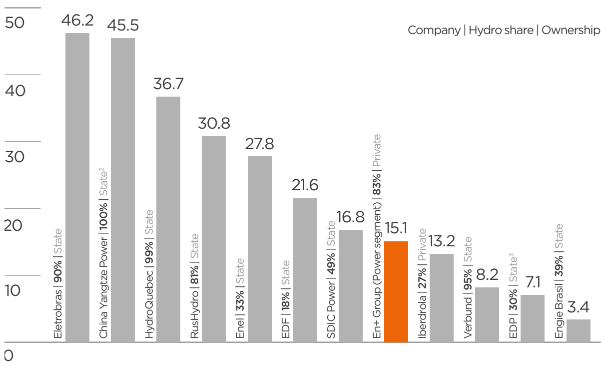
Russia has a well-developed power sector, which is essential for the country's high-energy-consuming economy. The total installed capacity of the Unified Energy System of Russia was 245.3 GW in 2020, with total electricity production of 1,047.0 TWh. The Russian electricity market is dominated by thermal assets, which represent 67% of the total installed capacity in Russia, while the Siberian region's capacity is roughly equally split between hydro (49%) and thermal (51%).

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

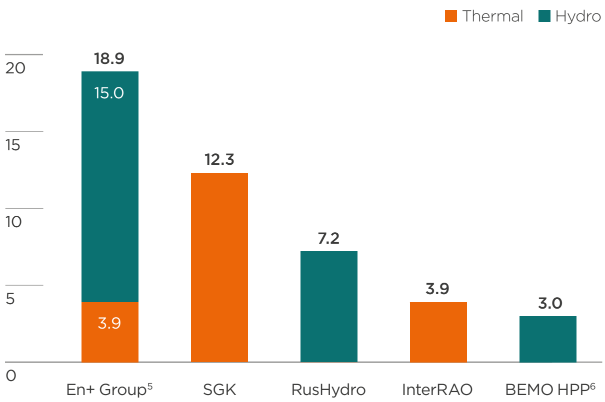
Hydropower generation is a key area of the Power segment's business, with the majority of its assets located in Siberia. In 2020, En+ Group remained the largest producer in Siberia, with a 37% share of installed capacity. Furthermore, 77% of its capacity is represented by hydropower assets, and it enjoys utilisation priority over the regulatory range of thermal power plants.

Coal prices are the main driver of day-ahead market prices since CHPs are the marginal producers. The output of HPPs, driven by weather conditions, is also relevant, as it affects the production volumes required from CHPs.

Power companies by installed hydro capacity globally, 2020 (GW)[1]



Competitive landscape in Siberia by installed capacity, 2020 (GW)[4]



1 Based on latest filings.
2 Subsidiary of China Three Gorges Corporation.
3 State-owned China Three Gorges Corporation and CNIC own 23.3% and 5.0% stakes, respectively.

4 Based on the Company's internal data and peer companies' publicly available results, announcements, reports and other information.
5 The Company's assets capacity provided for Siberia only. The total Company's capacity is 19.5 GW, including 15.1 GW in hydropower.
6 BEMO (Boguchany HPP) is a 50/50 JV between UC RUSAL and RusHydro, operated by RusHydro.

Metals segment review

Market overview[1]

Global aluminium demand

In 2020, countries grappled with supply chain disruptions and severe contractions in economic activity, as the COVID-19 pandemic spread across the world. In the aluminium industry, this sparked a drop in end-use demand in all major economies with the exception of China. Moreover, the pandemic became the key driver of change in government policies, which are now in turn accelerating green technology shifts and amplifying the trends that have been evolving within the aluminium industry over a number of years. The evolution of these trends now look set to quicken demand recovery in 2021 and will drive growth in aluminium use over the long term.

Global manufacturing continued its recovery in December despite the latest wave of the pandemic. December's PMIs revealed that advanced economy manufacturing was still expanding. Global PMI remained at a level of 53.8 in December, unchanged month-over-month. Meanwhile, a weaker dollar, strong manufacturing data, positive news on the development of COVID-19 vaccines and expectations of a US economic stimulus package continued to support commodity prices. In December, the aluminium price continued to trade above the USD 2000/tonne level.

For the full year 2020, global aluminium demand was down by 1.7% YoY to 63.9 mt, improving from a 2.6% decline YoY during 9M 2020. Rest of the World ex-China ("RoW") demand contracted by 8.9% to 26.0 mt, however China offset this with continuous robust demand, demonstrating strong growth of 3.9% to 37.9 mt.

In 2020, the largest end-user segment of aluminium was construction, decreasing by 4% year-on-year. The construction sector displayed resilience during the pandemic with construction sites in general less impacted by lockdown closures than other industries. Regional differences were significant, however, meaning China's strong levels of consumption were key in softening the effect of sharper falls in demand seen in areas such as South America. COVID-19-induced stimulus packages were further positive news for infrastructure investment worldwide and aluminium use within the industry. The environmentally oriented part of these packages will see more resources directed specifically into green construction technologies where aluminium is often the material of choice.

Lockdowns, supply shortages and diminished demand weighed heavily on the automotive sector, which saw both aluminium demand and light vehicle production contract 17% YoY in 2020. This was a considerably sharper fall in demand than observed in all other key industries and the automotive sector consequently lost its position as the largest consuming sector of aluminium products for the first time in 6 years. Whilst the decline in vehicle output impacted heavily on aluminium demand, changes in consumer choice, emissions targets and green recovery packages favour growth in the use of aluminium in automotive manufacture over the longer term. As preferences drive a growing share of SUV type vehicles in vehicle production overall, the demand for lightweight solutions increases in order to meet ever more stringent CO_2 emission targets. Moreover, recovery packages incentivise EV sales, where aluminium finds additional applications within space frames and battery enclosures.

Packaging sector demand remained robust throughout the year, with aluminium semi-finished product consumption falling by just 1% year-on-year in 2020. This resilience was the consequence of a series of unexpected upsides from the pandemic, such as a spike in demand for aluminium-containing pharmaceutical packaging. Moreover, lockdowns shifted consumer eating behaviours that led to an increase in demand for at home foils and cans. A clear example of this included North America, where a surge in beverage can usage left can producers struggling to satisfy demand. Lastly, aluminium substitution continued to benefit from its "sustainable" image and ease of recycling, the backlash against single-use plastic packaging and the heightened environmental awareness of consumers. Consequently, the substitution of glass (beer) and PET (soft drinks) with aluminium cans accelerated, with US aluminium can sheet demand to grow at a healthy 5-6% CAGR over the next five years according to Harbor.

Finally, aluminium end-use demand within the electrical sector fell by 4% year-on-year in 2020, after the pandemic caused disruption to power infrastructure projects and supply chains. The year did however see the announcement of several new national CO_2 emission targets and green stimulus packages that look set to drive the transition of energy acquisition to renewable sources faster and sooner. With the installation of renewable power sources such as solar and wind often requiring high voltage aluminium transmission cables, a positive impact on aluminium demand over the coming years is anticipated.

1 Unless otherwise stated, data for the Metals segment's "Market overview" section is sourced from Bloomberg, CRU, CNIA, IAI, Aladdiny and Antaike.

Global aluminium supply, inventories and premiums

Global aluminium production in 2020 grew by 2.3% to 65.3 mt, taking into account minimal RoW growth of 0.2% year-on-year to 28.0 mt and 3.9% growth YoY in China, to 37.2 mt. Overall, the global market had a surplus of 1.4 mt during 2020.

Operating capacity in China exceeded 38.7 mt. Chinese unwrought aluminium/alloys and products exports declined by 15.2% YoY to 4.84 mt in 2020, while unwrought aluminium imports during 2020 amounted to around 1.06 mt vs. 75 thousand tonnes for 2019. This shift followed a strongly negative export price arbitrage and reduced demand overseas due to the pandemic. China is thus becoming an important balancing force for the global aluminium industry, absorbing excessive supply from the RoW markets.

In 2020, aluminium inventories at LME warehouses declined by ~133 thousand tonnes to 1.34 mt. LME live warrants increased to a level of 1.19 mt. Chinese regional stocks moved in a downward trend over the period April to December and fell by 1.06 mt to a total of 0.61 mt from their highest level this year of 1.68 mt at the beginning of April 2020. Chinese regional inventories remained at a seasonally low level at 682 thousand tonnes by the end of 2020.

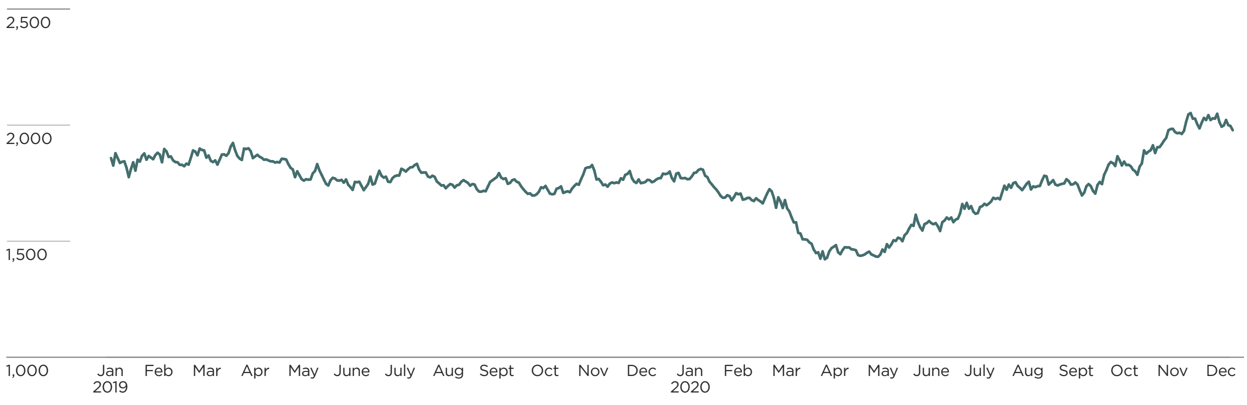
By the end of 2020 aluminium premiums had risen in the US, Europe and Asia, with strong demand fundamentals and aluminium scrap shortage outside of China supporting a further increase in demand for primary metal.

In 1H 2020 VAP market demand reduced drastically, due to fall of end-use demand from key consumer industries that followed widespread lockdown measures. But by the end of 2020 on the back of stock replenishment across whole supply chain, postponed end-use demand and positive expectations regarding market conditions in 2021, VAP demand almost returned to pre-crisis level. VAP supply adjusted through the year in line with general market circumstances – during 1H 2020 producers switched to primary aluminium production. And this has further contributed to primary aluminium stockpiling during this period.

Aluminium market outlook

Looking ahead to 2021, demand for primary aluminium is estimated to grow by 5-6%. The speed of vaccine rollouts, success of government stimulus packages and the ability to contain outbreaks are each expected to have significant impacts on global aluminium demand. Over the long term, the acceleration of green technology trends will help drive aluminium demand over the coming years. The global market is expected to move into a small deficit in 2021.

LME aluminium price dynamics (USD/t)[1]



1 Bloomberg data.

Metals segment review continued

Operational performance

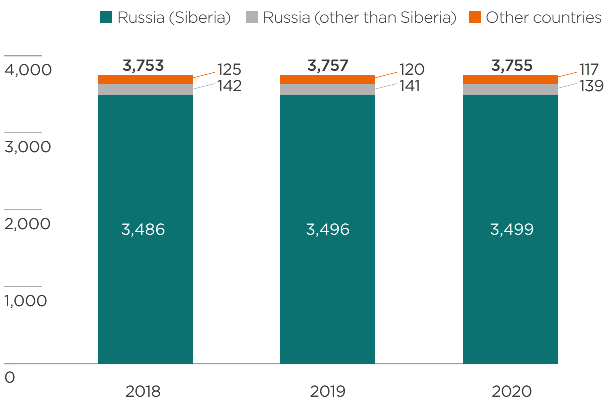
Aluminium

RUSAL owns ten[1] aluminium smelters, which are located in two countries: Russia (eight plants) and Sweden (one plant). The Company's core asset base is located in Siberia, Russia and accounts for approximately 93% of the Company's aluminium output in 2020. Among those, BrAZ and KrAZ together account for more than half of RUSAL's aluminium production. The Company owns an 85% stake in a smelter located in Nigeria.

In March 2019, the launch of the second part of the first stage of the Boguchany (BEMO) project brought the total production capacity to almost 300 thousand tonnes per annum.

The Group's primary aluminium production for the year ended 31 December 2020 was stable as compared to the previous year and totalled 3,755 kt.

Aluminium production, (kt)



Alumina

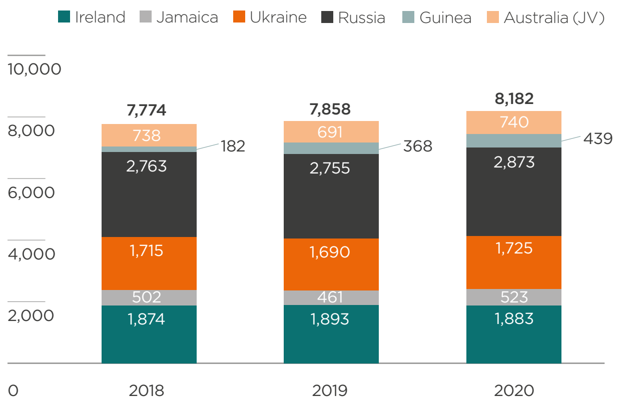
The Group owns nine alumina refineries as of the end of 2020. RUSAL's alumina refineries are located in six countries: Ireland (one plant), Jamaica (two plants, one legal entity), Ukraine (one plant), Italy (one plant), Russia (four plants), and Guinea (one plant). In addition, the Company holds a 20% equity stake in QAL, an alumina refinery located in Australia.

Since February 2020, anti-COVID measures were taken to control and prevent the spread of the disease at all plants, some of which are still in place. Thanks to these efficient and prompt managerial actions there has been no substantial change in production schedules or finished goods output.

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

RUSAL's total attributable alumina output was 8,182 kt in 2020 and 7,858 kt in 2019. Production volume increase by 4% due to enhancement of equipment operations at Achinsk Alumina Refinery, stabilisation of production process at Windalco and Friguia Alumina Refinery, output increase at Queensland Alumina Limited.

Alumina production, (kt)[2]



Bauxites and nephelines

Bauxites and nephelines are key raw materials for alumina production. In 2020, the Group was approximately 80% self-sufficient in bauxites and nephelines.

Bauxites

The Group operates seven bauxite mines. RUSAL's bauxite mines are located in four countries: Russia (two mines), Jamaica (one mine), Guyana (one mine), and Guinea (three mines). The Company's long position in bauxite capacity helps secure sufficient supply for existing operations and the prospective expansion of the Company's alumina production capacity. In addition, the Group sells low volumes of bauxite to third parties.

1 Nine aluminium smelters in operation (Alscon, located in Nigeria, aluminium operation is mothballed).
2 Pro-rata share of production attributable to the Group.

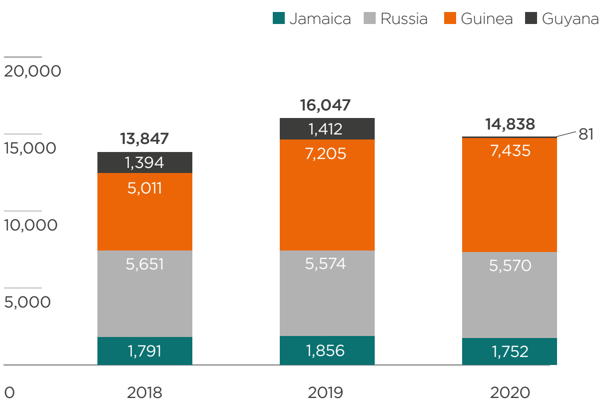
The Group's total attributable bauxite output[1] was 14,838 kt in 2020, as compared to 16,047 kt in 2019.

The decrease in own bauxite mining was caused by the suspension of production activity in Guyana, announced at the beginning of February 2020, and the replacement of Guyana bauxites with higher quality and lower price analogues. The suspension and mothballing of operations of the Bauxite Company of Guyana (BCGI) resulted from serious illegitimate actions that have gone beyond the control of government and enforcement agencies, including arson of the electricity pylon basement and other corporate property, and blocking of the river.

The decrease in KBK bauxite mining reflected a reduction in supply needed by the Nikolaev Alumina Refinery (which has switched to processing Dian-Dian bauxite). The Windalco mining decrease was a result of sufficient raw material stock at the beginning of the year.

The most substantial bauxite production volume growth occurred at the Friguia and Dian-Dian mines.

Bauxite production, (kt)[2]

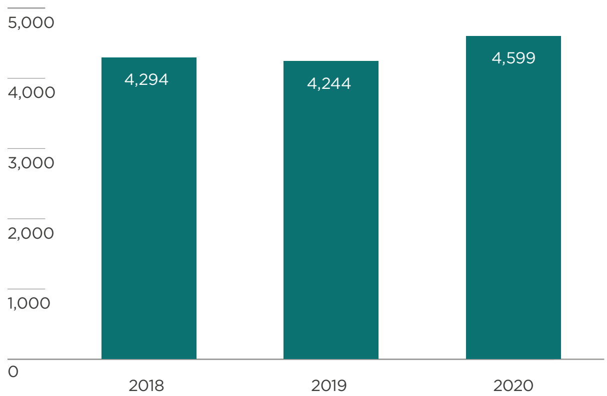


Nephelines

RUSAL's nepheline syenite production was 4,599 kt in 2020, as compared to 4,244 kt in 2019.

The increase of the production volume of nepheline mainly reflected additional quantities required for alumina production.

Nepheline mines (Achinsk), (kt Wet)



Downstream projects

Foil and packaging

The volume of foil produced by the Group's facilities in 2020 amounted to 103.44 kt, which was a 5.44 kt or 5.5% increase from 2019. The domestic supply of plain foil and tape from RUSAL Ural Foil and RUSAL Sayanal decreased by 3.87 kt in 2020 as Dozakl, a large buyer, left the market and purchased 5.6 kt less tape than it did in 2019. This loss was offset by additional sales to other domestic buyers.

The output of Ural Foil, Armenal and Sayana Foil grew 8%, 16% and 21%, respectively year-on-year as a result of equipment productivity.

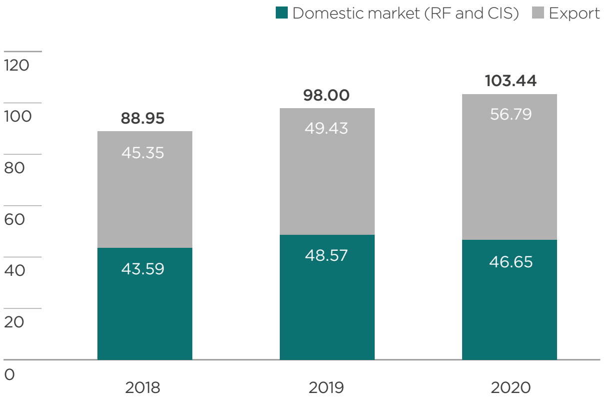
1 Bauxite output data was:
- Calculated based on pro-rata share of the Company's ownership in corresponding bauxite mines and mining complexes. The total production of the Company's fully consolidated subsidiary, Bauxite Company of Guyana Inc., is included in the production figures, notwithstanding that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

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

Metals segment review continued

The output reduction at Sayanal also reflected a higher share of more marginal thin foil (average thickness decreased by 1.1 µm vs. 2019). At the same time, Sayanal increased the output of high-margin converted foil by 11%.

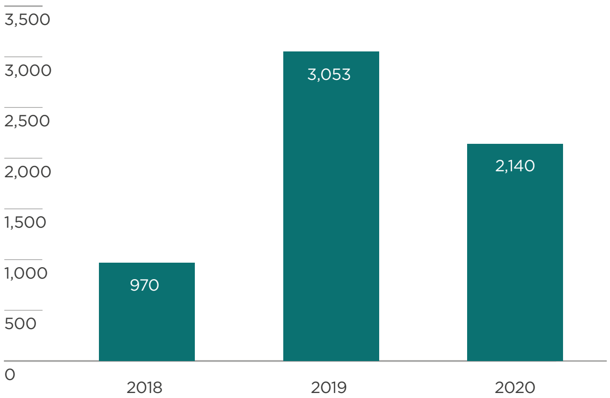
Foil production, (kt)



Wheel business

The output of wheels in 2020 decreased by 30% due to a COVID-induced softening of demand on end markets in 1H 2020. The coronavirus pandemic also forced some suppliers to delay delivery, installation and commissioning of equipment under expansion projects, which had an adverse impact on production capacity in 2H 2020.

Aluminium wheels production, (thousand pcs.)



Other business

Powders

The coronavirus pandemic was the main factor which caused a decrease in the output and sales of powders due to a sharp decline in production in the automotive and aircraft industries. This in turn reduced the demand for aluminium from companies supplying finished products to these industries.

Secondary alloys

The amount of dross and aluminium-containing waste converted into secondary aluminium reduced in 2020 by 3.9 kt or 22% from the previous year due to a reduction in both internal and external dross and waste available for conversion.

Silicon production

Production volumes in 2020 decreased in comparison with 2019 due to falling market prices for silicon and, as a result, unprofitable production at LLC RUSAL Kremny Ural, the operation of which has been halted since 1 December 2019. The personnel has been reduced to necessary level to restart the facility when the situation in the silicon market improves.

JSC Kremny continued operating four furnaces throughout 2020. In 2020, plant modernisation was completed, including the supply of a new type of hydraulic furnace mouth tending machines. A six-year development strategy for JSC Kremny was approved with planned restoration of idling capacities and improvement of environmental efficiency through the replacement of all “wet”-type gas treatment plants with modern dry-type treatment plants with bag filters.

Other mining assets

RUSAL owns and operates 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 RUSAL’s bauxite and nepheline syenite resource base.

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

Bogatyr Coal LLP

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

Bogatyr Coal LLP, which produced approximately 43.34 mt of coal in 2020, has approximately 1.66 billion tonnes of Proved and Probable Ore Reserves and has Measured Mineral Resources and Indicated Mineral Resources totalling approximately 2.01 billion tonnes as at 31 December 2020 (reported on under JORC by SRK). Bogatyr Coal LLP generated sales of approximately USD 248 million in 2019 and USD 243 million in 2020. Russian and Kazakh customers contribute to approximately 30% and 70% of 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 27.82% shareholding stake in Norilsk Nickel as at the latest practicable date.

RUSAL's shareholding in Norilsk Nickel allows for significant diversification of earnings through Norilsk Nickel's exposure to PGMs[1] and non-ferrous metals (nickel, copper, cobalt), and broadens RUSAL's strategic opportunities. The Company's objective is to maximise the value of this investment for all shareholders.

Company profile and financial results[2]

As of 31 December 2019, Norilsk Nickel's resource base on the Taimyr and Kola Peninsula consisted of 757 mt of Proved and Probable Ore Reserves and 2,020 mt of Measured and Indicated Mineral Resources. Its key assets are located in the Norilsk Region, the Kola Peninsula, and the Trans-Baikal Territory in Russia, and in Finland.

In 2020, Norilsk Nickel produced 236 kt of nickel, 487 kt of copper, 2,826 koz of palladium and 695 koz of platinum. Compared to 2019, the following is to be noted:

- The growth in production of nickel (+3%) primarily reflected an increase in the production of nickel concentrate for sale at Kola MMC and higher processing volumes of the Company's Russian feed at Norilsk Nickel Harjavalta (production of nickel from own Russian feed also increased by 3%).
- The decline in production of copper (-2%) was attributed to changes in saleable product mix, reallocation of copper semi-products within the Company's divisions and lower processed volumes of concentrate, which was purchased from Rostec (production of copper from own Russian feed also decreased by 2%).
- The decline in PGM production (-3% palladium, -1% platinum) was attributed to the commissioning of the new precious metals concentrate production line at the metallurgical shop of Kola MMC, as well as a high base effect from 2019, when Krasnoyarsk Precious Metals Plant processed earlier accumulated work-in-progress inventory (production of PGM from own Russian feed decreased by 3%).

Norilsk Nickel's metal sales are highly diversified by region: Europe, Asia, North and South America, Russia and the CIS; and by product: nickel, copper, palladium, platinum, semi-products and other metals.

The market value of RUSAL's investment in Norilsk Nickel amounted to USD 14,123 million as of 31 December 2020, an increase in comparison with the market value as of 31 December 2019 (USD 13,586 million). Market capitalisation of Norilsk Nickel was under effect from positive trends in end metal markets and Russian rouble depreciation, which was partly offset by negative external market factors (due to the COVID-19 pandemic) and internal factors (the accident at Heat and Power Plant No 3 (HPP-3) in May 2020).

In 2020, Norilsk Nickel recognised an environmental provision of USD 2.2 billion following the diesel fuel leak at the HPP-3 industrial site and in anticipation of compensation payable in respect of the environmental damage caused (more details below in the section Accident at HPP-3) that led to EBITDA decreasing in 2020.

Accident at HPP-3

On 29 May 2020, the fuel storage facility at heat and power plant No. 3 (HPP-3) in the Kayerkan neighbourhood of Norilsk failed due to a sudden sinking of its support posts, resulting in fuel leakage. According to preliminary investigations, 21.2 kt of diesel fuel leaked beyond the bunding perimeter into a designated pit, into nearby soil and into the Bezymianny Stream, and the Daldykan and Ambarnaya Rivers. Special containment booms were installed and effectively prevented the contamination of the Pyasino Lake. No one was hurt and the city of Norilsk was not harmed in any way.

As of the end of 2020, the spill was fully localised and the majority of the fuel and water mixture had been collected. Contaminated soil was placed into sealed off hangars to prevent further environmental risks. Water-fuel mixture collected from the Ambarnaya River and near the power plant was placed into temporary holding tanks.

1 PGMs are platinum group metals.
2 Production and operational data in this section are derived from www.nornik.ru/en/

Metals segment review continued

In 2021, continued clean-up and rehabilitation works are planned. According to the Norilsk Nickel Group assessment, total expenditure for clean-up and rehabilitation is estimated at USD 144 million (RUB 10.6 billion at the RUB/USD exchange rate as at 31 December 2020), from which clean-up expenses incurred in 2020 were USD 48 million. On 5 February 2021 the Arbitrazh court of the Krasnoyarsk region ordered Norilsk Nickel to pay environmental damages of RUB 146.177 billion (USD 1,979 million at the RUB/USD exchange rate as at 31 December 2020). On 19 February 2021, Norilsk Nickel announced that it had decided to comply with this judgement.

As one of the main shareholders of Norilsk Nickel, RUSAL was very concerned about the incident at HPP-3. RUSAL supported the stringent investigation of the circumstances on site that caused the accident and proposed measures to the Norilsk Nickel Board of Directors to help prevent such accidents in the future. Norilsk Nickel's Board of Directors supported some of RUSAL's proposals to strengthen the management team, including the introduction of a Deputy President for Environment, appointed in June 2020.

Projects

BEMO project

The Boguchany (BEMO) project involves the construction of the 3,000 MW Boguchany HPP (average annual electricity output: 17.6 billion kWh) and Boguchany Aluminium Smelter capable of producing 600,000 tonnes of metal per annum in the Krasnoyarsk Territory in Siberia.

The construction of the Boguchany Aluminium Smelter is divided into two stages (each stage with capacity for 298 kt of aluminium per annum). The first part of the first stage (149 kt of aluminium per annum, 168 pots) was launched in 2015, and the second part of the first stage was launched in March 2019. In May 2019, the first stage of the smelter reached its design capacity. In 2020, 290,046 tonnes of aluminium and alloys was produced, which is 32,333 tonnes more than in 2019. A total of 1,017,140 tonnes of aluminium and alloys has been produced since the start of the commissioning.

The second stage of the Boguchany Aluminium Smelter is to be considered with a strategic partner, RusHydro, subject to the state of the market and the availability of project financing.

Boguchany HPP is the fourth step in the Angara Hydroelectric Power Chain, the largest hydro project ever completed in Russia. Construction of the power plant was suspended in Soviet times due to the lack of financing, but was resumed in May 2006 by RUSAL and RusHydro, after they jointly agreed to complete it.

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

The hydropower plant started the commercial supply of electricity to the wholesale electricity and capacity market on 1 December 2012. Since its launch, Boguchany HPP has generated 101.364 TWh of electricity. In 2020, the hydropower plant produced and delivered 17.549 TWh to the wholesale electricity and capacity market for the first time in the entire period of operation, which exceeds the 2019 electricity output by 9.6%, or 1.535 TWh.

Taishet

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

The project includes construction of an aluminium smelter in Taishet in the Irkutsk Region (Eastern Siberia), with a design production capacity of the LC-1 (first series) of 352 pots, or 428.5 ktpa. The total electricity consumption by the LC-1 (first series) is estimated at 6,370 million kWh. We anticipate the first metal to be produced in 2021.

Assets overview

	Location	Installed capacity	2020 production	2019 production	Capacity utilisation rate
Aluminium smelters					
Bratsk aluminium smelter	Russia (Irkutsk Region)	1,009 ktpa	**1,004 kt**	1,008 kt	100%
Krasnoyarsk aluminium smelter	Russia (Krasnoyarsk Territory)	1,019 ktpa	**1,020 kt**	1,018 kt	100%
Sayanogorsk aluminium smelter	Russia (Republic of Khakassia)	542 ktpa	**529 kt**	539 kt	98%
Novokuznetsk aluminium smelter	Russia (Kemerovo Region)	215 ktpa	**215 kt**	215 kt	100%
Khakas aluminium smelter	Russia (Republic of Khakassia)	297 ktpa	**308 kt**	294 kt	104%
Irkutsk aluminium smelter	Russia (Irkutsk Region)	422 ktpa	**422 kt**	422 kt	100%
Kandalaksha aluminium smelter	Russia (Murmansk Region)	76 ktpa	**70 kt**	72 kt	92%
Volgograd aluminium smelter	Russia (Volgograd Region)	69 ktpa	**70 kt**	69 kt	101%
KUBAL	Sweden	128 ktpa	**117 kt**	120 kt	91%
ALSCON[1]	Nigeria	24 ktpa	**—**	—	0%
Boguchany aluminium smelter[2]	Russia (Krasnoyarsk Territory)	300 ktpa	**290 kt**	258 kt	98%
Alumina refineries					
Achinsk Alumina Refinery	Russia (Krasnoyarsk Territory)	1,069 ktpa	**900 kt**	823 kt	84%
Bogoslovsk Alumina Refinery	Russia (Sverdlovsk Region)	1,030 ktpa	**990 kt**	1,017 kt	96%
Urals Alumina Refinery	Russia (Sverdlovsk Region)	900 ktpa	**916 kt**	915 kt	102%
PGLZ Alumina Refinery[3]	Russia (Leningrad region)	88 ktpa	**67 kt**	—	76%
Friguia Alumina Refinery	Guinea	650 ktpa	**439 kt**	368 kt	68%
QAL	Australia	3,950 ktpa	**740 kt[4]**	691 kt[4]	94%
Eurallumina	Italy	1,085 ktpa	**—**	—	0%
Aughinish Alumina Refinery	Ireland	1,990 ktpa	**1,883 kt**	1,893 kt	95%
Windalco	Jamaica	1,210 ktpa	**523 kt**	461 kt	43%
Nikolaev Alumina Refinery	Ukraine	1,759 ktpa	**1,725 kt**	1,690 kt	98%
Bauxite mines					
Timan Bauxite	Russia (Republic of Komi)	3,300 ktpa	**3,310 kt**	3,221 kt	100%
North Urals Bauxite Mine	Russia (Sverdlovsk Region)	3,000 ktpa	**2,260 kt**	2,353 kt	75%
Compagnie des Bauxites de Kindia	Guinea	3,500 ktpa	**2,941 kt**	3,121 kt	84%
Friguia Bauxite and Alumina Complex	Guinea	2,100 ktpa	**1,423 kt**	1,304 kt	68%
Bauxite Company of Guyana Inc.	Guyana	1,700 ktpa	**81 kt**	1,412 kt	5%
Windalco	Jamaica	4,000 ktpa	**1,752 kt**	1,856 kt	44%
Bauxite Company of Dian-Dian	Guinea	3,000 ktpa	**3,071 kt**	2,780 kt	102%

1 Alscon aluminium production is mothballed.
2 A 50/50 joint venture of RUSAL and RusHydro. Capacity and production volumes of the BEMO project are not included in the Company's consolidated operating data.
3 All data is represented for September–December 2020.
4 Pro-rata share of capacity and production attributable to RUSAL.

Impact of COVID-19

In 2020, En+ Group, just like the entire world, faced the challenges of the COVID-19 pandemic. In particular, the Company faced the following main challenges:

- protecting employees while being unable to suspend operations
- working in highly volatile macroeconomic environment
- supplying our customers with critical heat and electricity, as well as responding to our metals segment customers' needs, including re-directing of product flows as required.

Protecting employees preserving uninterrupted operations

The Group launched a programme at the end of February 2020 to protect its employees against COVID-19, drawing on the expertise gained by RUSAL amidst the Ebola outbreak in Africa in 2014–15. The measures included buying personal protective gear; enhancing activities of medical units and paramedics; disinfection and cleaning of premises; and buying air purifying systems. Sickbays were arranged at the premises of operating companies for employees who might show symptoms of the disease, where they were able to wait for an ambulance. A zonal approach was applied at the sites to isolate the operating/auxiliary crews from the engineering/administrative staff. HR departments monitored potential COVID-19 cases and assisted in arranging testing campaigns. Relevant medicines were purchased to be distributed to employees, if and when needed. A hotline was established to advise employees on measures to combat the coronavirus. A broad intra-corporate information campaign was launched in the early days of the pandemic to raise employee awareness of COVID-19 prevention measures and to inform them about what to do if they showed symptoms of the disease. Routine testing was used to identify asymptomatic cases.

Decline in global aluminum demand

For the full year 2020, global aluminum demand was down by 1.7% y-o-y to 63.9 million tonnes. Rest of the world ex-China (RoW) demand contracted by 8.9% to 26.0 million tonnes. However, China offset this with its robust demand recovery, demonstrating a strong growth of 3.9% to 37.9 million tonnes.

At the same time, global aluminium production in 2020 grew by 2.3% to 65.3 million tonnes, taking into account (i) small RoW growth of 0.2% y-o-y to 28.0 million tonnes and (ii) 3.9% growth y-o-y in China to 37.2 million tonnes.

As a results global market was in surplus by 1.4 million tonnes during 2020. And this led to drop in aluminium prices, down to 1,460 dollars per tonne in April/May. Average 2020 aluminium price amounted to 1,702 dollars per tonne (down 5% y-o-y).

In response to the challenging market environment caused by COVID-19, the Metals segment successfully adjusted its sales, with a material increase in sales to geographies where demand was stronger. On the backdrop of falling global demand for aluminium Metals segment was the only key producer who increased VAP sales to 44% of total sales in 2020 and gained VAP share in sales portfolio.

Lower demand for electricity amidst restrictions

The restrictions imposed due to the COVID-19 pandemic caused a major decline in power consumption from the Russian market.

According to OJSC System Operator of the Unified Energy System, the power consumption from Russia's Unified Energy System was 2.4% lower in 2020 compared to 2019. The lowest figures were shown in May (down 5.5%) and June (down 6.0%); the remaining months, on average, registered 1.9% decrease vs. 2019. The most dramatic decline in the European part of Russia was seen in the Urals Unified Energy System (down 5.4%) and the Middle Volga Unified Energy System (down 4.2%). The North-Western Unified Energy System showed a smaller decline of 2.9%. The smallest decline in figures was seen in the Central Unified Energy System (down 0.8%) and the Southern Unified Energy System (down 0.6%). The Siberia Unified Energy System registered a 1.0% decline vs. 2019. The situation in Siberia differed from the other regions as its power-intensive operations were not suspended, preserving their normal power consumption.

Power consumption in the key regions where the Group has operations, i.e. the Irkutsk Region and the Krasnoyarsk Territory, was higher when compared to the rest of the regions connected to the Siberia UES in 2020. The Irkutsk Region registered a 0.9% increase in consumption despite the pandemic, which is the highest result among the Siberian regions connected to the Unified Energy System. The energy system of the Krasnoyarsk Territory and the Republic of Tyva showed a decrease of 0.7%. This better performance is attributable to the large consumers based in the Krasnoyarsk Territory and the Irkutsk Region, where the En+ Group's key energy assets are located, as they maintained power consumption and did not interrupt their operations. The western part of Siberia, i.e. the Tomsk and the Omsk regions, demonstrated the sharpest decline in consumption, respectively down 8.5% and 3.1% year-on-year.

Electricity sales in the retail market

The COVID-19 pandemic caused an increase in non-payments for electricity in the retail market, which peaked in April 2020. Some employees shifted to working from home, while sales companies closed their front offices in the Irkutsk and Nizhny Novgorod Regions.

For many years, the Group has developed remote and online payment services and applications, which helped to reduce the level of payment failures and helped avoid a greater increase in non-payments.

Power segment review

Market overview[1]

Overview of the Russian power sector

The Russian Federation's power sector is among the largest in the world, with installed electricity capacity of 245.3 GW and electricity output of 1,047.0 TWh as of 2020. The majority of Russia's electricity demand is met by thermal power plants that use natural gas and thermal coal as their primary fuel. In Siberia, thermal power plants make up 50.9% of installed capacity with hydropower generation making up 48.53%, remaining 0.57% are solar power plants.

The Unified Energy System (UES) of Russia covers most of the Russian territory. Grid interconnections between different energy systems are limited, with the Russian wholesale power and capacity market split into two pricing zones. The first pricing zone, the European–Ural price zone[2], includes the territory of the European part of Russia (including the Urals), while the second pricing zone, the Siberian Integrated Energy System (IES), encompasses Siberia. The electricity prices of the two price zones are driven by the differences in capacity and fuel mix in the respective price zones.

The Siberian IES has an operational area of 4,944,300 sq km, with a population of approximately 19 million people. The Siberian IES comprises 115 power plants with a total installed capacity of 52.1 GW, including 25.3 GW of HPPs (48.5%), 26.5 GW of thermal power plants (TPP) (50.9%) and 300.2 MW of solar plants (0.57%). The grid of the Siberian IES consists of 110, 220, 500 and 1,150 kV lines. The total length of power lines is 102,614 km[3].

A unique feature of the Siberian IPS is the significant role of HPPs in both the installed electricity capacity mix and electricity output. Thermal power in the Siberian IES is generated mostly through coal-fired power plants, which are primarily located near regions where the coal is mined.

Electricity demand

Electricity consumption in the UES of Russia in 2020 decreased by 2.4% year-on-year to 1,033.7 TWh (down 2.7% excluding the impact of 29 February 2020). Electricity consumption in the European–Ural price zone[4] decreased by 3.0% to 783.7 TWh (down 3.2% excluding the impact of 29 February 2020). Electricity consumption in the Siberian IES decreased by 1.0% to 209.4 TWh (down 1.3% excluding the impact of 29 February 2020).

Electricity supply

The total installed electricity capacity of the UES of Russia as of 1 January 2021 amounted to 245.3 GW and decreased by 1.0 GW in 2020. The decrease can be explained by a 1.86 GW commissioning of new capacity, a 3.25 GW decommissioning of old capacity and a 0.36 GW capacity increase linked to remarking, corrections, etc. In the second price zone, 81 MW was commissioned, 101 MW was decommissioned and there was an increase in capacity as a result of 54 MW being remarked.

In 2020, electricity output in the UES of Russia decreased by 3.1% year-on-year to 1,047.0 TWh (down 3.4% excluding the impact of 29 February 2020). Electricity output in the European–Ural price zone decreased by 3.8% to 796.2 TWh (down 4.1% excluding the impact of 29 February 2020).

Electricity output within the Siberian IES in 2020 was 207.0 TWh, down 0.8% year-on-year (down 1.1% excluding the impact of 29 February 2020). Output from HPPs in Siberia increased by 9.2% year-on-year to 117.7 TWh. In 2020 the Group's HPPs generated approximately 58.9% of the total electricity produced by hydropower stations in the Siberian IES. At the same time, thermal power plants decreased their electricity production by 11.7% year-on-year to 89.0 TWh. In 2020, combined heat and power (CHP) plants accounted for 43.0% of full-year electricity output within the Siberian IES, while HPPs accounted for 56.9%.

1 Unless otherwise stated, data for the Power segment's "Market overview" section is sourced from ATS, Association "NP Market Council", System Operator of the Unified Energy System of the Russian Federation.
2 Comprises the Central, Central Volga, Urals, North-West and South Energy systems.
3 According to the System Operator of the Unified Power System of the Russian Federation (www.so-ups.ru/).
4 Comprises the Central, Central Volga, Urals, North-West and South Energy systems.

Power segment review continued

Electricity and capacity prices

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

Due to seasonality in demand and the intermittency of hydropower, the price of electricity can exhibit significant fluctuations throughout the course of the year.

One of the major factors exerting significant influence in the medium term is the water inflow to Siberian HPPs, which determines the availability of low-cost hydropower for the wholesale market.

In 2020, spot prices for the European–Ural price zone decreased by 6.0% year-on-year and averaged 1,211 RUB/MWh, while spot prices for the Siberian IES decreased 2.0% year-on-year, averaging 872 RUB/MWh.

While electricity prices generally reflect short-term variations in the supply-demand balance and cover generators' variable costs, capacity prices cover fixed costs and sustaining CAPEX requirements.

Reflecting the long-term nature of these decisions, the capacity market functions rather differently to the electricity market, with annual auctions carried out to determine the price and availability of capacity in four years' time. Capacity prices are thus currently determined through to 2026. Starting from 2018, prices are indexed annually at the previous year's Consumer Price Index (CPI) minus 0.1% – the indexation is applied starting from 1 January of the year when the auction was conducted, until 1 January of the year when the capacity is supplied (prices were previously indexed at CPI minus 1%).

In 2019, the Ministry of Energy of the Russian Federation defined rules for the indexation of price parameters at competitive capacity outtake (CCO), which provide for a 20% growth in price parameters until 2024 and growth with inflation afterwards. Furthermore, the offtake period was increased to six years instead of four and further CCOs are conducted every year with the period of delivery in six years: in 2021 the COO has been conducted for 2026.

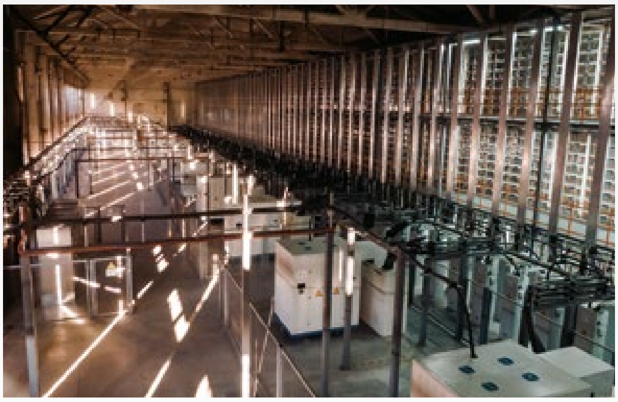
Low-carbon cryptocurrency mining: Bit+

Bit+ is a joint venture of En+ Group and BitRiver, operator of the largest data centre offering colocation services for bitcoin mining in Russia, for mining cryptocurrencies at low cost with a low-carbon footprint.

Under the partnership, En+ Group provides low-cost electricity from renewable energy sources to Bit+'s new mining operations while BitRiver runs and manages the operations. The first phase of Bit+'s new facility, with 10 MW of electricity committed by En+, is currently operational, with plans to scale the facility to approximately 40 MW.

The facility is located near BitRiver's current data centre in Bratsk, in the Irkutsk Region of Russia, and is composed of modular cryptocurrency mining units. Every modular unit is a specially converted shipping container and is equivalent to a full-size cryptocurrency mining data centre. Fourteen of these modules will be operational in the facility's first phase. Each module can accommodate up to 400 units of Bitmain's latest generation S19 Pro (110 Th) miners.

The Group actively supports the development of datacentres in the Irkutsk Region. The Company's energy assets in the region produce low-carbon, inexpensive electricity from renewable sources, and En+ is able to offer surplus power to Bit+. Moreover, the low average annual temperature reduces the energy required by the datacentres, making them more efficient and further minimising their carbon footprint.



Capacity prices

'000 RUB/MW/month	2019	2020	2021	2022	2023	2024	2025	2026
Second price zone	190	191	225	264	267	279	303	299

The CCO price for the European–Ural price zone grew by 1.9% year-on-year in 2020 (including CPI minus 0.1% indexation). The capacity price for the Siberian IES zone decreased by 2.1% year-on-year in 2020 (including CPI minus 0.1% indexation).

In the second price zone, base CCO price in 2019 and 2020 was almost the same. At the same time, the 2019 COO price is indexed for 2016-2018 inflation, and the 2020 COO price is indexed for 2017-2019 inflation. Inflation in 2016 was significantly higher than in 2019 (5.4% versus 3.0%), which translated a decrease in the indexed price by 2.1%.

		2020	2019	Change, %
Capacity prices (including CPI minus 0.1% indexation)				
First price zone	'000 RUB/MW/month	**126.5**	124.1	+1.9%
Second price zone	'000 RUB/MW/month	**209.2**	213.7	-2.1%
Electricity spot prices[1]:				
First price zone	RUB/MWh	**1,211**	1,288	-6.0%
Second price zone	RUB/MWh	**872**	890	-2.0%
Nizhny Novgorod Region	RUB/MWh	**1,259**	1,335	-5.7%
Irkutsk Region	RUB/MWh	**793**	789	+0.5%
Krasnoyarsk Territory	RUB/MWh	**789**	784	+0.6%

In 2020, the average electricity spot price on the day-ahead market in the second price zone decreased by 2.0% to 872 RUB/MWh. According to NP Market Council data, this decrease reflected an increase in HPP generation coupled with decreased demand.

In 2020, average electricity spot prices in the Irkutsk Region and Krasnoyarsk Region increased by 0.5% 793 RUB/MWh and by 0.6% to 789 RUB/MWh, respectively. The reason for differing price dynamics within the Siberian IES is the transmission constraints on the transit between East and West Siberia and changes in the demand structure in the period from August to October.

1 Day ahead market prices, data from ATS and Association "NP Market Council".

Power segment review continued

Operational performance

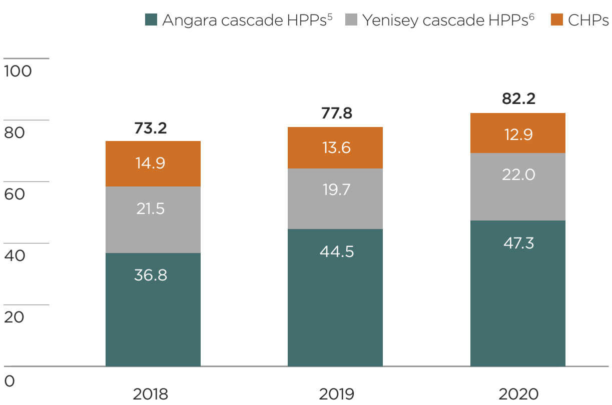
As at 31 December 2020, the total installed electricity capacity of the Group's power assets amounted to 19.5 GW[1], while its total installed heat capacity amounted to 15.6 Gcal/h. As at 31 December 2020, 77.5% of the installed electricity capacity was represented by HPPs, with the remaining 22.5% accounted for by CHPs (which are predominantly coal-fired) and one solar plant.

The Company produced 82.2 TWh[2] of electricity in 2020, which represented 7.7% of Russia's total electricity generation and 39.7% of the Siberian IES's total electricity generation for the period.

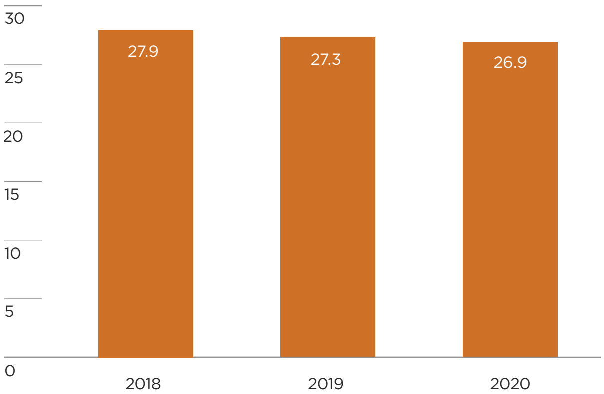
Hydropower generation

Hydropower generation is the main focus of the Group's Power segment. The Group operates five HPPs[3], including three of the five largest HPPs in Russia and of the twenty largest HPPs globally, in each case in terms of installed electricity capacity. In 2020, the Power segment's HPPs produced 69.3 TWh of electricity, which accounted for 84.3% of the total electricity generated by the Group.

Total electricity production[4], (TWh)



Heat generation, (mn Gcal)



Total electricity output by the Angara cascade HPPs (Irkutsk, Bratsk and Ust-Ilimsk HPPs) increased by 6.3% year-on-year to 47.3 TWh in 2020, due to increased water reserves in the reservoirs of the HPPs on the Angara cascade.

In 2020, Krasnoyarsk HPP's total power generation increased by 11.7%, from 19.7 TWh in 2019 to 22.0 TWh, mainly due to higher water levels in the Krasnoyarsk reservoir, in turn caused by high inflow in 2020 compared to the previous year. At the end of 2020, the level of the Krasnoyarsk reservoir was 236.22 m, compared to 236.03 m at the end of 2019.

Combined heat and power plants

The Group's CHPs decreased electricity output in 2020 by 5.1% year-on-year to 12.9 TWh, primarily as a result of higher HPP production on the back of more favourable hydrological conditions. Heat generation amounted to 26.9 million Gcal (down 1.5% year-on-year).

Abakan Solar Power Plant (SPP) generated 5.5 GWh in 2020 (down 11.3% year-on-year).

1 Including Onda HPP with installed power capacity of 0.08 GW (located in the European part of Russia, leased to UC RUSAL); excluding Boguchany HPP with installed power capacity of 3,000 MW (50/50 JV between UC RUSAL and RusHydro).
2 Excluding Onda HPP with installed power capacity of 0.08 GW (located in the European part of Russia, leased to UC RUSAL); excluding Boguchany HPP (50/50 JV between UC RUSAL and RusHydro).
3 Including Onda HPP.
4 Excluding Onda HPP with installed power capacity of 0.08 GW (located in European part of Russia, leased to UC RUSAL); excluding Boguchany HPP with installed power capacity of 3,000 MW (50/50 JV of UC RUSAL and RusHydro).
5 Includes Irkutsk, Bratsk, Ust-Ilimsk HPPs.
6 Krasnoyarskaya HPP.

Retail

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

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

Electricity transmission and distribution

As at 31 December 2020, the Group operated a transmission and distribution system of approximately 41,000 km of high and low voltage lines with an annual output of approximately 48 TWh. Through this system the Group transmits electricity generated at the Angara cascade HPPs to wholesale and retail consumers, including RUSAL's aluminium smelters. Other generation facilities of the Group, such as Krasnoyarsk HPP and Avtozavodskaya CHP, do not use this transmission network, as they are not located within close geographical proximity to the network.

Coal production

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

Coal prices in the domestic market are determined based on the level of competition and demand from various categories of consumers in the region (energy, utilities, other industrial enterprises, general population).

Projects

The New Energy modernisation programme

New Energy is a programme aimed at modernising the power plants of the Angara and Yenisei HPP cascade with a view to ramping up the energy output from the same volume of water passing through the hydropower turbines. Another objective is to reduce the Company's environmental footprint by curbing the greenhouse gas emissions of the Company's coal-fired power plants. In 2020, the programme has enabled En+ Group to increase its power output by 1.71 TWh.

The programme assumes a large-scale overhaul and replacement of the core equipment of the Company's largest Siberian HPPs, i.e. Krasnoyarsk, Bratsk, Irkutsk and Ust-Ilimsk HPPs. The programme envisages modernisation of hydroelectric generation units; replacement of runners. Increased efficiency will be provided by the new runners' improved blades and by utilising new materials, with an efficiency rate increase zof up to 8% depending on the runner. Higher safety and better reliability of the HPPs is another priority of the modernisation programme, which will mitigate the risks associated with cavitation and address the HPP generator wear problem.

The modernisation programme investment is expected to total RUB 21 billion in the period to 2026 (around USD 284.3 million as of 31 December 2020[1]), including funds already invested in the project (RUB 10 billion as at 31 December 2020 for the above projects).

The HPP efficiency will match that of the world's best performers after the New Energy programme is completed, providing for better reliability and a higher quality power supply to our Siberian consumers. On top of the expected economic improvement, the New Energy programme will positively impact the environment of the Siberian regions in which we operate. Hydroelectric energy is used to partially replace the energy generated by coal-fired power plants and thus prevent GHG emissions of 1.98 mt of CO_2e in 2020. The modernised turbines also incorporate an up-to-date runner design that prevents turbine oil leakage into water.

Bratsk HPP (18 generation units)	Ust-Ilimsk HPP (16 generation units)	Krasnoyarsk HPP (12 generation units)	Irkutsk HPP (8 generation units)
Projects completed and underway			
12 of 18 runners replaced (2007–2017)	4 of 16 runners replaced (2014–2018)	2 of 12 runners replaced (2016–2019)	1 generation unit replaced in 2020
6 remaining runners to be replaced by 2026		6 of 12 runners to be replaced by 2025	3 of 8 generation units to be replaced by 2023

1 Calculated based on USD/RUB exchange rate of 73.88 as at 31 December 2020.

Power segment review continued

In 2020, the Company launched a new hydroelectric unit at the Irkutsk HPP and began works on the next hydroelectric unit replacement. Major works began at the Krasnoyarsk HPP as well as a project to replace seven of the plant's power transformers. The Company completed a review of all equipment at the Bratsk HPP and hydraulic power unit wheels were subsequently ordered.

CHP modernisation programme

The Group participated in the state programmes for CHP modernisation providing us with a guaranteed return on investment. The Capacity Allocation Contracts (CAC) will be signed between buyers, market regulator (ATS) and generating companies of the wholesale market, providing the key criteria for modernisation, parameters of capacity supply after the modernisation and return on investment.

Through this programme the Group will improve the reliability and safety of 1,445 MW of its CHP capacity (32.9% of total CHP capacity). Total expected CAPEX for CHPs is USD 225 million[1] (RUB 16.6 billion) in 2020–2026. The current approved generating facilities should be completed and launched by 2026, with the project's internal rate of return at around 14%.

In 2020, the Company signed a contract for the supply of three new-generation turbo generators with a total capacity of 450 MW to Irkutsk CHP-10 in Irkutsk. At the CHP-6 in Bratsk, the main equipment will be replaced by 2022, which will increase the plant's capacity by 5 MW.

Small HPP project

As part of the state programme backed by the CAC mechanism for renewable projects, En+ Group is implementing the small-scale Segozerskaya HPP (8.1 MW) in Karelia (Russia). Total expected CAPEX for small HPP construction is approximately USD 19 million[1] (RUB 1.4 billion).

In 2020, En+ Group completed design engineering works for the small-scale Segozerskaya HPP. In 2021 En+ Group plans to launch construction works on the project site.

En+ Group has formed a portfolio of projects with a total installed capacity of about 200 MW. Depending on the results of the project feasibility studies, a decision will be made on when these projects will be implemented.

Electric vehicle charging stations in Irkutsk

En+ Group installed three pilot charging stations for electric vehicles in the Irkutsk Region. This initiative to support the growth of clean energy vehicle use is fully aligned with the Group's strategic focus on climate action.

Stations were launched in December 2020 in Irkutsk and in the village of Listvyanka on the shore of Lake Baikal. In the initial stage, En+ installed electric filling stations for "fast" charging of electric vehicles using CHAdeMO and CCS Combo (Type 2) connectors at DC with power of 50 kW. Fast charging makes it possible reach 80% battery capacity within 20 minutes.

Further development of the network of "fast" chargers in Irkutsk and the Irkutsk Region will be subject to the continued growth of the local EV market. The region has seen a significant increase in EV use over the past 3 years. According to Autostat[1] number of EVs in Russia increased by 71% in 2020 compared to 2019 with more than 60% of EV owners located in Siberia and Far East of Russia.

In the medium term, En+ plans to install "fast" chargers along motorways heading to Baikalsk, Khuzhir and the Olkhonsky district. In 2021, the Group plans to launch five new stations.

"As a responsible corporate citizen, En+'s primary aim for this project is to help improve air quality in our local communities. Our hope is that with the launch of these charging complexes, the number of electric vehicles used in the Irkutsk Region will continue to grow, helping to reduce local pollution and the region's overall contribution to climate change. En+ is ready to expand the network of stations in response to demand."

Mikhail Khardikov

1 Source: www.autostat.ru/news/47243/

Assets overview

	Location	Installed capacity	2020 production	2019 production
Hydropower plants				
Irkutsk HPP	Russia (Irkutsk Region)	662.4 MW	**4.1 TWh**	4.1 TWh
Bratsk HPP	Russia (Irkutsk Region)	4,500 MW	**22.4 TWh**	21.1 TWh
Ust-Ilimsk HPP	Russia (Irkutsk Region)	3,840 MW	**20.8 TWh**	19.3 TWh
Krasnoyarsk HPP	Russia (Krasnoyarsk Territory)	6,000 MW	**22.0 TWh**	19.7 TWh
Combined heat and power plants				
CHP-10	Russia (Irkutsk Region)			
Electricity		1,110 MW	**3.1 TWh**	3.8 TWh
Heat		563 Gcal/h	**0.4 mn Gcal**	0.4 mn Gcal
CHP-9	Russia (Irkutsk Region)			
Electricity		614.8 MW	**1.9 TWh**	2.1 TWh
Heat		3,198.9 Gcal/h	**6.0 mn Gcal**	6.1 mn Gcal
Novo-Irkutsk CHP	Russia (Irkutsk Region)			
Electricity		726 MW	**2.7 TWh**	2.6 TWh
Heat		2,075.8 Gcal/h	**5.5 mn Gcal**	5.6 mn Gcal
Ust-Ilimsk CHP	Russia (Irkutsk Region)			
Electricity		515 MW	**0.7 TWh**	0.9 TWh
Heat		1,015.0 Gcal/h	**1.6 mn Gcal**	1.6 mn Gcal
CHP-11	Russia (Irkutsk Region)			
Electricity		320.3 MW	**0.7 TWh**	0.6 TWh
Heat		1,056.9 Gcal/h	**0.9 mn Gcal**	1.0 mn Gcal
CHP-6	Russia (Irkutsk Region)			
Electricity		282 MW	**0.7 TWh**	0.7 TWh
Heat		2,071.2 Gcal/h	**3.6 mn Gcal**	3.5 mn Gcal
Novo-Ziminskaya CHP	Russia (Irkutsk Region)			
Electricity		260 MW	**1.1 TWh**	1.0 TWh
Heat		818.7 Gcal/h	**1.5 mn Gcal**	1.5 mn Gcal
Avtozavodskaya CHP	Russia (Nizhny Novgorod Region)			
Electricity		505 MW	**1.7 TWh**	1.6 TWh
Heat		2,226.0 Gcal/h	**3.3 mn Gcal**	3.3 mn Gcal
Solar power plant				
Abakan solar power plant	Russia (Republic of Khakassia)	5.2 MW	**5.5 mn kWh**	6.2 mn kWh
Other assets[1]				
Electricity		142.4 MW	**0.8 TWh**	0.6 TWh
Heat		2,768.6 Gcal/h	**4.2 mn Gcal**	4.3 mn Gcal

1 Other assets include Onda HPP and small scale generators and heat producers.

Strong financial performance

While our priorities for the year were to keep people safe, we also made progress with VAPs sales increase, effective cost management and investment in operational efficiency

USD 10 bn

Revenue

18%

Adj. EBITDA margin

"In 2020, our vertically integrated business model allowed us to deliver a healthy financial and operational performance."

Mikhail Khardikov,
Deputy CEO – Chief Financial Officer

Dear shareholders,
Despite challenges caused by the COVID-19 pandemic in 2020, En+ Group continued to make solid progress and delivered sustainable operational performance, which translated into a robust financial performance.

While our first priority was to keep our people safe and ensure business continuity, we also continued to make strategic and commercial progress, increasing sales volumes of value-added products, improving cost efficiency and progressing our ambitious decarbonisation strategy.

Against a backdrop of lower aluminium prices and foreign exchange headwinds, adjusted EBITDA was USD 1.9 billion, supported by stable aluminium output from the Metals segment and increased output from the Power segment. The Group's EBITDA margin remained strong at 18.0%, reflecting effective cost management, supported by the positive impact of rouble depreciation on production costs.

Lower sales volumes of primary aluminium and alloys y-o-y reflected that in 2019 we disposed of inventory accumulated during 2018 due to OFAC sanctions. Sales of VAPs increased 11.3% y-o-y and reached 44% of total aluminium and alloys sales. The Power segment was primarily affected by rouble depreciation.

We ended 2020 with a strong balance sheet. Our net debt at 31 December 2020 decreased by 3.7% y-o-y to USD 9,826 million. Net debt attributable to the Metals segment decreased by 14.0% y-o-y due to continued cost and structure optimisation of the debt portfolio. Net debt attributable to the Power segment increased by 14.0% y-o-y reflecting new loan agreements with Sberbank. In 2020, interest rates declined globally and there was a fall in the Central Bank of Russia's key rate. This translated into lower interest rates applied to our credit portfolio, especially in the Power segment where all debt is rouble denominated and the majority is on a floating base.

We generated USD 968 million of free cash flow, which included dividends received from Norilsk Nickel, following lower cash flow from operating activities and higher capital expenditure for En+.

The Group's capital expenditure increased 6.3% y-o-y and amounted to USD 1,128 million, as we continued to invest in enhancing operational efficiency as set out below.

As a part of our "New Energy" programme, we launched a new hydroelectric unit at the Irkutsk HPP and works on the next hydroelectric unit replacement and we continued works at the Krasnoyarsk and Bratsk HPPs. We also launched a range of modernisation projects at our CHPs aimed at improving reliability, productivity and safety of our assets as well as our environmental footprint.

The Metals segment continued its investment in key development projects. Core projects include the Taishet aluminium smelter and the Taishet anode plant. The Taishet aluminium smelter is expected to produce its first metal in 2021.

Furthermore, at the beginning of 2021 we launched the Ozernaya substation, which will provide the Taishet aluminium smelter with clean hydropower.

In 2020, our vertically integrated business model allowed us to deliver a healthy financial and operational performance. While the global economy is still experiencing the impact of the COVID-19 pandemic, we face the future with increasing confidence.

Mikhail Khardikov,
Deputy CEO – Chief Financial Officer

Key highlights

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

	As at or year ended 31 December	
	2020	2019
	(USD mn)	
Revenues	**10,356**	11,752
Gross profit	**2,548**	2,879
Gross profit margin	**24.6%**	24.5%
Results from operating activities (EBIT)	**1,010**	976
Operating profit margin	**9.8%**	8.3%
Pre-tax profit	**1,125**	1,580
Profit for the year	**1,016**	1,304
Net profit margin[1]	**9.8%**	11.1%
Adjusted EBITDA[2]	**1,861**	2,127
Adjusted EBITDA margin[3]	**18.0%**	18.1%
Net debt[4]	**9,826**	10,204
Net working capital[5]	**1,614**	2,042
Free cash flow[6]	**968**	1,614
Basic earnings per share[7]	**1.320**	1.356
Equity attributable to shareholders of the Company	**3,156**	4,330

Notes:
1 Net profit margin for any period represents net profit or loss for the relevant period divided by total revenues for the relevant period and expressed as a percentage, in each case attributable to the Group, Power segment or Metals segment, as the case may be.
2 Adjusted EBITDA for any period represents the results from operating activities adjusted for amortisation and depreciation, impairment of non current assets and gain/loss on disposal of property, plant and equipment for the relevant period, in each case attributable to the Group, Power segment or Metals segment, as the case may be.
3 Adjusted EBITDA margin for any period represents adjusted EBITDA for the relevant period divided by total revenues for the relevant period and expressed as a percentage, in each case attributable to the Group, Power segment or Metals segment, as the case may be.
4 Net debt represents the sum of loans and borrowings and bonds outstanding less total cash and cash equivalents as at the end of the relevant period, in each case attributable to the Group, Power segment or Metals segment, as the case may be.
5 Net working capital represents inventories plus short term trade and other receivables (excluding dividend receivables from related parties) less trade and other payables as at the end of the relevant period, in each case attributable to the Group, Power segment or Metals segment, as the case may be.
6 Free cash flow means, for any period, the cash flows generated from operating activities less net interest paid, capital expenditures, restructuring fees and other payments related to issuance of shares, adjusted for payments from settlement of derivative instruments plus dividends from associates and joint ventures.
7 The earnings per share calculation is based on a weighted average number of shares of 518 million and 634 million in 2020 and 2019, respectively.

Financial overview

The results of the Group's operations are divided into the Power and Metals segments. The Power segment comprises the power industry, including power generation, power trading and supply. It also includes supporting operations engaged in the supply of coal resources to the Group. The Metals segment consists of RUSAL, which includes RUSAL's equity investment in Norilsk Nickel.

RUSAL is one of the leaders of the global aluminium industry. In 2020, the Company accounted for around 5.8% of global production of aluminium and 6.5% of alumina production.

The Company's management believes that the division of the results of the Group's operations into the Power and Metals segments enables investors and analysts to best assess the parts of the Group's business.

In its comparison of period to period results of operations, the Group presents its results of operations on a consolidated basis after intersegmental eliminations, in order to analyse changes, developments and trends by reference to the individual segment's results of operations (Power and Metals segments). Amounts attributable to the segments are presented prior to intersegmental eliminations between them.

Revenues

The following table provides the Group's revenue from sales, analysed by each product sold by the Group, for the years indicated:

	Year ended 31 December	
(USD mn)	2020	2019
Sales of primary aluminium and alloys	**6,969**	7,906
Sales of electricity	**1,169**	1,300
Sales of alumina and bauxite	**534**	668
Sales of semi finished products and foil	**547**	563
Sales of heat	**426**	462
Other revenues	**711**	853
Total revenues	**10,356**	**11,752**

The following table provides the Group's revenue by business segment for the years indicated:

	Year ended 31 December	
(USD mn)	2020	2019
Metals segment	**8,566**	9,711
Power segment	**2,697**	2,989
Business segment revenues	**11,263**	12,700
Elimination of intersegmental revenues	**(907)**	(948)
Total revenues	**10,356**	**11,752**

The Group's revenue is mainly attributable to the Metals segment's operations. In 2020 and 2019, its revenue (before intersegmental elimination) accounted for 76.1% and 76.5% of the Group's revenue, respectively. In 2020 and 2019, the Power segment's revenue (before intersegmental elimination) accounted for 23.9% and 23.5% of the Group's revenue, respectively.

The Group's revenue decreased by USD 1,396 million, or 11.9%, from USD 11,752 million in 2019 to USD 10,356 million in 2020. This decrease was primarily due to a fall in the Metals segment's revenue, following a 5.0% decrease in the LME aluminium price to an average of USD 1,702 per tonne in 2020, from USD 1,792 per tonne in 2019 and a 6.0% decline in the sales volumes of primary aluminium and alloys given normalised levels of inventories of primary aluminium in 2020. The Group's revenue was also affected by a decrease in the Power segment's revenue, mainly following the depreciation of the rouble.

Cost of sales

The following table provides the Group's cost of sales by business segment for the years indicated:

	Year ended 31 December	
(USD mn)	2020	2019
Metals segment	**7,112**	8,113
Power segment	**1,582**	1,736
Business segment cost of sales	**8,694**	9,849
Elimination of intersegmental cost of sales	**(886)**	(976)
Total cost of sales	**7,808**	**8,873**

The cost of sales in the Power and Metals segments reflects costs incurred directly by the sale and production of the principal products and services of each of those business segments. For the Power segment, the cost of sales primarily includes costs for electricity and capacity purchased for resale, the cost of raw materials, fuel, personnel expenses, depreciation and amortisation. For the Metals segment, the cost of sales mainly consists of the cost of energy, alumina, bauxite, other raw materials, personnel expenses, depreciation and amortisation.

The Group's cost of sales decreased by USD 1,065 million, or 12.0%, from USD 8,873 million in 2019 to USD 7,808 million in 2020.

The decrease was primarily attributable to the decrease in the Metals segment's cost of sales by USD 1,001 million, or by 12.3%, to USD 7,112 million for the year ended 31 December 2020, as compared to USD 8,113 million for the year ended 31 December 2019. The decrease was primarily driven by a 6.0% fall in the volume of primarily aluminium sales and the depreciation of the rouble against US dollar between the comparable periods.

Gross profit

The Group's gross profit for 2020 decreased by USD 331 million, or 11.5%, to USD 2,548 million from USD 2,879 million in 2019.

The Group's gross profit margin increased from 24.5% in 2019 to 24.6% in 2020.

Distribution, general and administrative expenses

The Group's distribution, general and administrative expenses for 2020 decreased by USD 151 million, or 10.3%, to USD 1,320 million from USD 1,471 million in 2019 following rouble depreciation.

Adjusted EBITDA, adjusted EBITDA margin and results from operating activities

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

	Year ended 31 December	
(USD mn)	2020	2019
Reconciliation of adjusted EBITDA		
Results from operating activities	**1,010**	976
Add:		
Amortisation and depreciation	**781**	806
Loss on disposal of property, plant and equipment	**12**	24
Impairment of non current assets	**58**	321
Adjusted EBITDA	**1,861**	**2,127**

The Group's results from operating activities for 2020 increased by USD 34 million, or 3.5%, to USD 1,010 million from USD 976 million for 2019.

Results from operating activities attributable to the Metals segment increased by USD 192 million, or 220.7%, from USD 87 million in 2019 to USD 279 million in 2020; results from operating activities attributable to the Power segment decreased by USD 124 million, or 14.5%, from USD 855 million in 2019, to USD 731 million in 2020, as disclosed below.

The Group's operating profit margin increased from 8.3% in 2019 to 9.8% in 2020.

Adjusted EBITDA is defined as results from operating activities adjusted for amortisation and depreciation, impairment charges and loss on disposal of property, plant and equipment.

The following table provides the Group's adjusted EBITDA and adjusted EBITDA margin by segment (before intersegmental elimination) for the years indicated:

	Year ended 31 December	
(USD mn, except %)	2020	2019
Adjusted EBITDA Metals segment	**871**	966
Adjusted EBITDA Power segment	**993**	1,127
Consolidation adjustment	**(3)**	34
Adjusted EBITDA	**1,861**	2,127
Adjusted EBITDA margin Metals segment	**10.2%**	9.9%
Adjusted EBITDA margin Power segment	**36.8%**	37.7%
Adjusted EBITDA margin Group	**18.0%**	**18.1%**

In 2020, the Group's adjusted EBITDA decreased by USD 266 million, or 12.5%, to USD 1,861 million from USD 2,127 million in 2019. The decrease in 2020 as compared to 2019 was mainly due to the same factors that influenced the operating results of the Group.

Share of profits of associates and joint ventures

	Year ended 31 December	
(USD mn, %)	2020	2019
Share of profit in Norilsk Nickel	**930**	1,587
Effective shareholding of	**15.82%**	15.82%
Share of profit in BEMO project	**51**	49
Effective shareholding of	**28.44%**	28.44%
Share of profit in other associates/joint ventures	**(10)**	33
Share of profits of associates and joint ventures	**971**	**1,669**

The Group has a number of associates and joint ventures, which are accounted for in the Financial Statements under the equity method (see Note 13 to the Annual Financial Statements). The principal associates and joint ventures include Norilsk Nickel, Queensland Alumina Limited and the BEMO project.

Financial overview continued

The Group's share of the profits of its associates and joint ventures decreased by USD 698 million, or 41.8%, to USD 971 million in 2020 from USD 1,669 million in 2019. The change in the share of the profits of the associates and joint ventures in 2020 as compared to 2019 can primarily be attributed to the decrease in profit from the Group's investment in Norilsk Nickel. In 2020, Norilsk Nickel recognised an environmental provision in the amount of USD 2.2 billion due to liquidation of diesel fuel leak at the industrial site of HPP-3 in Norilsk and compensation of environmental damages that resulted in a decrease in its EBITDA in 2020.

The market value of the investment amounted to USD 14,123 million and USD 13,586 million as at 31 December 2020 and 31 December 2019, 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.

Finance income and costs
The Group's finance income primarily consists of interest income and net foreign exchange gain. The Group's finance costs primarily consist of interest expense on interest bearing liabilities and net foreign exchange loss.

	Year ended 31 December	
(USD mn)	2020	2019
Finance income		
Net foreign exchange gain	**98**	—
Interest income	**61**	82
Dividend income	**1**	1
Total finance income	**160**	**83**
Finance costs		
Interest expense	**(788)**	(987)
Net foreign exchange loss	**—**	(114)
Change in fair value of derivative financial instruments	**(226)**	(21)
Other finance costs	**(2)**	(26)
Total finance costs	**(1,016)**	**(1,148)**

The Group's finance income for 2020 increased by USD 77 million, or 92.8%, to USD 160 million from USD 83 million in 2019, mainly as a result of foreign exchange gains.

The Group's finance costs for 2020 decreased by USD 132 million, or 11.5%, from USD 1,148 million in 2019 to USD 1,016 million in 2020 as a result of a decrease in interest expense (USD 788 million in 2020 compared to USD 987 million in 2019) and result of foreign exchange losses.

Profit before taxation
For the reasons described above, the Group recorded a profit before taxation of USD 1,125 million in 2020 as compared to USD 1,580 million in 2019. In 2020, the Power segment generated a profit before taxation of USD 409 million compared to USD 492 million in 2019. In 2020, the Metals segment generated a profit before taxation of USD 716 million as compared to USD 1,054 million in 2019.

Income tax expense
The Group's income tax expense for 2020 decreased by USD 167 million, or 60.5%, to USD 109 million from USD 276 million in 2019, as a result of the lower profit before taxation in 2020 as compared to 2019. The current tax expense decreased by USD 146 million, or 39.6%, during this period, primarily due to a decrease in taxable profit. Deferred tax increased by USD 21 million from USD 93 million in 2019, to a tax benefit of USD 114 million in 2020, primarily due to the recognition of deferred tax assets related to tax losses incurred by various Group companies.

Profit for the year
For the reasons described above, the Group's profit for the year ended 31 December 2020 was USD 1,016 million, as compared to profit for the year ended 31 December 2019 of USD 1,304 million.

Metals segment

In 2020 and 2019, the Metals segment accounted for 76.1% and 76.5% of the business segments' revenues (before adjustments), respectively. As at 31 December 2020 and 31 December 2019, the assets of the Metals segment accounted for 62.2% and 60.8% of the Group's total assets (before adjustments), respectively.

Selected financial data

The following table provides selected data of Metals segment (before intersegmental elimination) for the periods indicated:

	Year ended 31 December	
(USD mn)	2020	2019
Revenues	**8,566**	9,711
Gross profit	**1,454**	1,598
Gross profit margin	**17.0%**	16.5%
Pre-tax profit	**716**	1,054
Profit for the period	**759**	960
Net profit margin	**8.9%**	9,9%
Adjusted EBITDA	**871**	966
Adjusted EBITDA margin	**10.2%**	9.9%
Adjusted net (loss)/profit[1]	**60**	(270)
Recurring net profit[2]	**990**	1,273
Recurring net profit margin[3]	**11.6%**	13.1%

Revenues

The following table provides components of the Metals segment's sales data (before intersegmental elimination) for the years indicated:

	Year ended 31 December	
	2020	2019
Sales of primary aluminium and alloys		
Revenue, USD mn	**7,088**	8,019
Sales volumes, kt	**3,926**	4,176
Average sales price (USD/t)	**1,805**	1,920
Sales of primary alumina		
Revenue, USD mn	**533**	664
Sales volumes, kt	**1,729**	1,753
Average sales price (USD/t)	**308**	379
Sales of foil and other aluminium products, USD mn	**381**	410
Other revenue, USD mn	**564**	618
Total revenues	**8,566**	**9,711**

The Metals segment's revenue decreased in 2020 by USD 1,145 million, or by 11.8%, to USD 8,566 million from USD 9,711 million in 2019, following a 5.0% decrease in the average LME aluminium price.

Revenue from sales of primary aluminium and alloys decreased by USD 931 million, or by 11.6%, to USD 7,088 million in 2020, as compared to USD 8,019 million in 2019, primarily due to a 6.0% decrease in the weighted average realised aluminium price per tonne (to an average of USD 1,805 per tonne in 2020 from USD 1,920 per tonne in 2019) driven by a decrease in the LME aluminium price (to an average of USD 1,702 per tonne in 2020 from USD 1,792 per tonne in 2019), as well as 6.0% lower sales volumes.

Revenue from sales of alumina decreased by 19.7% to USD 533 million for the year ended 31 December 2020 from USD 664 million for the year ended 31 December 2019, due a decrease in the average sales price of 18.7%, together with a decrease in sales volumes of 1.4%.

Revenue from sales of foil and other aluminium products decreased by USD 29 million, or by 7.1%, to USD 381 million in 2020, as compared to USD 410 million in 2019, primarily due to a decrease in sales of aluminium wheels between the comparable periods.

Revenue from other sales, including sales of other products, bauxite and energy services decreased by 8.7% to USD 564 million for the year ended 31 December 2020 as compared to USD 618 million for the previous year, due to a 9.4% decrease in sales of other materials (such as silicon by 39.1%, soda by 26.3%, and aluminium powder by 11.9%).

Cost of sales

The following table provides components of the Metals segment's cost of sales (before intersegmental elimination) for the years indicated:

	Year ended 31 December	
(USD mn)	2020	2019
Cost of alumina	**608**	764
Cost of bauxite	**447**	483
Cost of other raw materials and other costs	**2,298**	2,515
Purchases of primary aluminium from joint ventures	**465**	454
Energy costs	**1,868**	2,054
Depreciation and amortisation	**542**	549
Personnel expenses	**512**	499
Repair and maintenance	**381**	358
Net change in provisions for inventories	**(2)**	(16)
Change in finished goods	**(7)**	453
Total cost of sales	**7,112**	**8,113**

1 Adjusted net (loss)/profit for any period represents net (loss)/profit for the relevant period adjusted for the net effect from the share in the results of Norilsk Nickel, the net effect of embedded derivative financial instruments and the net effect of non current assets impairment.
2 Recurring net profit represents adjusted net (loss)/profit for the relevant period plus RUSAL's effective share of Norilsk Nickel's profits, net of tax.
3 Recurring net profit margin represents recurring net profit for the relevant period divided by total revenues, expressed as a percentage for the relevant period attributable to the Metals segment.

Metals segment continued

The Metals segment's cost of sales decreased by USD 1,001 million, or by 12.3%, to USD 7,112 million for the year ended 31 December 2020, as compared to USD 8,113 million for the year ended 31 December 2019. The decrease was primarily driven by a 6.0% fall in the volume of primarily aluminium sales and the depreciation of the rouble against the US dollar between the comparable periods.

The cost of alumina decreased by USD 156 million, or by 20.4%, to USD 608 million in 2020 as compared to USD 764 million in 2019, primarily due to a decrease in the alumina purchase price of 12.1% between the periods.

The cost of bauxite decreased by USD 36 million, or by 7.5%, to USD 447 million in 2020 as compared to USD 483 million in 2019.

The cost of raw materials (other than alumina and bauxite) and other costs decreased by 8.6% for the year ended 31 December 2020 compared to the same period in 2019, due to a decrease in the raw materials purchase price (prices for the raw petroleum coke decreased by 25.9%, calcined petroleum coke by 18.4%, pitch by 26.4%, and caustic soda by 17.6%).

Energy costs decreased by USD 186 million, or by 9.1%, to USD 1,868 million for the year ended 31 December 2020, as compared to USD 2,054 million for the year ended 31 December 2019, due to depreciation of the Russian rouble against the US dollar and a decrease in the average electricity prices between the same periods.

Finished goods consist mainly of primary aluminium and alloys (approx. 94%). The dynamic of change between the reporting periods was driven by fluctuations in the physical inventory of primary aluminium and alloys between the reporting dates: a 2.6% increase in 2020 and a 38.0% decrease in 2019.

Adjusted EBITDA and adjusted EBITDA margin

In 2020, the Metals segment's adjusted EBITDA (before intersegmental elimination) decreased by USD 95 million, or 9.8%, to USD 871 million from USD 966 million in 2019. The factors that contributed to the decrease in adjusted EBITDA margin were the same ones that influenced the operating results.

The following table provides a reconciliation of the Metals segment's adjusted EBITDA to its results from operating activities for the periods indicated:

	Year ended 31 December	
(USD mn)	**2020**	**2019**
Reconciliation of adjusted EBITDA		
Results from operating activities	**279**	87
Add:		
Amortisation and depreciation	**570**	566
Loss on disposal of property, plant and equipment	**13**	22
Impairment of non current assets	**9**	291
Adjusted EBITDA	**871**	**966**

The following table provides a reconciliation of the Metals segment's adjusted net profit and recurring net profit to its net profit for the periods indicated:

	Year ended 31 December	
(USD mn)	**2020**	**2019**
Reconciliation of adjusted net (loss)/profit		
Net profit for the period	**759**	960
Adjusted for:		
Share of profits and other gains and losses attributable to Norilsk Nickel, net of tax effect	**(930)**	(1,543)
Change in the fair value of derivative financial liabilities, net of tax (20%)	**222**	22
Impairment of non current assets, net of tax	**9**	291
Adjusted net (loss)/profit	**60**	**(270)**
Add back:		
Share of profits of Norilsk Nickel, net of tax	**930**	1,543
Recurring net profit	**990**	**1,273**

Adjusted net (loss)/profit for any period is defined as the net (loss)/profit adjusted for the net effect of the Metals segment's investment in Norilsk Nickel, the net effect of derivative financial instruments and the net effect of non-current assets impairment. Recurring net profit for any period is defined as adjusted net (loss)/profit plus the Company's net effective share in Norilsk Nickel's results.

Power segment

The Power segment is engaged in all aspects of the power industry, including power generation, power trading and supply, as well as supporting operations engaged in the supply of coal resources to the Group.

In 2020 and 2019, the Power segment accounted for 23.9% and 23.5% of the business segments' revenues (before adjustments), respectively. As at 31 December 2020 and 31 December 2019, the assets of the Power segment accounted for 37.8% and 39.2% of the Group's total assets (before adjustments), respectively.

Selected financial data

The following table provides selected data of the Power segment (before intersegmental elimination) for the periods indicated:

	Year ended 31 December	
(USD mn)	**2020**	**2019**
Revenues	**2,697**	2,989
Gross profit	**1,115**	1,253
Gross profit margin	**41.3%**	41.9%
Results from operating activities (EBIT)	**731**	855
Operating profit margin	**27.1%**	28.6%
Pre-tax profit	**409**	492
Profit for the period	**257**	311
Net profit margin	**9.5%**	10.4%
Adjusted EBITDA	**993**	1,127
Adjusted EBITDA margin	**36.8%**	37.7%

Revenues

The following table provides components of the Power segment's sales data (before intersegmental elimination) for the years indicated:

	Year ended 31 December	
(USD mn)	**2020**	**2019**
Average RUB/USD exchange rate	**72,14**	**64,74**
Sales of electricity		
Revenue, USD mn	**1,262**	1,376
Sales volumes, TWh	**97.8**	93.6
Average sales price (RUB/MWh)	**931**	952
Sales of capacity		
Revenue, USD mn	**434**	487
Sales volumes, GW/year	**178.5**	170.4
Average sales price ('000 RUB/MW)	**175**	185
Sales of heat		
Revenue, USD mn	**393**	425
Sales volumes, mn Gcal	**23.4**	23.8
Average sales price (RUB/Gcal)	**1,209**	1,156
Sales of semi finished products, USD mn	**180**	180
Other revenues, USD mn	**428**	521
Total, USD mn	**2,697**	**2,989**

The Power segment's revenue decreased by USD 292 million, or 9.8%, to USD 2,697 million in 2020 from USD 2,989 million in 2019, mainly reflecting the depreciation of the Russian rouble in 2020 compared to 2019 (the average RUB/USD exchange rate rose 11.4%) and a 2.2% decrease in the average electricity sales price.

Revenue from electricity sales decreased by 8.3% year-on-year to USD 1,262 million in 2020. The decrease was mainly driven by the depreciation of the Russian rouble in 2020 and lower electricity sales prices compared to 2019. This was partially offset by a 4.5% increase in electricity sales volumes.

Power segment continued

Capacity sales decreased by 10.9% year-on-year to USD 434 million in 2020. The decrease was mainly driven by the depreciation of the Russian rouble in 2020 and lower capacity sales prices compared to 2019. This was partially offset by a 4.8% increase in capacity sales volumes.

Heat sales decreased by 7.5% year-on-year to USD 393 million in 2020.

The Power segment's electricity generation increased from 77.8 TWh in 2019 to 82.2 TWh in 2020. In 2019, HPPs generated 64.2 TWh of electricity, or 82.5% of the total electricity generated by the Power segment, while in 2020 they generated 69.3 TWh of electricity, or 84.3% of the total electricity generated by the Power segment. The increase in HPP generation can be primarily explained by increased water reserves.

Cost of sales

The following table provides components of the Power segment's cost of sales (before intersegmental elimination) for the years indicated:

	Year ended 31 December	
(USD mn)	2020	2019
Electricity and capacity	**361**	399
Personnel expenses	**319**	334
Depreciation, depletion and amortisation	**206**	234
Cost of raw materials and fuel	**227**	271
Aluminium	**117**	111
Electricity transmission costs	**141**	158
Other	**211**	229
Total cost of sales	**1,582**	**1,736**

The Power segment's cost of sales decreased by USD 154 million, or by 8.9%, to USD 1,582 million for the year ended 31 December 2020, as compared to USD 1,736 million for the year ended 31 December 2019.

Adjusted EBITDA and adjusted EBITDA margin

The following table provides the Power segment's adjusted EBITDA and adjusted EBITDA margin for the years indicated:

	Year ended 31 December	
(USD mn)	2020	2019
Adjusted EBITDA (HPPs)	**914**	978
Adjusted EBITDA (CHPs)	**30**	66
Adjusted EBITDA (Coal)	**30**	38
Adjusted EBITDA (Other and unallocated)	**19**	45
Adjusted EBITDA (Power segment)	**993**	1,127
Adjusted EBITDA margin (Power segment)	**36.8%**	37.7%
Adjusted EBITDA margin (HPPs)	**84.8%**	86.0%
Adjusted EBITDA margin (CHPs)	**4.4%**	8.6%
Adjusted EBITDA margin (Coal)	**12.8%**	12.9%

In 2020, the Power segment's adjusted EBITDA (before intersegmental elimination) decreased by USD 134 million, or 11.9%, to USD 993 million, from USD 1,127 million in 2019. The decline was driven by a decrease in average electricity spot prices and the depreciation of the Russian rouble, but was partially offset by the increase in electricity generation volumes.

As power operations account for a sizeable portion of the revenues, assets and liabilities attributable to the Power segment, and are, therefore, a predominant contributor to the adjusted EBITDA of the Power segment, the low-cost operation of HPPs will positively affect the overall adjusted EBITDA of the Power segment. HPPs accounted for 92.1% and 86.8% of the Power segment's adjusted EBITDA in 2020 and 2019 respectively.

The following table provides a reconciliation of the Power segment's adjusted EBITDA to the Power segment's results from operating activities for the periods indicated:

	Year ended 31 December	
(USD mn)	2020	2019
Reconciliation of adjusted EBITDA		
Results from operating activities	**731**	855
Add:		
Amortisation and depreciation	**214**	240
Loss/(gain) on disposal of property, plant and equipment	**(1)**	2
Impairment of non current assets	**49**	30
Adjusted EBITDA	**993**	**1,127**

Net assets

(USD mn)	Year ended 31 December 2020	2019
Group		
Non-current assets	**16,062**	16,813
Current assets	**6,599**	7,218
Non-current liabilities	**(12,021)**	(13,185)
Current liabilities	**(4,575)**	(3,474)
Net assets	**6,065**	**7,372**
RUSAL		
Non-current assets	**11,501**	11,546
Current assets	**5,877**	6,268
Non-current liabilities	**(8,044)**	(8,677)
Current liabilities	**(2,791)**	(2,390)
Net assets	**6,543**	**6,747**
Power segment		
Non-current assets	**9,667**	10,371
Current assets	**903**	1,138
Non-current liabilities	**(3,981)**	(4,556)
Current liabilities	**(1,955)**	(1,213)
Net assets	**4,634**	**5,740**

In 2020, the Group's net assets decreased by USD 1,307 million to USD 6,065 million as at 31 December 2020, from USD 7,372 million as at 31 December 2019.

In 2020, the Metals segment's net assets decreased by USD 204 million, or by 3.0%, to USD 6,543 million as at 31 December 2020, from USD 6,747 million as at 31 December 2019. This was mainly caused by a decrease in total assets, driven primarily by a decrease in interests in associates and joint ventures and receivables.

In 2020, the Power segment's net assets as at 31 December 2020 decreased by USD 1,106 million, or by 19.3%, to USD 4,634 million, from USD 5,740 million as at 31 December 2019 mainly due to the acquisition of VTB Group's 21.37% stake in En+ Group for USD 1,579 million.

Net working capital

Net working capital is defined as inventories plus short-term trade and other receivables (excluding dividend receivables), less trade and other payables.

The following table provides the calculation of the net working capital of the Group, Power segment and the Metals segment as at the dates indicated:

(USD mn)	As at 31 December 2020	2019
Group		
Inventories	**2,339**	2,542
Short term trade and other receivables	**1,431**	2,082
Dividends receivable	**—**	(430)
Trade and other payables	**(2,156)**	(2,152)
Net working capital	**1,614**	**2,042**
Metals segment		
Inventories	**2,292**	2,460
Short term trade and other receivables	**1,163**	1,781
Dividends receivable	**—**	(430)
Trade and other payables	**(1,836)**	(1,770)
Net working capital	**1,619**	**2,041**
Power segment		
Inventories	**113**	138
Short term trade and other receivables	**333**	383
Trade and other payables	**(491)**	(511)
Net working capital	**(45)**	**10**

As at 31 December 2020, the Group's net working capital amounted to USD 1,614 million, compared to USD 2,042 million as at 31 December 2019.

The decrease in inventories (by USD 203 million from USD 2,542 million as at 31 December 2019 to USD 2,339 million as at 31 December 2020) was driven by a decrease in alumina, bauxite and WIP (raw materials cost impact).

Trade and other receivables, net of dividends receivable, decreased by USD 221 million from USD 1,652 million as at 31 December 2019 to USD 1,431 million as at 31 December 2020. The decline was driven by a decrease in aluminium sales. Trade and other payables remained flat from 2019.

Liquidity and capital resources

General

In 2020, the Group's liquidity requirements primarily related to funding working capital, capital expenditures and debt service. The Group used a variety of internal and external sources to finance operations. During the periods under review, short and long term funding sources predominantly included rouble and foreign currency denominated secured and unsecured loans from Russian and international banks, as well as debt instruments issued in both the Russian and international capital markets.

Liquidity was managed separately in both segments – Power and Metals.

Dividends

During the year ended 31 December 2020 the Group did not declare or pay dividends.

Cash flows

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

	Year ended 31 December	
(USD mn)	2020	2019
Cash flows from operating activities	**1,890**	2,561
Cash flows from/(used in) investing activities	**(77)**	92
Cash flows used in financing activities	**(1,372)**	(1,588)
Net change in cash and cash equivalents	**441**	**1,065**
Cash and cash equivalents at the beginning of the period, excluding restricted cash	**2,265**	1,140
Effect of exchange rate changes on cash and cash equivalents	**(157)**	60
Cash and cash equivalents at the end of the period, excluding restricted cash[1]	**2,549**	2,265
Free cash flow	**968**	**1,614**

Cash flows from operating activities

The Group's cash flows from operating activities for 2020 were USD 1,890 million, a decrease of USD 671 million, or 26.2%, compared to USD 2,561 million in 2019. This decrease was primarily due to changes in net working capital of USD 232 million in 2020, compared to USD 885 million in 2019, apart of EBITDA change.

Cash flows generated from/(used in) investing activities

The Group's cash flows from investing activities for 2020 were USD (77) million, and were primarily attributable to capital expenditures on the acquisition of property, plant and other investments, which were partially offset by dividends received from associates and joint ventures (mainly Norilsk Nickel).

Cash flows used in financing activities

The Group's cash flows used in financing activities for 2020 were USD 1,372 million, a decrease of USD 216 million from USD 1,588 million in 2019. This decrease was primarily due to the lower net repayment of debt and interest repayment driven by a reduction of the nominal interest rate.

Free cash flow

The following table provides a reconciliation of the free cash flow to the cash flows from operating activities for the periods indicated:

	Year ended 31 December	
(USD mn)	2020	2019
Reconciliation of free cash flow Group		
Cash flows generated from operating activities	**1,890**	2,561
Adjusted for:		
Capital expenditure (acquisition of property, plant and equipment and acquisition of intangible assets)	**(1,128)**	(1,061)
Dividends from associates and joint ventures	**1,170**	1,141
Interest received	**56**	62
Interest paid	**(779)**	(1,021)
Restructuring fees and expenses related to issuance of shares	**(26)**	(42)
Settlement of derivative financial instruments	**(215)**	(26)
Free cash flow	**968**	**1,614**

1 Restricted cash amounted to USD 13 million and USD 13 million at 31 December 2020 and 31 December 2019, respectively.

(USD mn)	Year ended 31 December 2020	2019
Reconciliation of free cash flow		
Metals segment		
Cash flows generated from operating activities	**1,091**	1,652
Adjusted for:		
Capital expenditure (acquisition of property, plant and equipment and acquisition of intangible assets)	**(897)**	(848)
Dividends from associates and joint ventures	**1,170**	1,141
Interest received	**26**	31
Interest paid	**(465)**	(553)
Restructuring fees	**(12)**	(33)
Settlement of derivative financial instruments	**(215)**	(26)
Free cash flow	**698**	**1,364**
Reconciliation of free cash flow		
Power segment		
Cash flows generated from operating activities	**805**	932
Adjusted for:		
Capital expenditure (acquisition of property, plant and equipment and acquisition of intangible assets)	**(237)**	(236)
Interest received	**30**	31
Interest paid	**(314)**	(468)
Restructuring fees and expenses related to issuance of shares	**(14)**	(9)
Free cash flow	**270**	**250**

Capital expenditure

In 2020 and 2019, the Group's capital expenditure (comprising the acquisition of property, plant and equipment, as well as the acquisition of intangible assets) was USD 1,128 million and USD 1,061 million, respectively. The Group's subsidiaries financed their cash requirements through a combination of operating cash flows and borrowings. The table below provides the capital expenditure (before adjustments) of the Metals and Power segments for the periods indicated:

(USD mn)	Year ended 31 December 2020	2019
Metals segment	**897**	848
Power segment	**237**	236

The Metals segment recorded total capital expenditure of USD 897 million for the year ended 31 December 2020. Maintenance CAPEX amounted to 56% of the aggregate CAPEX in 2020. The Metals segment continued its investment in key development projects as per its strategic priority of preserving its competitive advantages of vertical integration into raw materials and product mix enhancements. Among the core projects are the Taishet aluminium smelter (25% of total) and the Taishet anode plant (8% of total).

In 2020, capital expenditure by the Power segment amounted to USD 237 million. Maintenance CAPEX accounted for 51% of total capital expenditure. The Power segment continued to invest in technical connections to its power supply infrastructure (including a new substation for the Taishet aluminium smelter) and improve the efficiency of the Group's CHPs by continuing the HPP New Energy modernisation programme, which supported an increase in electricity generation volumes of 1,712.1 GWh in 2020.

Cash

As at 31 December 2020 and 31 December 2019, the Group's cash and cash equivalents, excluding restricted cash, were USD 2,549 million and USD 2,265 million, respectively. As at 31 December 2020 and 31 December 2019, the Power segment's cash and cash equivalents were USD 333 million and USD 497 million, respectively. The Metals segment's cash and cash equivalents were USD 2,216 million and USD 1,768 million, respectively.

Loans and borrowings

The nominal value of the Group's loans and borrowings was USD 9,939 million as at 31 December 2020, not including bonds, which amounted to an additional USD 2,438 million.

Set out below is an overview of certain key terms of selected facilities in the Group's loan portfolio as at 31 December 2020:

Facility/lender	Principal amount outstanding as at 31 December 2020	Tenor/repayment schedule	Pricing
Metals segment			
Syndicated facilities			
PXF facility	USD 1.085 bn	Up to USD 1.085 bn 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.
Bilateral loans			
Nordea Bank Abp	USD 200 mn	January 2021, bullet repayment at final maturity date	1-month LIBOR plus 2.4% p.a.[1]
Russian Regional Development Bank (RRDB)	USD 200 mn	November 2021, bullet repayment at final maturity date	2.97% p.a.
Sberbank	USD 2.1 bn	December 2027, quarterly repayments starting from September 2024	3-month LIBOR plus 3.0% p.a.
	RUB 106.4 bn		The key rate of the Bank of Russia plus 1.9% p.a.
Bonds			
Eurobond	USD 512 mn	February 2022, repayment at final redemption date	5.125% p.a.
Eurobond	USD 482 mn	May 2023, repayment at final redemption date	5.3% p.a.
Eurobond	USD 498 mn	February 2023, repayment at final redemption date	4.85% p.a.
RUB bonds	RUB 70 bn swapped into USD, for equivalent USD 1.1 billion (after cross-currency swaps)	5 tranches, the last repayment is May 2030, repayments at final redemption dates, subject to a bondholders' put option exercisable within 3.0–3.5 years	2.9%–4.69% p.a. (after cross-currency swaps)
Power segment			
Sberbank	RUB 97.5 bn	December 2026, quarterly repayments starting from September 2020	The key rate of the Bank of Russia plus 1.5% p.a.
Sberbank and VTB	RUB 65.4 bn	June 2023, quarterly repayments starting from September 2019	The key rate of the Bank of Russia plus 2% p.a. (except for RUB 2.3 bn tranche bearing 10.5% p.a.)
Sberbank	RUB 100.8 bn	December 2022 (with the borrower's unconditional right to extend to December 2026 – with scheduled repayments starting from 2023)	The key rate of the Bank of Russia plus 1.65% p.a.

1 In January 2021, the facility was refinanced by the sustainability-linked pre-export finance facility for up to USD 200 million, interest rate 3 month LIBOR + 1.8%, with the possibility to reduce the margin if the sustainability KPIs are fulfilled.

Security

As of 31 December 2020, the Metals segment's debt (save for several unsecured loans and bonds) is secured, among others, by the assignment of receivables under specified contracts, certain pledges of shares of a number of the Metals segment's subsidiaries, designated accounts and shares in Norilsk Nickel (representing a 25% plus 1 share of Norilsk Nickel's total nominal issued share capital).

As of 31 December 2020, the Power segment's debt (save for unsecured working capital loans of certain operating companies from Gazprombank, Sberbank and other banks) is secured, among others, by pledges of shares (including 21.37% of En+ GROUP IPJSC shares) and interests in certain operating and non-operating companies, properties, plant and equipment.

Key events

- In February 2020, the Group entered into two loan agreements with Sberbank:

  Loan 1 – three-year RUB 100.8 billion loan agreement to finance the acquisition of a 21.37% stake in En+ Group from VTB for USD 1.6 billion.

  Loan 2 – loan agreement granting a right to extend the final maturity of Loan 1 for another four years during 2022.

- In August 2020, RUSAL performed the first annual testing of the sustainability KPIs under PXF and its verification by an independent auditor. All target levels for the previous year were achieved or exceeded, and the margin was subsequently decreased to 2.1% starting from August 2020.
- In November 2020, RUSAL negotiated new terms under the bilateral transaction with Sberbank backed by NN shares. Final maturity was extended from 2024 to 2027, and the interest rate was reduced: on the dollar tranche from 3m LIBOR+3.75% (with a floor on LIBOR = 1.0%) to 3m LIBOR+3.0% (without a floor on LIBOR) and on the rouble tranche from 9.15% to the key rate of the Bank of Russia +1.9%.
- On 28 January 2021, RUSAL signed the sustainability-linked pre-export finance facility for up to USD 200,000,000. 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 decarbonisation 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 fulfilment of the applicable key performance indicators which will be further agreed between the parties. The proceeds were used to refinance more expensive debt.
- In March, RUSAL announced signing and starting the drawdown of a syndicated loan agreement for up to RUB 45 billion with VTB and Gazprombank. As part of the loan agreement, VTB will provide RUB 30 billion, whilst Gazprombank will provide RUB 15 billion. The term of financing is up to 15 years. The funds raised will be used to help finance the completion of the start-up phase of the TaAZ smelter and partial refinancing of investments made in 2020.

Debt capital markets

- On 20 March 2020, the Group repaid the first tranche of Panda bonds and redeemed bonds with a notional value of CNY 320 million (USD 46 million).
- On 9 June 2020, placement of the exchange-traded rouble bonds of RUSAL Bratsk series BO-002P-01 in an amount of RUB 10 billion with a 6.5% coupon rate was completed and the exchange-traded rouble bonds commenced trading on the Moscow Exchange. Maturity of the bonds is ten years subject to a bondholders' put option exercisable in June 2023.
  In addition to the placement, the Group entered into cross-currency interest rate swaps, which resulted in an exchange-traded rouble bonds exposure in the amount of RUB 10 billion being translated into a US dollar exposure with a maturity of 3 years and an interest rate of 2.90%.
- In July 2020, RUSAL launched a tender offer and purchased from investors and redeemed Eurobonds for a total amount of USD 88.5 million.
- On 4 September 2020, RUSAL repaid and redeemed the second tranche of Panda bonds with a notional value of CNY 20 million (USD 3 million).

Contingencies

The summary of the Group's principal contingencies is set out below. For a detailed discussion of the Group's contingencies in 2020, including environmental contingencies, risks and considerations, see Note 22 of the Annual Financial Statements.

Taxation

Russian tax, currency and customs legislation is subject to varying interpretations, and changes, which can occur frequently. Management's interpretation of such legislation, as applied to the transactions and activities of the Group, may be challenged by the relevant local, regional or federal authorities. Recent developments suggest that the Russian authorities are becoming more active in seeking to enforce, through the Russian court system, interpretations of tax legislation, in particular in relation to the use of certain commercial trading structures, which may be selective for particular tax payers and different from the authorities' previous interpretations or practices. Recent events within the Russian Federation suggest that the tax authorities are taking a more assertive and substance-based position in their interpretation and enforcement of tax legislation.

Tax risks attributable to the Group, together with an estimate of the maximum possible additional amounts which may reasonably become payable in respect of such risks, are disclosed in Note 22 (a) of the Annual Financial Statements.

Legal contingencies

The Group's business activities expose it to a variety of lawsuits and claims which are monitored, assessed and contested on an ongoing basis. Where management believes that a lawsuit or another claim would result in an outflow of economic benefits for the Group, a best estimate of such outflow is included in provisions in the consolidated financial statements (Note 22 (c)). As at 31 December 2020, the amount of claims where management assesses outflow as possible is approximately USD 21 million (31 December 2019: USD 21 million).

Financial ratios

Gearing

The Group's gearing ratio – the ratio of total debt (including both long-term and short-term borrowings and bonds outstanding) to total assets – as at 31 December 2020 and 31 December 2019, was 54.7% and 51.9%, respectively.

Return on equity

The Group's return on equity – the amount of net profit as a percentage of total equity – was 16.8% and 17.7% as at 31 December 2020 and 31 December 2019, respectively.

Interest coverage ratio

The Group's interest coverage ratio – the ratio of earnings before interest and taxes to net interest – for the years ended 31 December 2020 and 31 December 2019, was 1.4x and 1.1x, respectively.

Going concern

The Group closely monitors and manages its funding position and liquidity risk throughout the year, including monitoring forecast results, to ensure that it has access to sufficient funds to meet forecast cash requirements. Cash forecasts are regularly produced and sensitivities considered for, but not limited to, changes in power and aluminium prices, foreign exchange rates, production rates and costs. These forecasts and sensitivity analyses allow management to mitigate liquidity or covenant compliance risks in a timely manner. After making enquiries of management, the Directors have a reasonable expectation that the Group can continue in operation and meet its commitments as they fall due. Accordingly, the Directors believe that adoption of the going concern basis in preparing the financial statements is appropriate.

Report on payments to governments

The table below shows the amounts paid by the Group's entities to public authorities (primarily in the form of miscellaneous taxes and levies) in connection with their extraction activities:

	Type of payment 2020 ('000 USD)							
	Production fees	Taxes or levies on corporate sales, production or profits	Royalties	Dividends	Signing—on, discovery and production bonuses	Licence fees, rental charges, entry fees and other consideration for licences and/or concessions	Infrastructure improvement payments	TOTAL
Russia	—	36,489	—	—	—	4,506	2,808	43,803
Kazakhstan	—	24,505	—	—	—	1,141	252	25,898
Ukraine	—	51	—	—	—	36	0	88
Guinea	—	5,663	—	—	—	—	—	5,663
Guyana	—	48	132	—	—	124	—	305
Jamaica	—	214	722	—	—	63	—	998
Total	**—**	**66,971**	**854**	**—**	**—**	**5,871**	**3,060**	**76,755**

Sustainable development

As a producer of low-carbon aluminium and renewable power, sustainability is central to everything En+ Group does. We are committed to integrating sustainable development principles and values into our daily operations and to continuously improving our ESG practices.

In 2020, the Group adopted eight corporate policies to support our ESG practices:
- Board of Directors Diversity Policy
- Environmental Policy
- Health, Occupational, Industrial and Fire Safety Policy
- Policy on Human Rights
- Stakeholder Engagement Policy
- Corporate Code of Ethics
- Conflict of Interest Policy
- Anti-Bribery and Corruption Policy

Corporate documents are available in English and Russian on our website.

To download from our English website:
www.enplusgroup.com/en/investors/corporate-documents/

We recognise the importance of the transparent disclosure of our work and progress in climate control, environmental protection, human development, health and safety, and community engagement. This section of the Annual Report provides an overview of the programmes En+ Group has established to drive continuous improvement in our sustainability performance. Our 2020 Sustainability Report will provide much more detailed information.

In 2020, En+ Group released its second Sustainability Report which complied with international non-financial standards and best global practices. Our Sustainability Reports provide our stakeholders with information about the Group's approach to sustainable development, management of ESG risks, key ESG indicators and the progress of our sustainability projects and programmes. Our contribution to the United Nations' Sustainable Development Goals is covered in our Sustainability Reports and, in significantly more detail in our annual SDG Report. We published our second SDG Report in 2020.

To download the SDG Report from our website:
www.enplusgroup.com/upload/docs/En+%20SDG%20Report%20ENG.pdf

To download Sustainability Report from our website:
www.enplusgroup.com/upload/iblock/5b5/En_-Group-SR19-ENG.pdf

While the Group supports all 17 UN SDGs, we focus our work and programmes on eight of the SDGs where we can demonstrate the most impact.

To read more on UN SDGs p. 68-69

The Group's SDG focus can be categorised as centred around the well-being of personnel and local communities, the responsible use of natural resources, the mitigation of the Company's impact on the environment, and climate leadership. Understanding that partnerships and collaboration play a vital role in helping achieve sustainability ambitions, in 2019 En+ Group added SDG 17 'Partnerships for the Goals' to the existing seven SDGs as key objectives for our business.

In 2019, En+ Group joined the United Nations Global Compact (UNGC) and is firmly committed to its Ten Principles covering human rights, labour standards, environmental protection, and anti-corruption. In addition, the Group is also an active member of the UNGC Local Network in Russia and En+ Group's Director for Sustainable Development, Anton Butmanov, was elected to the Russian Local Network's Governing Council in 2020.

The Group is a member of several international sustainability associations and initiatives established either under the auspices of, or in partnership with, the UNGC. These include the CEO Water Mandate, an initiative that mobilises business leaders on issues around water, sanitation, and sustainable use of water resources, and focuses on SDG 6.

Since 2019, the Group has been a signatory of the Business Ambition for 1.5°C campaign, an urgent call to action from a global coalition of UN agencies, businesses and industry leaders to make a valuable and necessary contribution to limiting global temperature rise to 1.5°C above pre-industrial levels. Pledging to align our emission reduction targets with the 1.5°C scenario, the Group formally committed to the Science Based Targets initiative (SBTi), as well as to developing and submitting the new targets for validation by August 2021.

Throughout 2020, we continued to develop our relationship with the International Hydropower Association (IHA) and the 'Hydropower of Russia' Association. The Chairs and members of the Boards of En+ Group and IHA discussed Principles of Sustainable Hydropower and a new mission to position hydropower at the top of energy transition discussions.

The ASI Performance Standard is widely accepted as the exclusive sustainability standard for the entire aluminium value chain. The Standard was developed through interaction between industry players, consumers and NGOs. The requirements of the Standard encompass eleven sets of criteria, incl. business ethics, governance, environmental aspects, human rights and social aspects. In 2020, five of RUSAL's smelters, i.e. Boguchansky aluminum smelter (BoAZ), Bratsk aluminum smelter (BrAZ), Krasnoyarsk aluminum smelter (KrAZ), KUBAL (Kubikenborg aluminum AB) and Sayanogorsk aluminum smelter (SAZ), were ASI certified and were included in the effective ASI certificates of RUSAL. This brings the number of the RUSAL's sites certified against the ASI Performance Standard to nine after the management company and three RUSAL's other facilities, i.e. Bauxite Timana (bauxite mining), Urals Aluminium Smelter (alumina production) and Irkutsk Aluminium Smelter (aluminium production, casting and alloy manufacturing), were audited for certification. RUSAL also plans to have its other facilities certified. In 2021, Alexey Spirin, Director of Environmental and Climate Risk Management Department, was the successful candidate voted in by ASI members at ASI's annual Board elections, to a Production and Transformation seat.

Supporting the UN SDGs

The UN SDGs provide a robust framework and address the world's most intractable problems. We have doubled down on our work to address these issues and make a meaningful contribution to the achievement of identified SDGs.

Safe workplaces

En+ Group is dedicated to creating and upholding a culture of health and safety at every one of our facilities around the world, with an absolute commitment to ongoing improvement of H&S management and processes.

Leading medical and emergency healthcare in Guinea

We have Bauxite mining facilities across Guinea, run through two separate operating divisions of RUSAL. Both offer staff access to high quality medical care. In addition, we have been leading the private sector response to Ebola in Guinea since 2014 when the country experienced a major and devastating outbreak of the deadly disease in 2020 we also transformed the Ebola centre to a COVID-19 treatment facility.

Clean water and sanitation

Working with a range of relevant stakeholders, we collaborate on Lake Baikal conservation programmes built on measurable goals.

Monitoring the water quality and ecology of Lake Baikal

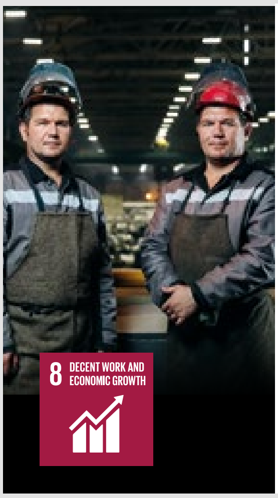
In 2019, we established a scientific programme to monitor the water quality and ecology of Lake Baikal. A team of environmental experts from a range of academic and scientific institutions have focused on the content of microplastic and heavy metals in the water, disease of natural Baikal sponges and the development of filamentous algae Spirogyra; as the programme progresses their scope may extend to aquatic biological resources, the endemic seal population and isotopes.

Affordable and clean energy

We own and operate some of the world's largest hydropower plants. We aim to increase the efficiency of our hydropower infrastructure and drive better performance through our long-term New Energy Programme.

Modernisation and improvement

Our 'New Energy Programme', launched in 2007, is delivering wide-scale modernisation of our largest hydropower plants in Siberia. Through this programme we are on track to generate 2.5 TWh more electricity from the same amount of water passing through our turbines by 2025, securing accessible power for the people of Siberia and helping to reduce CO_2 emissions by 2.5m tonnes annually from 2025.



Decent work and economic growth

All our facilities comply with our policies on human rights, labour rights, and industrial safety standards, ensuring all staff throughout enjoy the same level of job security and safe working conditions.

Local jobs for local people

At our facilities outside of Russia, our strict policy is to always recruit from the local population first and to only bring staff in from overseas when the necessary skills cannot be found among the regional communities. All our roles are immediately advertised to those living near our operations and we provide preliminary training for all those seeking employment.

Read our full SDGs report 2020 at:
www.enplusgroup.com/en/sustainability/un-sdgs/

Responsible consumption and production

Every part of the business has its individual goals on reducing both the consumption of natural resources and waste generation.

Reclamation, reuse and repurpose of bauxite residue

At our alumina refinery at Aughinish in Ireland, we have developed an industry-leading approach to the management and land rehabilitation of `bauxite residue disposal areas'. We are now also using the latest technology to treat the residue for reuse, for example as an inorganic polymer for construction materials. In 2019 we developed the capabilities to extract alkali from bauxite residue and in 2020 we are testing de-alkalised residue to assess its potential uses in construction.

Climate action

We have two critical focuses: optimising low-carbon aluminium production today; and investing in the development of tomorrow's technologies that have the potential to remove GHG emissions from the smelting process.

ALLOW – RUSAL's low-carbon aluminium

In 2017, RUSAL launched ALLOW, its own brand of low-carbon primary aluminium. By 2019, more than 78% of all the aluminium produced by RUSAL was low-carbon. ALLOW is crafted by renewable hydropower and is available globally. The carbon footprint of ALLOW (at smelter, Scope 1&2, which corresponds to Level 1 in the International Aluminium Institute's Technical Guidance Document) is less than 4 tonnes of CO_2e per tonne of aluminium, and is approximately four times lower than the industry average. ALLOW aluminium comes with independently verified statements of its carbon footprint, traceable to individual smelters, ensuring transparency and enabling customers to make better-informed decisions about the primary aluminium they procure.

www.enplusgroup.com/upload/iblock/7f5/En_-Group-Green-Aluminium-Vision.pdf

Environmental monitoring

We conduct a wide range of long-term projects aimed at maintaining and preserving the biological diversity of nature reserves. The Group has been monitoring the direct impact of our aluminium smelters on the environment. Our comprehensive monitoring programmes include surveys of the quality and condition of soil, plants, water, bed sediments and snow cover. The monitoring provides us with data that we use to assess the current condition of the environment and to design solutions to reduce the potential environmental impacts of our industrial facilities. Importantly, the research results also represent a unique and regularly updated scientific database on the ecosystems. One example is a long-term project to assist in the study and conservation of the Snow Leopard, a rare species that lives in the unique Altai-Sayan ecoregion.

Partnerships for the goals

We are committed to working closely with industry peers, policymakers, academics, IGOs, NGOs and civil society; as well as to sharing our data and intelligence for the development of solutions.

Carbon Clarity

Our Carbon Clarity programme was set to encourage enhanced emissions disclosure throughout the aluminium industry, empowering customers with the information they need to make sustainable choices. We also released a guide to our own emissions and have instigated an ongoing campaign calling on the London Metal Exchange to implement mandatory disclosure for all the aluminium it lists.

Environmental management

En+ Group places special emphasis on environmental protection and addressing global climate change issues as sustainable development priorities. Continuous improvements to our existing environmental management system are based on the application of the core values of our Environmental Policy, which was adopted by the Board of Directors in December 2020.

We operate our facilities in accordance with local and international legal requirements and establish voluntary environmental projects. Every year, the Group invests in technological development, equipment modernisation programmes, enhanced production efficiency, and environmental protection activities.

Main production facilities that are either owned by En+ Group entities or are under our operational control successfully apply our environmental management system, which is based on ISO 14001:2015 and is aimed at the reasonable use of natural resources and mitigation of adverse environmental impacts.

Environmental risk management is carried out in accordance with internally approved procedures. We record any inconsistencies identified through governmental supervision or voluntary audits, and develop and implement corrective measures.

Beyond the Group's own footprint, we provide customers with reliable access to renewable power sources, enabling them to reduce their own carbon footprints. In 2020, En+ Group's Krasnoyarsk HPP became Russia's first power plant to sell energy attribute certificates in accordance with the I-REC Standard, opening Russia to the I-REC market. Our Metals segment produces more than 90% of its aluminium using low-carbon renewable hydropower energy, substantially reducing the carbon footprint of its products.

In 2020, there were no major[1] incidents related to spillage, air, water or soil pollution; there were no related claims filed and no fines imposed.

Climate change

En+ Group is committed to being a world leader in addressing climate change and environmental issues. We are set to reduce the Group's carbon footprint and work with a wide range of partners to enhance our global policy and the industry's response. Due to the energy-intensive nature of our businesses, minimising the climate impacts of the production processes is one of our most important strategic objectives. In January 2021, the Group announced targets of a reduction of at least 35% in GHG emissions by 2030 and to be net zero by 2050. While there is already an established GHG reduction strategy in the Metals segment, we are now developing an integrated strategy for the entire Group to achieve these targets.

TCFD

En+ Group is currently developing its corporate format for disclosing financial data related to climate change based on a set of recommendations from the Financial Stability Board Task Force on Climate-related Financial Disclosures (the "TCFD").

The TCFD disclosure of climate change risks project consists of two phases:
- Disclosure of climate change risks by the Metals segment
- Disclosure of climate change risks by the Power segment

Under both phases, climate change risks will be identified and recorded. After that, we will be developing more detailed plans to minimise these risks. Our next steps are to identify the five most significant risks and to develop several scenarios to mitigate them. The results of this work will be presented in the Carbon Disclosure Project (CDP) report for 2020. We will provide more information about the implementation of TCFD recommendations in our Sustainability Report 2020.

Since 2019, JSC Irkutskenergo has led WWF Russia's information transparency rating of Russian fuel and energy companies

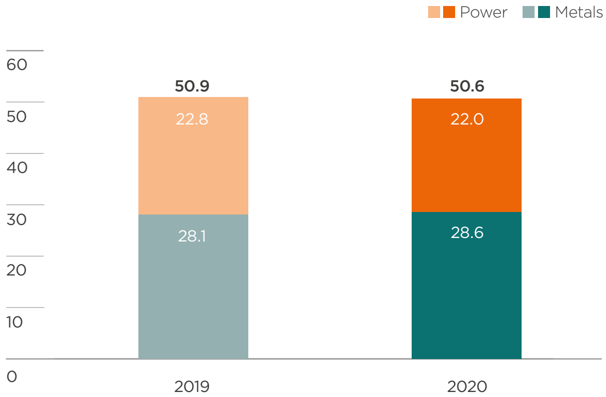
JSC Irkutskenergo, which manages the Group's energy assets in the Irkutsk Region, has topped the ranking of Russian power companies for transparency on environmental responsibility for two consecutive years. Compiled by WWF Russia, the rating covers fossil fuel powered heat and electricity production. The rating was published on 22 December 2020, the 100th anniversary of the adoption of the Soviet plan for national economic recovery and development, GOELRO.

1 Major incidents are incidents that cause a major contamination of soil, air or water and lead to court penalties (after all stages of appeal), with damages in excess of USD 1 million. Majority (significance) is assessed in accordance with the Company's risk management system.

Performance

En+ Group's total GHG emissions decreased in 2020 compared to 2019, due to a number of factors.

Gross GHG emissions (Scope 1 + 2)[1, 2], ($MtCO_2e$)



A slight increase in our Metals segment's GHG emissions in 2020 (28,6 mln. tonnes compared to 28,1 million tonnes in 2019) was caused by growth of alumina output.

The main source of GHG emissions in the Power segment are the CHPs of LLC Baikal Energy Company (until 1 September 2020, JSC Irkutskenergo) which provides heat and electricity to consumers by burning fossil fuels. The amount of fossil fuels burnt depends on the mix and volume of heat and electricity loads. The dynamics of fuel consumption for heat supply largely depend on the outdoor temperature. Fuel consumption for electricity supply is mainly influenced by market demand for electricity generation through the condensation cycle. Over the last three years, peak electricity generation for the condensation cycle occurred in 2018 (which was also the coldest) and amounted to 6.1 TWh (5.3 TWh in 2019, 4.7 TWh in 2020). This peak was also a result of a low water season in Lake Baikal and a decrease in electricity generation at HPPs. In 2018, the average outdoor temperature in Irkutsk during the heating period dropped to -8.3°C (-6.1°C in 2017, -7.1°C in 2019, -6.1°C in 2020).

Forestry Project

In 2019, the Metals segment implemented an initiative to plant over one million trees in Russia, planting more than 500 thousand trees in the Irkutsk region and 500 thousand in the Krasnoyarsk Territory as part of our comprehensive carbon footprint reduction programme. In 2020, the Company continued to roll out one of Russia's largest reforestation and forest protection projects and funded the planting of more than 112 thousand trees in the Krasnoyarsk Territory and the Irkutsk Region, and continued aerial forest protection of more than 500 thousand hectares of the lower Yenisei forestry in the Krasnoyarsk Territory.

New Energy Programme

In 2020, the modernisation programme enabled En+ Group to avoid GHG emissions by 2 Mt by partially replacing energy demand from coal-fired power plants with HPP output. Our increased renewable power generation substitutes power produced by coal-fired plants in Siberia when operating in condensing mode (the most inefficient mode where only power is produced).

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1 Preliminary data, being verified as part of En+ Group 2020 Sustainability report preparation.
2 Figures for Power segment were recalculated because of improvement in methodology.

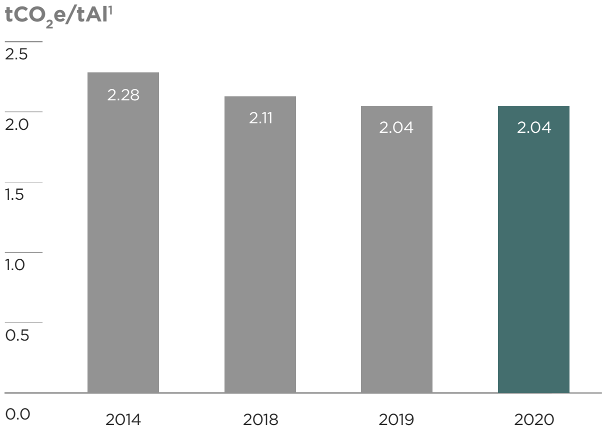
Our Power segment also avoided 2,061 kt of CO_2e emissions in 2020 by taking measures in the following key areas:

- Raising the efficiency of HPP turbines, substituting environmentally-damaging condensation mode generation at CHPs with HPP output – 1,991 kt of CO_2e
- Efficient fuel use and energy saving initiatives – 70 kt of CO_2e

In 2020, we developed project documentation for the Segozerskaya HPP in Russia (Karelia). Commissioning of this small-scale HPP is slated for the end of 2022.

The Metals segment's GHG emissions in electrolysis operations

The Group's Metals segment places special emphasis on minimising climate impact by applying the highest international standards of quality and governance to the entire production chain, fully compliant with the requirements of the new green economy. One of RUSAL's corporate targets in minimising anthropogenic impact on the climate system is a reduction of the direct GHG emissions per tonne of aluminium produced from the existing electrolysis operations by 15% compared to the 2014 baseline level by 2025. In 2020, RUSAL achieved an 11% reduction[1] in its direct GHG emissions per tonne of electrolysis operations versus the 2014 level, which is fully in line with the phased schedule to achieve these targets. The chart below shows the reduction of direct GHG emissions per tonne in electrolysis operations.



ALLOW

Carbon labelling is an appropriate takeaway from the new approach to decarbonisation, based on international, regional, national and local initiatives to limit GHG concentrations in the Earth's atmosphere. The demand for climate-friendly goods is clearly growing among consumers. In 2017, En+ Group's unique integrated supply chain enabled its Metals segment to start offering its proprietary aluminium brand, ALLOW. ALLOW aluminium is manufactured with a total level of GHG emissions from both smelter and power generation (providing energy for electrolysis) of less than 4 tonnes of CO_2e per tonne of aluminium. Industry average emissions are around 12,5 tonnes of CO_2e per tonne of aluminium. The Group verified its primary aluminium alloys in accordance with the criteria of the ALLOW brand in 2020 with the help of the international audit company, TÜV Austria. 78% of the Company's primary aluminium output was confirmed to be compliant with the criteria attributed to this brand. The calculations followed the Aluminium Carbon Footprint Technical Support Document developed by the International Aluminium Institute.

1 Scope 1 here includes only electrolysis. Preliminary data, being verified as part of En+ Group 2020 Sustainability report preparation.

The Company has a long-standing commitment to investment in Research & Development and innovation. The introduction of our unique inert anode technology will help us to dramatically cut the environmental impact of our aluminium production. Using inert anodes completely eliminates emissions of greenhouse gases (CO and CO_2), polyaromatic hydrocarbons, benzo(a)pyrene and sulphur from the reduction process. Another positive result of this technology is the generation of oxygen in the aluminium production process.

Air emissions (excluding GHG emissions)

En+ Group is committed to reducing the negative impact it may have on the atmosphere. We are implementing a number of initiatives to ensure that technological improvements, which contribute to emissions reduction, are carried out in a timely manner. We comply with all the necessary internal and government regulations in all our countries of operation.

The Metals segment's key initiatives to reduce its negative impact on the atmosphere are:
- Implementing Eco-Søderberg technology (at KrAZ, BrAZ, IrkAZ, and NkAZ)
- Constructing and modernising gas treatment plants (at BrAZ, IrkAZ, NkAZ, KUBAL, UAZ and Achinsk Alumina Refinery).

JSC Irkutskenergo upgraded the electrostatic precipitators at Novo-Irkutsk CHP and Novo-Ziminskaya CHP, and replaced ash traps at CHP-6 and UICHP to reduce pollutant output. One of the Group's main projects to reduce the environmental impact of its Metals segment is the introduction of advanced and highly efficient dry gas treatment facilities, which will capture up to 99.8% of both hydrogen fluoride and the solid fluorides present in exhaust gases in the smelter's reduction area. This will reduce not only the gross emissions from the production facility, but also the amount of gas treatment waste disposed at specialised landfills. Since 2018, we have been implementing a comprehensive plan to reduce emissions in Russian cities, including Krasnoyarsk, Bratsk and Novokuznetsk, as a part of the Ecology national project and Clean Air federal programme. The latter aims to reduce the level of air pollution in large industrial centres, including a reduction of at least 20% of the total emissions of pollutants into the atmospheric air by 2024 in the 12 most environmentally problematic cities of Russia: Bratsk, Krasnoyarsk, Lipetsk, Magnitogorsk, Mednogorsk, Nizhny Tagil, Novokuznetsk, Norilsk, Omsk, Chelyabinsk, Cherepovets and Chita. The programme will significantly improve the air quality in these cities (below limits) and quality of life of the citizens. We will be contributing to this programme's ambitious goal.

Water resources

En+ Group facilities draw water from both surface and underground sources for operational and production needs. Alumina refineries and power facilities are the Group's biggest water consumers due to their technological requirements and processes. The Company rarely suffers from water shortages at our facilities and there are currently no critical water-related risks (water consumption or disposal).

The most important areas of the Group's efforts to minimise our impact on water resources are:
- Reducing fresh water consumption
- Reducing wastewater discharge and concentration of pollutants in waste water
- Increasing recycled water volumes

Climate change mitigation

Beyond our efforts to push the market towards carbon taxation and acceptance of a greener aluminium, the Group's partnerships reflect our commitment to supporting climate change mitigation.

RUSAL leads the global aluminium industry with 'A-' CDP climate rating

To demonstrate our support for global mitigation efforts, the Group has committed to disclosing its environmental impact through the Carbon Disclosure Project (CDP) and the International Aluminium Institute. RUSAL has been involved in CDP since 2015, informing stakeholders about its products' carbon footprint, climate risk assessments, and climate targets. CDP aims to make environmental reporting and risk management a business norm, and drive disclosure, insight and action towards a sustainable economy. We are also committed to fully disclosing greenhouse gas emissions from our aluminium, alumina, bauxite and other facilities.

The International Aluminium Institute (IAI), of which RUSAL has been a member since 2002, collects statistical and other relevant information, encourages and assists in the continuous progress in the safe and environmentally sound production of aluminium, and communicates the views and positions of the aluminium industry to international agencies and other relevant parties.

En+ Group is a member of the Climate Partnership of Russia, which was created on the eve of the 21st United Nations Climate Change Conference, COP21, to consolidate Russian businesses' efforts to reduce environmental impacts. In 2020, the Group participated in sessions organised by the Partnership, where Lord Barker joined Nigel Topping, High Level Climate Action Champion for UNFCCC, and Ruslan Edelgiriev, Adviser to the Russian President and Special Presidential Representative on Climate Issues, to discuss their vision for the upcoming COP26 climate conference.

We continue to cooperate with the Aluminium for Climate initiative. The initiative is part of the World Economic Forum's Mission Possible platform, created to accelerate the decarbonisation of hard-to-abate industries. The initiative is a platform that brings together the most active leaders of the international aluminium industry and aims to achieve industry consensus on decarbonisation by 2050. In 2020, the Aluminium for Climate initiative worked closely with the organisational committee of the 26th United Nations Climate Change Conference, COP26, to bring the industry to the forefront of the energy-intensive sectors. As decarbonisation cannot be achieved in each industry in isolation, both the Aluminium for Climate and the Mission Possible platform worked to broaden cross-sectoral collaboration in 2020.

Lake Baikal

The Group owns and manages operations at three of the four HPPs (excluding Boguchany HPP) located on the Angara, the only river that exits Lake Baikal.

Lake Baikal provides ca. 60% of water used by these power plants to generate energy.

The eastern Siberian lake, declared a UNESCO world heritage site in 1996, is the largest and deepest freshwater lake on earth. The lake and its coastal zone create a unique habitat for numerous plant and animal species, many of which are endemic.

The problems facing Lake Baikal were the subject of extensive discussions in many forums in 2020, with a particular focus on regulating environmental restrictions for the Central Environmental Zone of the Baikal natural territory, which is affected by transportation infrastructure and water level regulation.

Water level regulation is a special item on the Group's agenda as state regulation of the lake's water levels directly affects the operating modes of Irkutsk HPP. Our long-term inflow forecasting project (ENvision) continued in 2020 and will provide us with more precise forecasts of the HPP output, and will help the authorities improve the lake water level management practices.

Together with WWF Russia, the Group initiated a project to assess and report on the environmental and social problems of the Baikal natural territory in order to establish wide scale dialogue and to find new solutions. WWF Russia launched a campaign to encourage experts to join the effort.

The Group pays special attention to the lake's environmental condition. Despite COVID-19 challenges, we sponsored the implementation of a series of new projects for monitoring and research into the condition of the lake and its inhabitants. For instance, the Institute of Ecology and Evolution of the Russian Academy of

Sciences, supported by the Group, established expeditions for environmental monitoring and Baikal seal research; and the Water Problems Institute of the Russian Academy of Sciences has set out to establish more accurate operating schedules for the Angara-Yenisei HPP cascade in view of the environmental and other limitations.

En+ Group also gained the support of the state corporation VEB.RF and the Government of the Irkutsk Region for a programme to establish an international centre for water resources at the former site of the Baikal pulp and paper plant under the framework of development of the city of Baikalsk and the Baikal region.

Waste

En+ Group is passionate about increasing its recycling and the safe disposal and storage of waste. We are actively developing new waste management sites, as well as renovating and modernising existing facilities to make sure waste is disposed of and stored safely. All our waste management sites are compliant with the necessary regulations.

Alumina and aluminium production waste

The most significant types of waste in terms of volume are bauxite and nepheline residue, which are considered to be non-toxic waste. They represent over 80% of the total waste generated by RUSAL. In cooperation with R&D centres and institutions, RUSAL is developing and applying new methods of specific waste reduction at its aluminium smelting and alumina refining facilities. The smelters and refineries are actively seeking to reduce solid waste and residue storage facilities.

Residue volumes are directly related to the dynamics of production and other factors, such as the depth of ore beds and the alumina content present in processed ore and bauxites.

Ash and slag waste

The volumes of generated ash and slag waste depend directly on the volumes of heat and electricity generated at CHPs, as well as coal combustion parameters. JSC Irkutskenergo seeks out, develops and applies new methods of ash waste disposal in cooperation with leading R&D institutions and production companies.

We relentlessly strive to find new methods of ash waste utilisation and treatment. The following measures are currently in place to enhance our waste treatment:

- Raising the volume of fly ash disposal – modernisation of Novo-Irkutsk CHP’s dry ash discharge plant
- Extracting iron bearing concentrate – a pilot plant at CHP-9
- Sales of ash waste to manufacturers of construction materials
- Production of ash and slag material for the reclamation of waste disposal facilities and coal reserves

In 2020, the following additional measures were initiated:

- R&D on the use of ash and slag for road beds
- A pilot project for the environmentally safe use of ash and slag for reclamation and backfilling of disturbed land
- A project for dry storage of ash and slag mixtures at the Novo-Ziminskaya CHP
- A project for dry storage of SHS of CHP-9 and CHP-10 at the ash and slag dump of CHP-9 section No. 1.

Tailing dams management

In 2019, there were major dam disasters on different sides of the globe. En+ Group operates several large tailing dams and safety at these dams is a key priority for us. For this reason, we closely monitor and analyse the causes of such disastrous events in order to learn lessons and prevent similar situations at our own facilities.

To prevent any accidents and significant impact on the environment, bauxite and nepheline residue storage areas together with ash and slag waste storage areas are subject to comprehensive control.

- Hydraulic structures are inspected daily and periodically, and their condition is constantly monitored by instrumentation
- We carry out certification of personnel operating the hydraulic structures and provide professional development for technicians who perform technical supervision of safety at hydraulic structures
- We are studying the use of the dry bauxite and nepheline residue stacking process, which uses press filters and eliminates the impact of the liquid phase on the safety of mud disposal areas

Climate change mitigation continued

Based on the investigations of accidents at other companies' tailing dams, En+ Group has planned to implement the following actions:
- Constant health and safety monitoring measures aimed at maintaining the reliability of tailing dams
- The training and professional development of personnel
- A targeted audit of mud disposal areas at alumina refineries to make sure they comply with hydraulic structure health and safety rules
- A transition to the dry mud disposal process and a study of the use of the dry mud disposal process, which uses press filters and eliminates the impact of the liquid phase on the safety of mud disposal areas
- Planning for the development of mud and ash dumps

We have formulated strategic plans to develop mud and ash dumps which will maintain and expand production levels, while ensuring we have enough capacity for waste disposal.

Mine waste
The stripped overburden is usually placed back into the mined-out openings (internal dumping), which leads to further land rehabilitation.

Persistent organic pollutants
In line with the Russian Federation's plan to comply with the commitments of the Stockholm Convention on Persistent Organic Pollutants (POPs), En+ Group developed a long-term programme for polychlorinated biphenyl containing waste disposal to meet the requirements for these commitments by 2025.

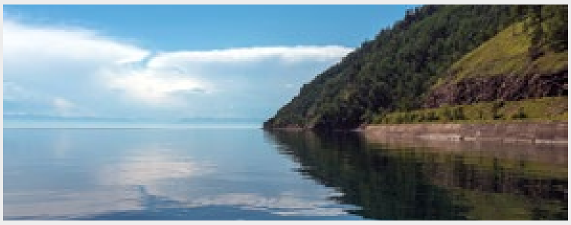
Land resources
Restoring disturbed land is a main focus for the En+ Group. In line with our accounting policy, the expected costs of decommissioning facilities and restoring the environment are reflected in our international financial statements as reserves.

Restoration of disturbed land is carried out in the following areas:
- Restoring disturbed terrain and soil fertility once mining activity (open-pit mining) is finished
- Rehabilitating production and consumption waste disposal facilities (ash dumps, landfills, etc.)
- Rehabilitating disturbed and contaminated land.

Energy
En+ Group's core strategy for energy production and consumption is threefold: the uninterrupted supply of electricity and heat to third-party consumers; the increase of electricity generation at hydropower plants; and the reduction of grid losses and internal consumption of energy at generating facilities.

Special-purpose programmes and energy efficiency projects are in place at all of the Group's entities. Energy saving technologies are widely employed – from the optimisation of energy generation modes and equipment designs, to the reduction of heat losses and adoption of optimised maintenance procedures within the technical and technological parameters of operations.

With hydropower fuelling more than 90% of RUSAL's aluminium output, we strive to minimise our industrial carbon footprint through the implementation of energy efficiency measures.



Environmental monitoring of Lake Baikal
Lake Baikal is an important natural site within the impact zones of the Power segment's production facilities. En+ Group recognises its share of responsibility for the environmental well-being of the lake and takes efforts to support and preserve its biodiversity. In 2020, the second annual expedition for environmental monitoring of Lake Baikal was carried out to obtain unbiased data on the condition of the lake's ecosystems. In addition to defining the overall hydrochemical characteristics of the lake water, the monitoring also explored the microplastics content in the surface water layer and included water sampling from the Selenga River upstream and downstream of Ulan-Ude and from the Angara River upstream and downstream of the Irkutsk HPP. More water samples were taken from drinking wells in the residential areas located on the banks of Lake Baikal.

Hydrochemical analyses of the water samples showed that the main pollutants entered Lake Baikal through the Selenga River. An important result of the expedition is the scientific confirmation of the hypothesis that biogenic substances come to the lake through groundwaters from the residential areas.
The key findings of the Baikal environmental monitoring were presented at the All-Russian Water Congress in October 2020.

Aughinish Alumina Ltd
waste management initiative

Aughinish Alumina Ltd. (AAL), Ireland contributes to En+ Group's environmental best practices. For example, AAL has achieved a 40% reduction in tonnes of carbon per tonne of alumina production over the past 15 years. In addition, management of the Bauxite Residue Disposal Area (BRDA) at AAL is an example of the Group's best practices in land rehabilitation and waste management. AAL implemented best available technology to treat the residue by using industrial mud farming process. Vegetation and screening programmes have been in place for many years to improve visual perspectives. One of AAL's priorities is to develop ways to reuse the bauxite residue (BR).

In this regard, AAL is active in many European projects aimed at developing bauxite reuse technologies. It is a partner of EIT Raw Materials, a major global commodity consortium, funded by EIT (European Institute of Innovation and Technology), a body of the European Union. The consortium's strategic goal is to turn raw materials into a powerful force for Europe. Throughout 2020, AAL continued to participate in the RECOVER project, launched in 2016, to develop a new technology for the reuse of bauxite residue for the production of technically complex products such as inorganic polymers. The technology used in the project is a high temperature sintering of bauxite residue to produce a vitrified material similar to copper residue (called slag). The vitrified material is cooled, ground and blended with alkali solution to produce a dense inorganic polymer. Other additives such as surfactant and alumina powder are used to produce porous inorganic polymer. The products from the process will be used in construction materials, namely dense blocks for non-load bearing construction, fire retardant panels and porous blocks. The construction of a four-module pilot plant was completed in 2020. Each module of this pilot plant is a custom-made container equipped with benchmark branded equipment. The first two sections deal specifically with bauxite residue and the last two containers are used to produce inorganic polymer from copper residue.

In 2020, a Pilot Plant and Product Demonstration Event was hosted at AAL. This was a significant milestone of the RECOVER project. The event, which took place online due to COVID-19 restrictions, showcased the flagship products and technologies developed during the project. Of particular interest to AAL were the artefacts made with bauxite residue.

AAL is also part of RemovAL, which is a large research project funded by the EU. The main premise of RemovAL is that no single technology option is viable for bulk reuse of bauxite residue and that more than one element must be combined to achieve viable and meaningful utilisation. AAL in association with industry partners is developing and piloting Residue Dealkalisation to reduce the soda content of residue to <0.5% making it usable in the iron and cement industries. Other projects in RemovAL include the production of Lightweight Aggregates for building applications, converting bauxite residue into ready-made mortar for the synthesis of inorganic polymers and the production of pig iron and ferro-silica alloys. In 2021, AAL will construct and demonstrate the use of BR, along with other waste materials such as fly ash, in road construction. This will be demonstrated on the BRDA at AAL.

AAL is also participating in a third EU research project, ReActiv, launched in November 2020. Coordinated by LafargeHoclim, the biggest cement producer in Europe, the ReActiv project will create a novel sustainable symbiotic value chain, linking by-products of the alumina production industry and the cement production industry. Through ReActiv, modification will be made to both the alumina production and the cement production side of the chain, linking them through the new ReActiv technologies. The ReActiv technologies will modify the properties of the industrial residue, transforming it into an active material suitable for new, low-carbon cement products.

Climate change mitigation continued

Biodiversity

The Group is intent on making a positive contribution to the protection of the environment and mitigating its impact on biodiversity in the regions where we operate. Our core production facilities are located in Siberia which has unique indigenous plants and wildlife. We strive to apply the world's best practices in the field of biodiversity. We cooperate with research and educational institutions and non-governmental organisations to develop effective measures of preserving ecosystems.

Biodiversity preservation

For several years, the Group has conducted monitoring in the regions of operations. This monitoring provides data that we use to assess the current condition of the environment and make adjustments to environmental protection activities and design solutions to reduce the negative impact of industrial development. These research materials represent a unique and regularly updated scientific database of the natural areas of Russia's northern regions.

Conservation of aquatic biological resources

For the past six years, En+ Group has been successfully carrying out the restoration of aquatic biological resources. Over this period, more than 1.5 million young peled (northern whitefish) have been released into the waters of the Angara region. The species is a relative of cisco and omul, reaching an adult weight of 2–2.5 kg. The cultivation of young fish for replenishment of fish stocks is carried out annually at fish hatcheries that specialise in the reproduction of valuable fish species.

Through this programme, young Siberian sturgeons were released into the Yenisei River in 2020 as a result of cooperation between Krasnoyarsk HPP and the Yenisei branch of FGUP Glavrybvod. The young fish were grown at the Beloyarsky fish farm built in 1973 to compensate for damage to aquatic biodiversity inflicted by the construction of Krasnoyarsk HPP.

In total, our production facilities released about 253,000 young peled and 2,300 young sturgeons into the waters of the Angara basin and 12,400 young Siberian sturgeons into the Yenisei River.

Baikal seal preservation programme

The Baikal seal is the only mammal that lives in Lake Baikal and is endemic to the region. The seal at the top of the food chain in the Baikal ecosystem, and its condition allows us to draw conclusions about the quality of its habitat, i.e. the Baikal ecosystem as a whole. That is why it needs to be constantly monitored – primarily, its migrations and health.

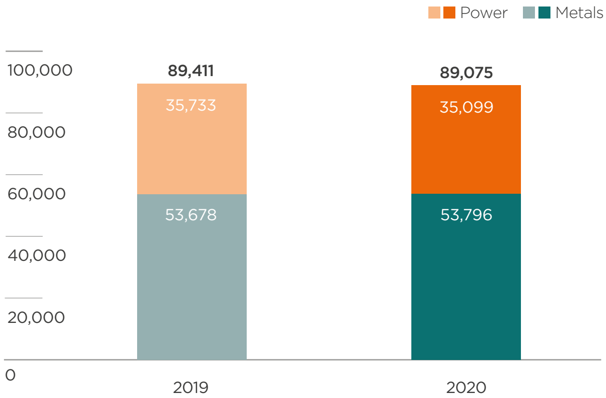
En+ Group and the Severtsov Institute of Ecology and Evolution of the Russian Academy of Sciences signed a cooperation agreement in the end of 2019, which envisages *inter alia* preservation of biodiversity, including the Baikal seal preservation programme. En+ Group and other partners of the Institute joined a comprehensive programme to preserve the Baikal seal through 2025. In 2019-2020, as part of the programme, scientists carried out an expedition to count the seal population and to attach satellite trackers to several seals (to monitor their migration routes); analyses were conducted to define the health of the animals. We also made a contribution to this work by transferring the findings of the Lake Baikal environmental monitoring.

Responsibility for employees

People

En+ Group provides jobs to almost 90,000 people across all regions of operation. The total number of employees (full-time equivalent) by each segment of the Group is set out in the following graph[1,2].

Total number of employees



Our key HR objectives are to recruit and retain highly skilled personnel, increase employee engagement, and create attractive working conditions and work environment for employees, contributing to their professional development and the well-being of their families.

Social security programmes

En+ Group's production facilities have developed a system focused on building and maintaining long-term employee motivation by providing targeted social benefits equally to all full-time and part-time employees of the Group.

We provide stable and competitive salaries and comprehensive social benefits for our employees as well as remuneration based on skills, performance and grade. The remuneration and motivation system also includes multiple wage and salary benefits (time-based bonus system), incentive programmes and other additional benefits.

The Group uses motivational systems that result in a highly productive workforce:
- Bonuses awarded from the fund of the head of the enterprise
- Annual performance-related bonuses
- Payments to employees who have received corporate, state or departmental awards
- Payments to employees actively participating in our social projects

For several years, our largest Russian assets have been providing their employees with the following key social benefits:
- Financial aid including: payments for the birth of a child and parental leave until the child reaches six months old; aid for families with three or more children under 18 and for those with an income below the regional minimum wage; payments for employment anniversaries; and financial support for funerals of close relatives
- Recreation at health resorts
- Pension benefits for employees (co-financing together with the employee through non-state pension funds in excess of mandatory payments by the employer);
- Medical services (including voluntary medical insurance)
- Sports activities
- Provision of food to employees during the working day at the production site
- Reimbursement of housing cost when managers or highly-specialised experts need to move to the region where the company's operations are located, as well as the possibility of compensation for rental housing to young specialists with particularly valuable and rare skills
- Corporate mortgage programme for employees
- Childcare programmes (partly covering costs of children going to health resorts and summer health camps)
- Support for non-working pensioners. Additional benefits to state pension are provided to those who retired before 2007 and to former heads of departments. There is also compensation for energy and heat supply in the apartments of retired employees
- Festive events for workers and members of their families to mark, for example, the anniversary of the enterprises, Day of Metallurgist, Power Engineers' Day and other holidays, as well as annual New Year parties and gifts for children of employees. These were all virtual events in 2020
- Other social expenses including subsidised transport, additional paid social vacation under the collective bargaining agreement and local regulations, and compensation for work-related accidents

Additionally, in 2020 as a continuation of the programme started in 2019, there was a differentiated increase in wages of the employees of the Group's enterprises, to recognise disparities in purchasing power of wages and the level of wages in specific enterprises in comparison with the local labour markets.

1 Preliminary data, being verified as part of En+ Group 2020 Sustainability report preparation.
2 Total number of employees in 2019 is 89,411, in 2020-89,075. Average headcount in 2019 is 88,732, average headcount in 2020 is 87,458.

Responsibility for employees continued

Personnel training and development

The key objective of En+ Group in personnel training is to cultivate a set of professional skills in our employees which meet the requisite quality and efficiency of our production programme while ensuring safety and fostering long-term technological development within the industry.

In 2020, we reviewed, updated and unified the competence model of our Metals and Power segments to promote and cultivate an entrepreneurial environment in the Group.

The existing mandatory personnel training system in the power industry regulates the training and procedures required for every position in the industry. En+ Group's corporate training system supplements and completes the mandatory system, by taking the specific requirements of our external environment into account. Our training and development programmes cover all education levels, from that of a school pupil to a technical manager.

Classroom programmes include:
- Professional training and skills development and additional professional education (including talent pool participants' education)
- Simulator training and psychophysiological support for operational personnel
- Corporate competitions in professional skills
- Modular programmes for internal talent pool building and training
- Career guidance and additional targeted training, with potential for further employment for students of specialised universities in Siberia

In 2020, 30 project teams from the Irkutsk National Research Technical University (INRTU), one of the region's leading universities, participated in the annual Energy Lab innovative projects competition.

At the end of school year 2019/2020, more than 4,000 children from nearly 250 schools participated in the Olympiad 'Alchemy of the Future'.

The Group's long-term production expertise has been put to use in building a simulator-based training programme, which was adopted in 2019 to ensure the professional development of current operational staff.

In addition, we developed an innovative programme to hone new practical skills and safe methods of working at height in order to reduce the risk of occupational injuries. A dedicated facility hosts the programme, which will ensure our personnel remain professional and competent.

To foster creative thinking skills and to help colleagues develop innovative solutions to production challenges, training programmes based on the TRIZ approach (Russian: the Theory of Inventive Problem Solving) have been actively introduced.

The Metals segment is continuously developing its personnel training systems by arranging and improving professional training, increasing the relevance of our functional academies, and creating targeted modular programmes to meet our business objectives.

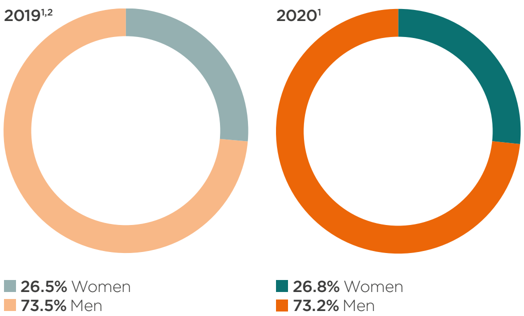
Our functional academies' approach empowers employees to enhance their skills in topics of study relevant to the Group's targets and strategy.

Personal and professional diversity

En+ Group is proactive in ensuring the diversity of its staff in an environment offering opportunities for both professional and personal growth.

The Board of Directors understands that our stakeholders strive for higher personal and professional diversity at the top management level and on the Board Directors itself.

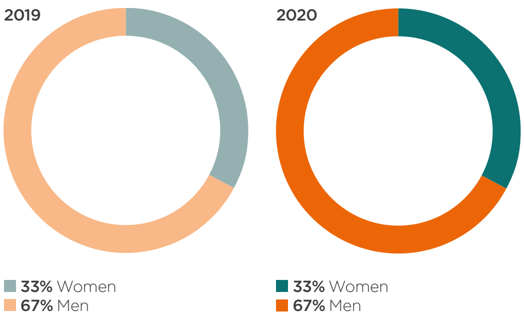
Workforce gender diversity



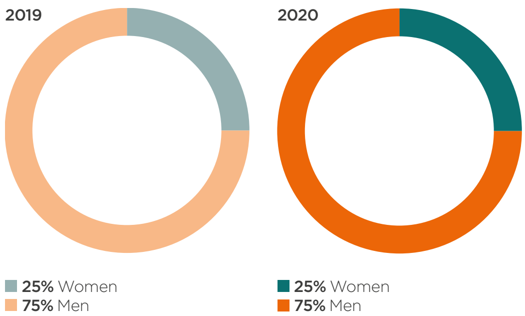
En+ Group sees the complete elimination of all forms of discrimination as essential to our success. We have a stable rate of female participation in our labour force of approximately 27%.

The nature of our business means that numerous operations in the production process are classified as highly hazardous. Female participation in such operations is heavily regulated, especially in Russia and CIS countries. This is to say that we are already at about the natural level of female participation for the industry; however, we are continuing to aim towards an ever more inclusive and diverse working environment.

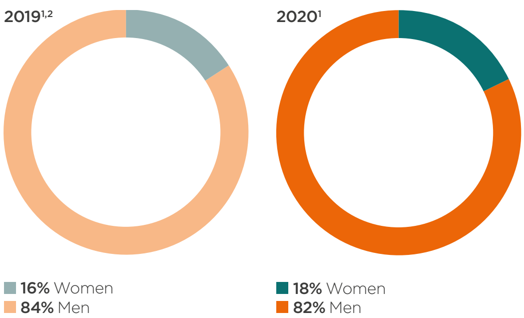
En+ Group's Board gender diversity



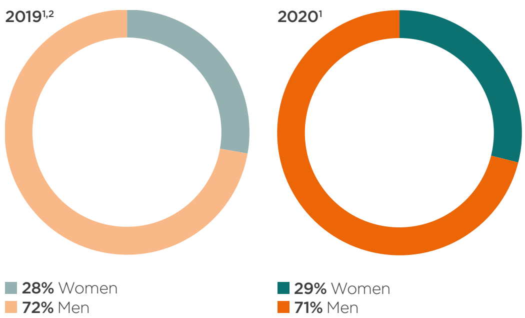
Executive management team gender diversity



Senior management gender diversity



Middle management gender diversity



1 Preliminary data, being verified as part of En+ Group 2020 Sustainability report preparation.
2 Figures for 2019 were recalculated because of improvement in methodology.

Responsibility for employees continued

Creating and ensuring equal opportunities

En+ Group aspires to create an enabling and non-discriminating working environment.

We work towards ensuring equal opportunities in hiring, promotion, training and remuneration for all employees, regardless of their ethnicity, nationality, religious beliefs, gender, age, sexual orientation, marital status, disability or any other characteristics, within the framework of the current law.

In the event of injury, employees are provided with permanent employment, training and vocational assistance, whenever needed.

Health and Safety

Health and safety is at the top of the Group's agenda. The HSE Committee ensures that the Company has in place a proper system for the management of health and safety risks. Our principles and commitments are set out in the Health, Occupational, Industrial and Fire Safety (abbreviated as "OHS") policy.

The Group complies with both legal health and safety requirements and its own internal standards, which are often stricter than the rules prescribed by legislation.

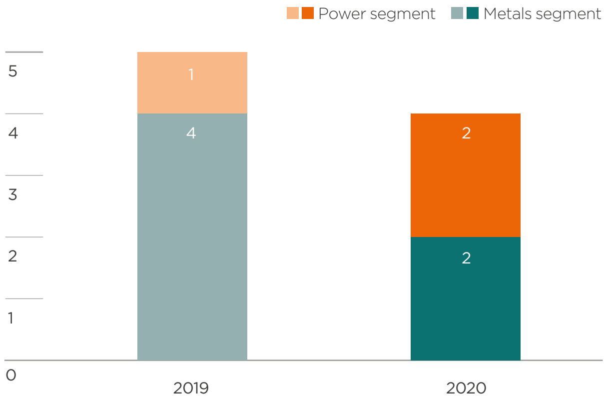
We arrange all necessary health and safety briefings and training sessions and carry out health and safety audits to ensure that all employees appreciate the importance of their own safety. In order to ensure the health and safety of our employees, we constantly review our existing occupational health and safety management system, and look for new and innovative ways of promoting safe working practices among our employees.

The Group monitors, records and investigates all incidents regardless of severity. This includes incidents resulting in micro-injuries, and instances of employees' health deteriorating over a period of time. The findings of these investigations are used to develop and implement corrective actions, intended to prevent future accidents or occupational health impacts. Protecting human life and health from threats related to industrial factors, or from consequences of accidents, is our highest priority.

Health and Safety performance

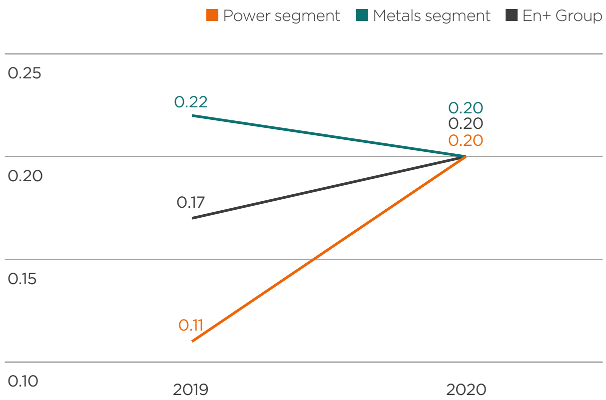
En+ Group deeply regrets that there were four work-related fatalities in 2020 notwithstanding En+ Group's commitment to the zero fatalities concept. In-depth internal investigations were conducted into each one of the accidents to determine critical factors and root causes and to institute preventative measures. The HSE Committee considers a detailed report on any incident that has involved a fatality, as well as monitoring the statistics and trends related to all other incidents.

Work-related employee fatalities



For the reporting period, the Group's overall Lost Time Incident Frequency Rate (LTIFR)[1] was 0.20 in 2020, an increase from 0.17 in 2019[2]. This came as the result of an accident in Ust-Ilimsk in November 2020, involving a bus carrying employees to the CHP. We regret to announce that 19 people were injured. En+ Group has developed corrective and preventive actions to ensure transport safety and to monitor the condition of the injured employees.

Lost Time Injury Frequency Rate(LTIFR)[3]



1 Per 200,000 hours worked.
2 The LTIFR value for En+ Group was clarified for 2019 due to an improvement in the reporting processes.
3 Preliminary data, being verified as part of En+ Group 2020 Sustainability report preparation.

Our efforts to ensure health and safety

In 2020, En+ Group successfully continued working on the realisation of a three-year Strategic Plan (launched in 2019) to improve its Occupational Safety Culture under the Vision Zero concept. The main aim of this plan is the gradual improvement of health and safety indicators through a series of projects, some of which were implemented in 2020.

As part of the Self-Dismissal programme, every employee is guaranteed the right to refuse work that poses a risk of injury. Compliance with this programme is ensured at each of En+ Group's enterprises by our plant managers.

We developed and adopted a set of Basic and Fundamental Safety Rules for our production facilities. In addition we formally regulating numerous processes to ensure the proper condition of scaffolding and platforms, organising works involving hoisting mechanisms, ensuring the safe traffic of vehicles and pedestrians at production sites, using video recorders in admission to operations, and switching power devices.

Admission to work sites in terms of employees' blood alcohol content prior to each work shift in line with tour alcohol and drug zero tolerance policy continues to be controlled. Daily medical examinations using Automated Medical Examination software/hardware were introduced in 2020 to detect any deterioration of employee health at workplaces located at remote power generation or transmission facilities in the Irkutsk Region.

A health and safety monitoring project continued in the Power segment in 2020. The project combines reactive and proactive health and safety performance indicators at all production sites into one integrated metric, used continuously to monitor and adjust health and safety efforts. The ongoing monitoring indicator is also used as a KPI to determine the size of the quarterly bonus. In 2020, managers continued to hold monthly HSE meetings by video conference, where directors of the production facilities reported on the results of their HSE efforts, discussed the findings of workplace audits and shared experiences in health and safety improvements.

During the reporting period, the production safety management system in the Metals segment was transitioned from the OHSAS 18001: 2007 standard to the international ISO 45001: 2018 standard, as confirmed by the DNV GL certificate (international accredited registrar and classification society).

In 2020, an external audit of the health and safety management system and the level of safety culture was conducted at four sites of the Metals segment. Based on the assessment results, a roadmap for the further development of the production safety management system was developed.

To prevent accidents such as the serious damage which occurred on the territory of CHP-3 in Norilsk, owned by the Norilsk Nickel Company, we implemented the following actions at the enterprises of the Metals segment:
- Expert assessment of the reliability and safety of 36 ground storage tanks, used for chemical substances and oil products with a volume of more than 1,000 m^3
- Technical audit of hazardous production facilities at five sites (AGK, BrAZ, IrkAZ, SAZ, KrAZ)
- Compliance verification of draft conclusions of industrial safety examination for technical devices, buildings and structures operated at hazardous production facilities at five enterprises (AGK, BrAZ, IrkAZ, SAZ, KrAZ)

Based on the results of the measures taken, the enterprises developed and implemented corrective actions, intended to prevent future accidents.

In 2020 the Metals segment implemented piloted an automated information system 'Production safety – RUSAL' at two sites in Krasnoyarsk (KrAZ) and Achinsk (AGK).

Goals for 2021:
- Achieve zero fatalities
- Control and reduce all injuries, including contractors
- Improve safety culture with a priority focus on the personal safe behaviour of each employee

Community engagement

We are committed to developing our local communities and strive to make a positive contribution to social well-being in all the regions where we operate. We invest in community projects that align with the needs of local people, as well as our business activities. For this reason, our community engagement priorities lie in urban development, healthy living, education, the environment, and volunteering. In 2020, the En+ Group allocated over USD 71 million[1] for social investments and charitable projects. Since the beginning of 2020, the world has faced the unprecedented challenges arising from the coronavirus pandemic, which has had a devastating impact on the lives of individuals, families and communities and put national economies under tremendous long-term pressure. We strengthened our work to address these issues alongside the further development of our established community initiatives.

Our response to the coronavirus pandemic

Like every other company, the coronavirus pandemic has affected our operations and, critically, has had an impact on En+ Group staff, current and former. The health and well-being of our people has been our number one priority and is at the heart of our multifaceted response to the emergency.

Our first step was to take fast and decisive action to protect our workforces around the world. More than 15,000 staff started working from home on 18 March. Our Health and Safety Department received daily reports on the employees working remotely. To support them through the transition to a new working environment, we launched an internal communications initiative, providing links to free educational platforms, virtual museums, libraries, and language learning sites, and we established special hotlines to address any concerns.

To protect our staff at these operational sites, we promptly established a number of special sanitary measures. We established a programme of deep-cleaning and disinfecting of our sites and provided all workers with personal protective equipment, including masks and gloves. We upgraded medical rooms and paramedic support and increased the medical monitoring of all our employees. New measures were implemented to balance the need for social distancing with enough staff availability in case of self-isolation or individual employees becoming unwell.

The Group launched an initiative to support the elderly and retired employees, many of whom are considered high-risk for infection and were therefore unable to leave their homes. The Group delivered free food supplies to 16,000 of these employees in our regions of operation. We set up a dedicated phone line where recipients could arrange purchase and delivery of additional food and medical essentials. To support healthcare and frontline workers in the Irkutsk Region, En+ Group purchased 800,000 medical-grade masks to donate to hospitals, healthcare institutions and social services.

During the pandemic, the Group built and handed over to regional medical organisations seven medical centres in Achinsk, Bratsk, Sayanogorsk, Shelekhov, Krasnoturinsk, Boguchany and Taishet. The construction cost amounted to 4 billion roubles.

In Kindia, Guinea, RUSAL opened one of the country's first specialist COVID-19 diagnosis and treatment centres. We rapidly converted the Centre for Epidemic and Microbiological Research and Treatment (CEMRT) – which we had built in 2015 to treat and combat the spread of Ebola – into a 60-bed in-patient treatment facility. Following authorisation from the National Agency for Health Security, on 11 April 2020, CEMRT received its first COVID-19 patient. RUSAL commissioned and established a multifunctional centre for the treatment of infectious diseases alongside our medical facility in Friguia, Guinea with all necessary medical equipment, and trained medical staff. We continue to work closely with Guinea's health authorities to support the local communities in Kindia and Friguia. En+ Group is committed to maintaining all initiatives designed to mitigate the impact of the pandemic for as long as needed.

1 Preliminary data, being verified as part of En+ Group 2020 Sustainability report preparation.

Our key programmes

Infrastructure and urban development
Infrastructure development is key for attracting investment and ensuring the social and economic growth of cities and towns today, especially smaller towns. The better the conditions, the lower the outflow of capital and workforce.

RUSAL Territory

RUSAL Territory is a programme for the social and economic development of the regions in which RUSAL operates, providing support for the construction and renovation of communal facilities, the urban environment, and socially significant community spaces. Since its launch in 2011, the programme has supported social and infrastructure projects in 22 cities, towns and villages, and built or renovated hundreds of facilities to provide the local communities with better social infrastructure. In the 10 years since the programme was established, 635 projects have received support and more than 200 social infrastructure facilities were built, repaired or re-equipped. In 2020, the programme's competition resulted in 11 projects being awarded investments of 423.2 million roubles. RUSAL also held an open international competition to create a concept for the development of the Central Park in Krasnoyarsk with a prize fund for 3 winners in the total amount of 6 million roubles.

The Power segment also started infrastructure projects in the line with its community strategic framework. In 2020, the company constructed a children's playground in Ust-Ilimsk, a hockey stadium in Cheremkhovo, and a ski base in Tulun. It also renewed five hockey rinks in Irkutsk and started the reconstruction of the ski base in Divnogorsk. The Group also initiated a project to create a scaled recreation area along the dam of the Irkutsk HPP. The dam is an arterial city road – public transport runs along it and it is accessible to citizens. Residents use it for running, cycling, walking and sightseeing. The project will create convenient access to the dam, improve the network of public transport stops, and create new space for both active and peaceful pastimes. The Group conducted an online survey among citizens and created the architectural concept based on public opinion and the city's urban development plans. The first stage of construction works is planned for 2021.

In Guinea, RUSAL is involved in the construction of basic infrastructure facilities, making a vital difference by providing locals with access to a full range of modern amenities. In 2020, RUSAL commissioned and completed the construction of an elementary school building in Mambia, Kindia Prefecture. At the same time, it built a new indoor market building for the population in Barrage, Kindia Prefecture, and it has successfully constructed a new road bridge across the Samou River in Kindia Prefecture. Another project focused on providing local people with access to drinking water and in 2020, seven new water wells were drilled in various locations in the Kindia and Boké regions where RUSAL operates.

Volunteering
Corporate volunteering is important to ensure the Group remains engaged with employees and local communities and establishes sustainable relations with both citizens and the government. Our volunteering programmes bring together a wide variety of people, including production facility employees, school children, students, and representatives from social and educational institutions. To maximise social impact, we have developed programmes and technology that make it easier for local residents to volunteer.

In 2020, due to lockdown in all regions of our operations in Russia, we launched a large-scale social campaign, which became the main activity for hundreds of corporate volunteers from the Group. From March to June, employees were involved in the delivery of food supplies to elderly and retired employees considered high-risk for infection and unable to leave their homes. The ban on holding public events also changed our plans for the implementation of volunteer programmes. The usual events were replaced by prompt assistance to socially vulnerable groups during the pandemic. In general, the number of events has not decreased over the year, but the format has changed quite dramatically, with many events switched to online mode.

The large social programme of the Metals segment – 'Helping is Easy' – launched in 2014 to encourage volunteering; this programme includes annual environmental projects, the Yenisei Day and Green Wave projects, and the online charity game 'Time to Help'. In 2020 our total funding of winners within the frameworks of "Helpin is Easy" project competition was 2.8 million roubles, and the winners raised additional 1.5 million roubles of co-funding from their organisations and partners. In May 2020, volunteers from RUSAL congratulated 94 veterans of World War II on the 75th anniversary of the Great Victory.

Community engagement continued

The Metals segment

River Day

A corporate environmental clean-up campaign, 'River Day', was carried out to clean up river banks in the cities where the Company operates. In 2020, Achinsk, Bratsk, Volgograd, Kamensk-Uralsky, Krasnoturyinsk, Krasnoyarsk, Novokuznetsk, Sayanogorsk and Severouralsk joined the 'River Day'. In two hours, the action teams collected 1,400 bags (11 tonnes) of waste. Once sorted, 360 bags of plastic, glass and metal were sent for recycling.

The Power segment

Project 360 campaign

The 360 project is part of En+ Group's comprehensive programme to protect Lake Baikal and the nature areas of the Russian Federation from adverse environmental impacts. The programme has been in place since 2011 and includes environmental, scientific, educational and awareness-raising projects. As part of the 360 project, in 2020 we launched an online eco-marathon, which attracted 905 people from all over Russia. In 2020, more than 900 volunteers and employees from Irkutsk, Bratsk, Ust-Ilimsk, Divnogorsk, Miass and Nizhny Novgorod took part in the 360 project's regular campaigns to clean up the banks of local water bodies.

In the Metals segment, large-scale charitable event "From Siberia With Love", aimed at developing a culture of charity and raising private donations, attracted more than 4,000 participants and spectators from Krasnoyarsk and Achinsk.

Sports and healthy living

En+ Group supports programmes to ensure healthy living and promote the well-being of local people. One of our largest sports and healthy lifestyle projects in Russia is 'Get on Your Skis Everyone!', runs since 2016 as a partnership between En+ Group, RUSAL, and the Russian Ski Racing Federation. We have built partnerships with regional sports authorities and ski racing federations, and improved the quality of ski infrastructure by upgrading ski resorts, stadiums and other facilities. In 2020, a ski base was built in Tulun, as part of the rehabilitation of the social infrastructure of the city, which suffered from severe floods in the summer of 2019. The Company also provided the necessary sports equipment. Total investments in this project comprised about 14.5 million rubles. New project for construction works of the ski base in Divnogorsk also started in 2020. En + Group and RUSAL conducted the second 'Best Ski Coach of the Year' competition, through which five trainers won scholarships. To popularise and promote skiing to a mass audience, the project has social networks on Instagram, VKontakte, Facebook and YouTube, and publishes unique content for cross-country skiing enthusiasts of all ages with the involvement of leading Russian skiers.

Another area of focus is the improvement of healthcare in vulnerable communities. We believe that healthy communities encourage strong development and perform better in all aspects of life. RUSAL has for a long time continued to support the Guinean healthcare system. All of RUSAL's enterprises in Guinea have their own medical services. This includes four dispensaries, and a hospital with round-the-clock care teams that examine workers before their shifts and provide emergency medical care. Our patients receive consultations and treatment on a regular basis, and children are vaccinated against infectious diseases. We provide medical staff with high-level training and hold health education events for workers.

In July 2020, RUSAL chartered a plane stocked with humanitarian aid medical cargo to combat the spread of the COVID-19 pandemic to Guinea. The cargo included dozens of items of medicines well as modern medical equipment and supplies for the treatment of patients with a confirmed COVID-19 infection.

Supporting community environmental programmes

Environmental safety continues to be a vital area of En+ Group's sustainability strategy. We carry out a series of projects aimed at protecting unique landscapes in the territories where we operate. Our initiatives have received positive responses from regional and federal governments, as well as from residents who appreciate local nature. Through environmental social projects, the Group seeks to cooperate with local organisations to facilitate a synergetic effect. A key environmental programme for the Group is 'Nature Matters', which brings together a variety of activities to promote the protection of Lake Baikal and other water bodies and natural territories, including volunteering, environmental protection events, and eco-education based on collaborations with non-profit organisations and local activists.

In 2020, En+ Group launched an annual fund to invest in new projects to protect Lake Baikal and other water bodies in Siberia. The fund is delivered through our Environmental

Project Grant Contest, which is a transparent and effective tool for financing innovative projects that contribute to community development, conversation of water bodies and climate change action. The contest invites applications from NGOs, academics and community groups and provides support for environmental and social entrepreneurship, environmental educational programmes, volunteer projects, projects to improve infrastructure to reduce anthropogenic pressure on natural areas, and scientific research.

In the first year of our Environmental Project Grant Contest, we received 83 applications. Fourteen projects from Irkutsk, Ust-Ilimsk, Divnogorsk and cities along the shores of Lake Baikal won the competition and received funding.

Education

En+ Group carries out various activities to widen educational opportunities for residents in our regions of operation. Activities include support for schools and universities, the organisation of public exhibitions and events, and the introduction of its own programmes.

In Russia, En+ Group supports the development of robotics to provide targeted training for young people considering a career in engineering by encouraging the development of key skills for the future, immersing participants in real business environments, and identifying priority areas for regional development. In early 2020, we ran RoboSib-2020 which was the largest event yet. Around 800 students from five regions of Russia and China participated, with a total of more than 5,000 attendees. Of the 164 teams of schoolchildren and students participating in the competition, 76 won RoboSib awards. The winners included teams from the Irkutsk Region, Krasnoyarsk Territory, the Republic of Buryatia, Saint Petersburg, and China.

In 2020, the Group started the development of an educational course for schoolchildren – 'Energy in every drop' – to support their learning of the principles of hydroelectric power plant operations. The course is scheduled to launch at schools in 2021.

The training and development programme of the Metals segment – 'Leaders of Urban Change' – provides courses in the field of social and business design, corporate volunteering, and urban environment development, as well as holding inter-regional gatherings of leaders.

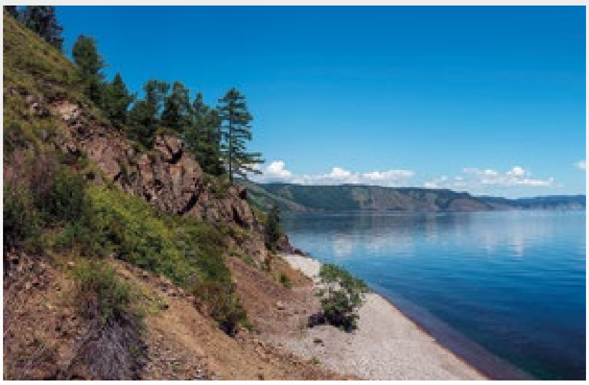
In Ireland, AAL participates in an industry-led initiative called Limerick for Engineering. The primary goal of the initiative is to increase the quality and quantity of engineering talent in the region by encouraging primary and post-primary students to explore the world of STEM (Science, Technology, Engineering and Mathematics) while also promoting engineering as a career choice. In 2020, AAL participated in the virtual Limerick for Engineering Showcase, which gave students the opportunity to meet with industry professionals who provided information about their chosen fields and demonstrated some of the interesting technology they work with. Our representatives also visited local schools and gave talks and demonstrations about engineering and RUSAL Aughinish. In addition, a number of students from local schools and universities visited the plant, where they learnt about the alumina production process.

In Sweden, Kubikenborg Aluminium AB (KUBAL) also pays significant attention to the local educational sphere, participating twice a year in student fairs, establishing a scholarship for students at Sundsvall University, and inviting students from Sundsvall University to conduct research for their thesis at the facility.

Partnership with the Great Baikal Trail (BBT) Association

Through its partnership with the BBT Association, an organisation focused on environmental education and sustainable development, En+ Group supports responsible eco-tourism in the region, creating safe tourist trails and reducing the impact of human activity on the fragile Baikal ecosystem.

In 2020, we collaborated with BBT Association and invested 4 million roubles to create a navigation system and improve a popular 54 km-long tourist route in the Pribaikalsky National Park.



Sustainable economic development

Research and development (R&D)
Since 2016, the Group has been engaged in the 'Perovskite Solar Module Development' project in cooperation with the Faculty of Materials Science of Moscow State University (MSU). The project implementation was supported by the Federal Target Programme until 2019, and is currently supported by the Russian Scientific Foundation. In 2020, the research provided the following results:

1. Two patents describing methods for producing films of a perovskite-like structure were successfully registered in seven foreign territories, including the United States and the European Union. One more patent is to be registered in early 2021
2. Two more R&D results were recommended for registration with the patent authorities of the Russian Federation to ensure legal protection
3. In June 2020, JSC Krasnoyarsk HPP and Moscow State University signed a new master agreement for scientific and technical cooperation with a view to developing perovskite-silicon solar tandems

Through our sustainable development strategy, En+ Group consistently explores the impact of water use modes on the environment and looks for opportunities to reduce this impact.

The first stage of research within the 'Long-Term Forecasting of Inflow to Lake Baikal Using Machine Learning Hydrological Modelling Methods' project was completed in 2020. It included an analysis of atmospheric circulation regularity amidst physical and geographical conditions, and an analysis of the past and present correlations between meteorological values and circulation components. It also predicted temperature and precipitation anomalies in the future using machine learning methods with artificial supplementation of the learning sampling. As part of the project:
- A database of water consumption observations at 12 hydrological posts in the basin of Lake Baikal for 1971-2016 was created and verified
- Databases of meteorological parameter observations at the network of weather stations (63 stations) in the basin of Lake Baikal were created using open access databases (Pik, Aisori, GSOD, rp5) and data of VNIIGMI for 1960-2018
- A hydrological model of the inflow was formulated to best describe the regional processes. A model of the water inflow to Lake Baikal was calibrated and set up based on the SWAT modelling software

For the first time, a physical and mathematical model of the discharge generation was developed for the entire basin of Lake Baikal. A model of such class was previously developed solely for the basin of the Selenga River, based on the ECOMAG modelling software, as part of a scientific project of the Institute of Water of the Russian Academy of Sciences (Moreido & Kalugin, 2017). Comparing the reproduction quality of daily water consumptions in the Selenga River near the Mostovoy station showed a similar quality of the models for the calibration period, and a much better quality than the model developed for the control and verification period.

The developed hydrological model of Lake Baikal will be used to create a software solution for scenario calculations of the impact of weather and climate conditions on the inflow to Lake Baikal and will enable scenario calculations of long-term regulation (series of dry years, wet years, cold and warm years, long-term climate trend in accordance with IPCC scenarios, etc.).

Internal control and risk management

A comprehensive framework of internal controls is in place across the Group, designed to protect the Group's assets, improve business processes, and ensure compliance of the Group's operating companies with applicable laws and regulations.

Audit and Risk Committee

The Board of Directors has responsibility for the efficiency and effectiveness of the financial and economic activities of the Group and is responsible for maintaining and reviewing the effectiveness of the Company's systems of internal control system and risk management.

The Board has established an Audit and Risk Committee (the "A&RC"), which assists the Board in its review of the financial statements of the Group; ensures that systems of internal control and risk management are in place and operating effectively; oversees the internal and external audit processes and performs such other activities as are requested by the Board.

p. 108 Audit and Risk Committee Report

The Company's structure includes the Internal Audit Directorate (the "IAD"), which is independent of management and which reports to the A&RC and the Board. The IAD assists the A&RC and the Board in overseeing the financial and economic activities of the Group and the related systems of internal control and risk management.

The IAD reports regularly to the A&RC concerning the results of both scheduled and unscheduled audits; any deficiencies identified in the system of internal control; recommendations and corrective measures to be taken by management; identified risks and related financial exposures and mitigation measures.

Internal control system (ICS)

The IAD seeks to provide assurance to management and shareholders of the Company that the Group's assets are safeguarded and profits are maximised; that the Company complies with the requirements of applicable laws and regulations; and that proper accounting records are maintained.

The IAD seeks to ensure that an effective system of internal control is in place and operating effectively across the Group, including:

1. Operational and financial control:

- Conducting audits of the efficiency and effectiveness of business processes across the operating companies in order to identify and minimise risks associated with ineffective management, and to enhance control of operational and technological processes, commercial activities, personnel management, implementation of investment projects, financing, etc.
- Conducting audits to prevent and identify fraudulent activities by management, employees and third-party contractors (such as fraud, misappropriation, misuse of the Group's assets, sub-optimal use of materials and time), and mitigate the effects thereof.
- Exercising control over commercial activities (including the selection of suppliers of raw materials, other materials, and services, including construction and/or installation works) in the interests of effective cost management for the Group (including by participating in the Tenders Committee and overseeing the work of Tender committee across the Group's operating companies).

The operational and financial control objectives are achieved through comprehensive audits and controls inspections conducted by the IAD in accordance with the annual audit plan (approved by the A&RC) using a risk-based approach. In addition, the IAD conducts unscheduled audits as requested by management and provides an independent opinion in the fields and areas requiring immediate decision-making by management. The IAD uses audit findings to develop corrective actions aimed at minimising or eliminating any failures or weaknesses identified by audits, with a view to preventing such breaches in the future. The IAD regularly updates management and the A&RC on its audit and review findings, and on the status and implementation of the recommendations it has provided to management.

2. Compliance control

– Auditing compliance with the requirements of creditor banks, listing rules and other financial regulators, including with respect to sanctions, etc.

– Auditing compliance with the internal regulations and policies of the Group, designed to ensure compliance with the requirements of the supervisory authorities, financial institutions and other counterparties of the Company.

3. Regulation of business processes

– Development of the Group's system of internal control and mitigation of risks of common process violations/ losses and particular aspects of the Group's activities (system of authority delegation; control over conflicts of interest, related-party transactions, compliance procedures; control over business travel, etc.).

– Development of uniform standards of commercial activities (e.g. Generalised Regulations on Purchases in accordance with applicable law and regulations; regulations on sales of illiquid assets of the Company).

4. Development and implementation of projects to improve ICS

– Identifying cost management opportunities in commercial activities (e.g. sales of illiquid assets – regulations are reviewed and tools and measures introduced aimed at improving the Company's commercial services efficiency, including the reduction in cost of goods, works, and services).

– Providing recommendations and development of terms of reference for automation of separate modules of the e-document flow, general accounting and management accounting systems.

Improvement of the corporate system of internal control

The IAD implemented a set of key measures in 2020 to support and improve the ICS.

1. Targets for control over the Group's commercial activities and development of measures to increase the efficiency of commercial activities:

– Reduction of costs for the purchase of key commodities and materials was achieved through improved commercial conditions and negotiations as part of the control of procurement activities
– Goals regarding control over commodities and turnover of goods and materials in the Power segment's companies were achieved; specialised automated forms for inventory management were developed and implemented
– The target for the sale of the Group's illiquid assets was exceeded by 20%
– Development of the regulation on the rating assessment of suppliers and contractors;
– Update of the Procurement Regulations for all enterprises of the Company
– Definition of the procedure of the Company's Collegial Purchasing Bodies and cooperation with its subsidiaries with regard to procurement procedures

2. Development and adoption of a framework of regulations for the ICS

– A unified document management system for all of the Group's entities has been introduced

– A standard for official documents has been introduced

– A catalogue of standard contract templates has been developed

– Accounting systems and electronic document management system of En+ Group companies have been improved, an indication of the integral assessment in the online mode (API-gateway) of information on counterparties according to external sources has been introduced

Risk management framework

The Company has established a risk management system, which is an integral part of the Company's internal control system and corporate governance framework, to reduce any potential threats to the Company's compliance with its corporate governance standards and ensure consistent and sustainable business development.

The Company's risk management system provides for the identification, financial and probabilistic estimation and control over any change in the risk of both the internal and external environment with regard to the financial and/or economic activities of the Group's operating companies.

The vertical principle is used to manage the risks of the Company, based on the identification of any risks to the business processes of standalone operating companies with subsequent consolidation at the Business level, and then at the Company level, in accordance with the regulating documents that stipulate the procedure and responsibilities of all participants in the risk management process.

Risk maps are used to illustrate the risks of operating companies and the Businesses. Risk maps provide details of each risk event scenario, estimates of possible risk impact and measures aimed at mitigating the possible negative impact on the activities of operating companies, Businesses and the Company. The risk map of the Company includes a list of all possible risks that may threaten the objectives of the Company in the next calendar year.

Risk status monitoring is undertaken on a quarterly basis to analyse any changes, update the estimates for existing risks and implement measures for controlling identified risks, as well as to search for, identify and estimate the impact of new risks arising during the quarter/year.

The risk monitoring results are submitted to management, the Chief Executive Officer, A&RC and Board. Responsibility for effective risk management rests with the Chief Executive Officer.

Key risk management developments of the Company in 2020:

1. 2020 Risk Map development and monitoring on quarterly basis over the year

The En+ Group's Regulations on Risk Management establish the procedure for the development of Risk Maps by all entities of the Group for the coming year and the quarterly review and update of the developed Risk Maps. The results are provided to the Group's executive management and the Board of Directors.

2. Large-scale training on risk-management fundamentals at all En+ Group entities

During the period July-October 2020, the Group's conducted large-scale training on the risk management system. The training took place on the Company's Corporate University platform and comprised a video course and tests at the end of the course.

The training covered 3,300 Group employees. The distance-learning format made it possible to accomplish the task despite the COVID-19 pandemic.

In addition, starting 1 July 2020 the En+ Group Risk Management course became mandatory for all new employees upon completion of their probationary period, regardless of their position.

Regular risk management training will allow the Company to increase the culture of risk management and allow all Company employees to apply the tools of a risk-oriented approach.

Risk identification

As part of its strategic, business planning and risk processes, the Group considers how a number of macroeconomic themes may influence its principal risks. These are factors about which the Company should be cognisant in developing its strategy, including long-term supply and demand trends. They include, for example, developments in technology, demographics, climate change, and how markets and the regulatory environment may respond. These themes are relevant to the Group's assessments across a number of its principal risks. The Group will continue to monitor these themes and the relevant developing policy environment at an international and national level, and will adapt its strategy accordingly.

Since March 2020, the Company has been monitoring the evolving situation, and consequent emerging risk, with regard to the spread of COVID-19. The Group has been working with a variety of stakeholders, including industry and medical organisations, to ensure its operational response and advice to its workforce is appropriate and commensurate with the prevailing expert advice and level of risk.

Risk management framework continued

En+ Group's key business risks

The Group's principal risks, as set out in the table below, are those risks which could prevent the business from executing its strategy and creating value for shareholders, or which could lead to a significant loss of reputation. The Committee has carried out an assessment of the principal risks facing the Company, including those that would threaten its business model, future performance, solvency or liquidity.

Risk impact is based upon an estimation of the combined impact of probability and financial effect of a given risk (i.e. a probabilistic assessment of the risk impact on the Group). Thus, the higher the probability, the higher the potential impact, and vice versa.

Risk impact on the Company		Changes in 2020	
●	High	↑	Higher impact
●	Medium	N/C	No change
●	Low	↓	Lower impact

	Risk	Description	Change in 2020	Mitigation measures
External and market risks				
1	**Environment** ●	Pollution of land, water courses or air due to equipment failure or human error giving rise to penalties and/or fines. Suspension of operations or loss of license to operate	N/C	Group's environmental management system Consistent application of the Group's Environmental Policy Engagement with national and local governments on developments in environmental legislation Environmental KPIs for Company management
2	**Laws and regulations** ●	Business impact of changes in, or the manner of enforcement of laws and regulations in Russia and globally, incl. antimonopoly regulation, tariff regulation, licensing and permits, environmental regulation, HSE regulation	↓	Monitoring of changes in the regulatory frameworks Interaction with the regulatory authorities
3	**Market – supply demand, commodity price volatility** ●	Business impact of volatility in supply, demand and/or prices of commodities fundamental to the Group's operations: Metals segment: aluminium, alumina, bauxite, power Power segment: electricity prices in certain segments of the Wholesale Electricity and Capacity Market (long-term contracts, 'day-ahead' market)	↑	The Group monitors its key risks, and conducts market research & analysis, and business & scenario planning The Company partially hedges its market risks by using derivative financial instruments

	Risk	Description	Change in 2020	Mitigation measures
4	**Geopolitical**	Risks of a negative impact on the Group in the case that new sanctions are imposed by foreign states In 2020, the sanctions previously imposed by the US authorities were not in effect after respective agreements had been reached Risks of a negative impact on the Metals segment's operations in various countries (Guyana, Guinea)	↓	The Company implements a series of measures envisaged by the ToR in order to have sanctions restrictions removed. Independent auditing is done on a regular basis to ensure compliance with the ToR provisions Continuous monitoring of the political situation is exercised in the countries where the Group operates
5	**Force majeure – natural disasters, large-scale accidents, epidemics**	The Company may suffer major damages to its production facilities, or suspension/discontinuance of operations as a result of natural disasters, epidemics, terror attacks	↑	Scenario planning and development of early response measures Implementing a set of organisational and practical measures to ensure asset safety The COVID-19 pandemic that broke out at the end of 2019 has led to additional costs for the Company to protect employees and provide assistance to medical institutions in the regions where the Company operates
Business and operational risks				
6	**Maintenance**	These risks relate to equipment: failures of equipment that may result in damage to property, reduced output or discontinued operations.	**N/C**	Timely maintenance and repairs/ overhauls of equipment; modernisation of production facilities
7	**Legal**	Risks that losses may be incurred as a result of enforcement of court judgements on claims by contractors and shareholders of the companies of the Group	↑	Legal defence against lawsuits Negotiating with the claimants
8	**Commercial and project**	Risks of disruptions in supply chains of goods and raw materials: sales of the products from metals and coal businesses require the use of railway infrastructure with its uncertain availability pattern Risks of monopoly pricing at the transportation market Risks of projects not completed on time/on budget The implementation of large-scale repairs has been delayed as contractors were unable to perform works as scheduled due to the COVID-19 pandemic and the restrictions imposed by the Russian Government	↑	Negotiating with suppliers of logistical services Ensuring timely supply and performance under investment contracts in accordance with the Group's internal regulations

Risk management framework continued

	Risk	Description	Change in 2020	Mitigation measures
9	**Health and safety**	Workforce or contractor injury due to human error, equipment failure, or workplace configuration, given the endemic risks within the Power and Metals segments relating to major accident hazards and asset integrity	**N/C**	The Group has arranged special-purpose units to reduce the probability of occupational injuries by means of development of regulations, staff training and ensuring compliance with the rules relevant to complicated and hazardous works through relevant control measures. Supervisory authorities (the Russian technological supervision service ROSTECHNADZOR, and the consumer rights compliance service ROSPOTREBNADZOR, etc.) exercise scheduled and ad hoc checks to control compliance with HSE requirements
10	**IT security & resilience**	Risks of important data loss or damage to components of the IT infrastructure by hacking or malware attacks Risks of failures of the automated information control and management systems of large industrial facilities (HPPs, CHPs, etc.)	↑	Testing the IT infrastructure for security vulnerability detection Use of uniform policies and procedures for ensuring security of all Group entities In 2020 amidst the COVID-19 pandemic, substantial numbers of employees shifted to home working through secure communication channels and special-purpose software
Financial risks				
11	**Financial**	Financial impact of market volatility regarding foreign exchange and interest rates Tax risks	**N/C**	The Group exercises continuous control over the financial condition of Group companies. Monitoring of compliance with the terms of the loan agreements with banks is arranged at the Group's entities to ensure uninterrupted operating activities. Regular control is exercised over compliance with the agreed financial covenants; tax planning is undertaken, as well as control over tax accruals and payments
Climate-related risks*				
12	**Transition risks** N/A	Financial or reputational impact due to policy, legal, technology, and market changes	**N/C**	Constant monitoring of policy, legal, technology, and market changes and proactive management of this issues
13	**Physical risks** N/A	Negative impact on operational process due to climate change, including water supply and temperature variations	**N/C**	Business and scenario planning; climate research and analysis

*Climate-related risks

The Company considers and examines climate-related risks and opportunities. This year En+ Group continued its work on implementing the Task Force on Climate-related Financial Disclosures (TCFD) recommendations.

The Company aims to make its climate change reporting more transparent for stakeholders. For detailed information please refer to the Sustainability Report.

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Ethics and compliance

Commitment to the highest legal and ethical standards is at the core of our business.

In 2020, En+ Group developed and adopted a revised version of its Code of Corporate Ethics to improve corporate governance practices. The Code states the key values, principles and standards of business conduct to be adhered to by the employees and Board members; the Code explains matters relating to employees, third parties, customers and governmental authorities; health, safety and environment; efficiency; ensuring confidentiality of information; control and reporting, and conflicts of interest. The Company maintains a whistleblowing hotline for employees and other persons. The Code of Corporate Ethics is publicly available in Russian and English on the Company's corporate website.

Corporate compliance system

En+ Group operates an effective corporate compliance system, subject to applicable laws, recommendations issued by regulators, special requirements of the industry and best practices. The Board of Directors has established a Compliance Committee, which ensures the development of and control over the Group's compliance management system.

Anticorruption compliance and corporate ethics

En+ Group takes every opportunity to promote best practice in fighting corruption, and consistently complies with high standards of responsible and ethical behaviour. In 2020, the Board of Directors adopted the Anti-Bribery and Corruption Policy and the Policy on Conflict of Interest of the Group. These policies provide the basis for continuous improvement of the corporate culture and implementation of the required components of compliance at each and every Group company.

Sanctions compliance

En+ Group is focused upon mitigating the risk of being reincluded in the OFAC's SDN list. A relevant compliance programme has been devised and is being continuously developed by the Company. The Board of Directors approved the Sanctions Policy aimed at ensuring that the En+ Group, and its officers, directors and employees comply with the applicable terms of sanctions removal.

To download Code of Corporate Ethics from our website:
www.enplusgroup.com/upload/iblock/98b/Code-of-Corporate-Ethics-_Eng_.pdf

To download Anti-Bribery and Corruption Policy from our website:
www.enplusgroup.com/upload/iblock/f78/Anti_Bribery-and-Corruption-Policy-_Eng_.pdf

Corporate governance

The Company is committed to high standards of corporate governance. The Group intends to continue to improve in this area and to adhere to internationally recognised standards of corporate governance, transparency, disclosure and accountability applicable to listed companies.

The Company has made substantial changes to its corporate governance practices, as a result of the OFAC Sanctions imposed on the Company and its subsidiaries on 6 April 2018 and their subsequent removal on 27 January 2019. Following these changes, the Company has proven its commitment to high international standards of corporate governance.

With effect from 9 July 2019 (the "Continuance Date"), the Company was registered as an international public joint-stock company in the Unified State Register of Legal Entities of the Russian Federation and changed its legal jurisdiction of incorporation from Jersey to Russia (the "Continuance"). As a consequence, the Company's memorandum of association and articles of association previously governed by Jersey law were superseded by a new charter (the "Charter"), and the Company's name was changed to EN+ GROUP IPJSC.

Following the completion of the Continuance, the Company's ordinary shares were admitted to the Level One Quotation List of the Moscow Exchange, thereby creating a more diversified platform for investors in the Company's equity securities. The Company's GDRs were delisted from the Moscow Exchange and retained their listing on the London Stock Exchange.

Following the Continuance, the Company aims to comply with the recommendations of the Russian Corporate Governance Code insofar as is appropriate and practicable in the Group's context. In its corporate governance practices, the Company is also guided by the Listing Rules of the Moscow Exchange.

As a company incorporated in Russia, with GDRs listed on the Official List of the UK Financial Conduct Authority and traded on the Main Market of the London Stock Exchange, the Company is not required to comply with the provisions of the UK Corporate Governance Code. However, the Company has chosen to comply with the UK Corporate Governance Code insofar as is appropriate and practicable in the Group's context.

Adhering to high standards of corporate governance is an important element in attracting new investment, strengthening the Group's competitive position and enhancing shareholder value. Good governance is based on clarity of roles and responsibilities, and the Company aims to ensure that its governance procedures are applied to all areas of decision-making across the Group.

The Board of Directors is responsible to all of En+ Group's stakeholders for the strategic management of the Company. The day-to-day running of the Company falls within the competence of the CEO[1]. However, the Board retains responsibility for the approval of certain matters, which affect the shape and risk profile of the Company (see details below).

The Company's corporate governance system outlines the relationship between the Company's shareholders, the Board, the CEO and the management team, as well as the remit and duties of the Board committees.

We consider the following corporate governance principles to be fundamental to our operations:
- Transparency
- Open and clear decision-making
- Legal compliance, including clear and robust compliance with requirements for the Company to be and remain clear from the OFAC Sanctions
- Ongoing growth of the Company's value for the benefit of all stakeholders

1 The Charter uses the term "General Director" which is used interchangeably with the term "CEO" in public disclosures made by the Company.

At a glance

12
directors
including 7 independent non-executive directors

6
Board committees

All Board
committees
are chaired by independent non-executive directors

17 February
2020
En+ lists ordinary shares on the Level One Quotation List of MOEX

20 April
2020
En+ GDRs are delisted from MOEX (17 April 2020 was the last trading date for the GDRs on MOEX)

1 December
2020
the Corporate Governance and Nominations Committee of the Board was divided into the Corporate Governance Committee and the Nominations Committee

Corporate governance structure

The Company's corporate governance structure includes the following key elements:

General shareholders meeting

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Board

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CEO

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Timeline of corporate governance changes

17 February
2020
En+ Group's ordinary shares were admitted to trading on the Level One Quotation List of MOEX

20 April
2020
The Company's GDRs were delisted from MOEX (17 April 2020 was the last trading date for the GDRs on MOEX)

25 September
2020
The annual general shareholders meeting of the Company took place. One new independent non-executive director was appointed to fill the vacant position on the Board

1 December
2020
The Board divided its Corporate Governance and Nominations Committee into two separate committees: the Corporate Governance Committee and the Nominations Committee

General shareholders meeting

The general shareholders meeting (the "GSM") is the supreme governance body of the Company. The Charter details the matters which fall within the powers of the GSM.

Voting at a GSM is conducted on the basis of one vote per ordinary share. Decisions are generally passed by a simple majority of shareholders voting in favour of a motion at the meeting, save for a number of matters which, under the Charter, require the adoption of a special resolution (i.e. voting by a 2/3 majority), including, inter alia:
- The adoption of amendments to the Charter or approval of the restated Charter
- A change in the Company's status to non-public, or obtaining public status
- The reorganisation of the Company by way of consolidation, merger in the form of acquisition, division, or divestment
- The liquidation of the Company
- The fragmentation, conversion or consolidation of Company shares
- The acquisition of the Company's outstanding shares
- An increase or reduction in the Company's share capital.

The GSM is quorate if shareholders holding more than half of the votes attached to the outstanding voting shares in the Company participate.

If the quorum for holding of an annual GSM is not reached, an adjourned GSM with the same agenda shall be reconvened at a later date. If the quorum for an extraordinary GSM is not reached, an adjourned GSM with the same agenda may be reconvened at a later date. An adjourned GSM is quorate if attended by shareholders holding no less than 30 per cent of outstanding voting shares in the Company.

Resolutions of the GSM may be adopted either in a meeting held in the form of joint presence of shareholders or by absentee voting.

If the agenda of a GSM includes issues relating to the election of the Board, approval of the Company's auditor for the audit of accounting (financial) statements prepared under the Russian Accounting Standards ("RAS"), or approval of the annual report and annual accounting (financial) statements of the Company, it may be conducted only with the joint presence of shareholders. However, due to the COVID-19 pandemic, in 2020 Russian joint-stock companies were permitted[1] to hold GSMs with the above-mentioned agenda via absentee voting.

An extraordinary GSM may be held based on a resolution of the Board either adopted on its own initiative, or at the request of a shareholder (or shareholders) holding no less than 10 per cent of voting shares in the Company as at the date of the request. An extraordinary GSM convened at the request of a shareholder (or shareholders) holding at least 10 per cent of voting shares in the Company shall be held within 50 days from the date of the request to convene the extraordinary GSM.

The Charter envisages a procedure for electronic voting at a GSM. Voting may be carried out in electronic form if this is envisaged by the decision of the Board. In this case ballots may be filled out in electronic form online, or sent to the Company's email address.

Information (materials) which are to be provided to the GSM should be made available within 20 days prior to the GSM, and in the event of a GSM with an agenda item on the Company's reorganisation, within 30 days prior to the GSM.

1 In accordance with the Federal Law No. 50-FZ dated 18 March 2020 and the Federal Law No. 115-FZ dated 7 April 2020.

Annual GSM

The annual GSM must be convened by the Board between 1 March and 30 June of each year, and the agenda must include the following items:
- The election of the Board members
- The approval of the Company's auditor for the audit of accounting (financial) statements prepared in accordance with RAS
- The approval of the Company's annual report
- The approval of annual accounting (financial) statements of the Company
- The approval of distribution of profits of the Company, including the payment (declaration) of dividends, except for payment (approval) of any interim dividends.

The Company's shareholders holding in aggregate at least 2 per cent of voting shares in the Company may no later than 30 days from the end of the reporting year propose items for the agenda of the annual GSM and candidates for election to the Board.

Due to the COVID-19 pandemic, in 2020 the period for holding an annual GSM in the Russian joint-stock companies was extended to 30 September 2020, and their shareholders were given an additional opportunity to propose items for the agenda of the annual GSM and candidates to the relevant governance bodies by no later than 27 days prior to the date of the relevant annual GSM[1].

Report on meetings held

In 2020, the first annual GSM of the Company after the Continuance was held on 25 September 2020 in the form of absentee voting.

The annual GSM considered and passed the following resolutions:

1. "To approve the Company's Annual Report for 2019"

2. "To approve the Company's annual accounting (financial) statements for the 2019 reporting year"

3. "Not to distribute the net profit received by the Company for 2019 and not to pay dividends on shares for 2019"

4. "To elect the Board of Directors of the Company consisting of 12 members from the list of candidates approved by the Board of Directors of the Company:
   1. Lord Barker;
   2. Christopher Burnham;
   3. Vadim Viktorovich Geraskin;
   4. Anastasia Vladimirovna Gorbatova;
   5. Nicholas Jordan;
   6. Joan MacNaughton;
   7. Elena Valerievna Nesvetaeva;
   8. Ekaterina Vyacheslavovna Tomilina;
   9. Carl Hughes;
   10. Alexander Valentinovich Chmel;
   11. Andrey Vladimirovich Sharonov;
   12. Andrey Vladimirovich Yanovsky"

5. "To approve JSC KPMG as the auditor of the Company (EN+ GROUP IPJSC)"

1 In accordance with the Federal Law No. 115-FZ dated 7 April 2020.

Board of Directors

As at 31 December 2020, there were twelve directors on the Board, including seven independent non-executive directors, four non-executive directors and the Executive Chairman of the Board.

In accordance with the Barker Plan[1] and as a condition of the removal of the Company from OFAC's SDN List, the Company announced on 28 January 2019 the immediate appointment of seven new independent non-executive directors, namely:
- Christopher Burnham
- Carl Hughes
- Joan MacNaughton
- Nicholas Jordan
- Igor Lojevsky
- Alexander Chmel
- Andrey Sharonov

On 8 February 2019, Lord Barker was appointed as Executive Chairman of the Board and Christopher Burnham was appointed as Senior Independent Director.

Lord Barker's appointment came with additional powers and responsibilities, designed to enhance the control of the Board over the corporate governance systems and procedures of the Company. The appointment was aimed at further increasing cooperation between the Board and the Company's management, with the ultimate objective of promoting the successful performance of the Company.

The following individuals were appointed as non-executive directors:
- Vadim Geraskin (appointed on 8 February 2019)
- Ekaterina Tomilina (appointed on 8 February 2019)
- Elena Nesvetaeva (appointed on 8 February 2019)
- Anastasia Gorbatova (appointed on 29 May 2019)

Each of the above directors, except for Igor Lojevsky who unexpectedly passed away on 12 April 2020, was re-elected in 2020 by the annual GSM and is currently serving on the Board. On 25 September 2020, the annual GSM also elected one new independent non-executive director – Andrey Yanovsky. The quality and breadth of experience of the directors, and the balance of the Board's composition are intended to protect and promote the Board's effectiveness.

Board composition and attendance

Board attendance and number of meetings in 2020

	Appointed on	Resigned on	Attendance[2]
Executive Chairman of the Board			
Lord Barker	17.10.2017	–	20/20
Non-executive directors			
Vadim Geraskin	08.02.2019	–	20/20
Ekaterina Tomilina	08.02.2019	–	20/20
Elena Nesvetaeva	08.02.2019	–	19/20
Anastasia Gorbatova	29.05.2019	–	20/20
Independent non-executive directors			
Christopher Burnham	27.01.2019	–	19/20
Alexander Chmel	27.01.2019	–	20/20
Carl Hughes	27.01.2019	–	20/20
Nicholas Jordan	27.01.2019	–	20/20
Igor Lojevsky	27.01.2019	12.04.2020	3/3
Joan MacNaughton	27.01.2019	–	20/20
Andrey Sharonov	27.01.2019	–	20/20
Andrey Yanovsky	25.09.2020	–	5/6
Total number of meetings			**20**

During 2020, the Board held 20 meetings and all of them were held in the form of absentee voting.

1 Lord Barker's plan regarding the removal of the OFAC Sanctions from the Company was announced on 27 April 2018 and subsequently adopted by the Board on 18 May 2018. The plan provided for the reduction of Mr Deripaska's shareholding to below 50% and the appointment of certain new directors such that the Board would include a majority of newly appointed independent directors. Further details in connection with the Barker Plan were disclosed, in particular, in the Company's 2018 Annual Report, available on the Company's website at www.enplusgroup.com/en/investors/results-and-disclosure/annual-reports/.

2 The number of meetings attended/maximum number of meetings the directors could of attended.

Board focus during the year

Area of focus	Matters considered and decisions adopted
Strategy and risk	17 December 2020 – The Board considered an update on health and safety matters – The Board considered an update on the situation relating to the COVID-19 pandemic – The Board approved the Company's Business Plan for 2021 18 November 2020 – The Board considered an update on health, safety and environmental matters – The Board considered an update on the situation relating to the COVID-19 pandemic 18 September 2020 The Board approved the Company's Sustainability Report 2019 18 August 2020 – The Board considered an update on health, safety and environmental matters – The Board considered an update on the situation relating to the COVID-19 pandemic 23 June 2020 – The Board considered an update on health, safety and environmental matters – The Board considered an update on the situation relating to the COVID-19 pandemic 15 May 2020 The Board preliminarily approved the Company's Annual Report 2019 22 April 2020 The Board considered an update on health, safety and environmental matters, including the situation relating to the COVID-19 pandemic 26 March 2020 The Board considered an update on health, safety and environmental matters, including the situation relating to the COVID-19 pandemic
Succession and leadership	1 December 2020 The Board updated the composition of the Compliance Committee and the Remuneration Committee, and elected the Corporate Governance Committee and the Nominations Committee 28 September 2020 – The Board reappointed Lord Barker as a chairperson of the Board – The Board refreshed the composition and appointed the chairpersons of all its committees – The Board approved the terms of contracts with members of the Board 21 May 2020 The Board updated the composition of the Remuneration Committee 26 March 2020 The Board approved the results of the assessment of the CEO KPI achievement for 2019
Corporate governance	25 December 2020 The Board approved the Board of Directors Diversity Policy, the Corporate Code of Ethics, the Policy on Human Rights, the Anti-Bribery and Corruption Policy, the Stakeholder Engagement Policy, the Environmental Policy, the Health, Occupational, Industrial and Fire Safety Policy and Conflict of Interest Policy. 1 December 2020 – The Board divided the Corporate Governance and Nominations Committee into the Corporate Governance Committee and the Nominations Committee and approved their Regulations – The Board updated Regulations on the Remuneration Committee, on the Compliance Committee, on the Corporate Secretary and on the Board of Directors 23 June 2020 The Board approved annual KPIs for the CEO for 2020 15 June 2020 The Board approved the general levels of D&O liability insurance

Area of focus	Matters considered and decisions adopted
Financial performance	13 November 2020 The Board approved the standalone financial statements for the three and nine months ended 30 September 2020 3 September 2020 The Board preliminarily approved the Company's annual accounting (financial) statements for the 2019 reporting year 18 August 2020 The Board approved the consolidated interim condensed financial information for the six months ended 30 June 2020 and the separate interim condensed financial information for the three and six months ended 30 June 2020 15 May 2020 The Board approved the separate interim condensed financial information for the three months ended 31 March 2020 26 March 2020 The Board approved the consolidated financial statements for the year ended 31 December 2019 and the separate financial statements for the year ended 31 December 2019

Directors and officers insurance

The liability of members of the Board of Directors related to the execution of their duties at the Company is insured under a D&O liability insurance policy, which is renewed annually and represents insurance against any in-scope losses of the directors.

Board responsibilities

The matters specifically reserved for the Board under the Charter include, inter alia, the following:
- The determination of the priority areas for the Company's activities
- The approval of the Company's long-term strategy and objectives and its overall management mechanism
- The day-to-day control over implementation of the Company's long-term strategy and objectives
- The approval of consolidated annual budgets and material amendments made thereto
- Control over the Company's core business and regular evaluation of its business in the context of the Company's long-term strategy and objectives and discharge of obligations contemplated by law and the Charter
- The convening of annual and extraordinary general meetings of shareholders
- The establishment and termination of committees, commissions, councils and other structural units of the Board, approval of their personal composition and regulations governing their operations
- The approval of internal documents of the Company (or making amendments or additions thereto) on the issues of environmental protection, insurance and risk management of the Company
- The approval of the Company's dividend policy
- The approval of certain transactions with a value exceeding USD 75 million
- The approval of share incentive plans and schemes provided to employees, as well as annual Key Performance Indicators for the CEO
- The approval of the Company's auditors (for the audit of financial statements in accordance with IFRS, or other internationally recognised rules other than IFRS)
- The approval of the register holder of the Company
- The appointment of the sole executive body (the CEO) of the Company.

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

Training and professional development of Board members

Newly elected directors complete an induction training programme upon their appointment.

The key elements of the programme include, inter alia:

- Personal meetings, in person or electronically, with the CEO, the Chairman of the Board, the Corporate Secretary, management team, and/or heads of corporate business units
- Familiarisation with operations, including on-site visits to the Group's production facilities with briefings on operational and managerial issues and meetings with local management
- Provision of Board information packages, including internal reporting documents for previous periods
- Provision of internal documents and Q&As with the management team
- Mandatory training, including by external advisors, on matters relating to insider trading, regulatory disclosure and compliance with sanctions.

The Corporate Secretary runs the induction training programme for newly elected directors of the Company, and coordinates all involved parties with the assistance of the Corporate Governance Committee and the Nominations Committee.

As part of its Board training and professional development efforts, the Board also regularly conducts training sessions for Board members on various matters, often led by external advisors. In 2020, due to the unexpected COVID-19 pandemic, all planned training sessions were postponed until 2021.

Biographies of directors who served on the Board in 2020 and have resigned as at the date of this report:

Igor Lojevsky

Independent Non-Executive Director

Appointed: 27 January 2019
Resigned: 12 April 2020
Year of birth: 1957
Year of death: 2020

Dr Igor Lojevsky had extensive experience of board-level governance in large, complex organisations with international scope of operations in both an executive and non-executive capacity.

His past practical experience included chairmanship and membership positions in the Strategic, Audit and Remuneration & Nomination Committees of major banking, mining, transportation and energy companies.

He exceled in strategic guidance, support and constructive challenge to controlling shareholders, as well as CEOs and respective executive teams.

Mr Lojevsky served as Vice Chairman of Eastern Europe for Deutsche Bank's Asset & Wealth Management and Corporate Banking & Securities divisions until his retirement in August 2014.

Mr Lojevsky originally joined Deutsche Bank in 2000 as a member of the London corporate finance team, covering clients from the energy industry in the countries of the former Soviet Union. He joined Deutsche Bank from the World Bank in Washington, DC, where he was Energy Policy Implementation Advisor for Europe and Central Asia.

Igor Lojevsky earned his PhD in Finance from EDHEC Business School/EDHEC-Risk Institute. He was a Research Associate and a member of the International Advisory board of EDHEC-Risk Institute (London, Nice) and Adjunct Professor of the Higher School of Economics (Moscow).

Dr Lojevsky co-authored a monograph on management titled Top Management – Theory and Practice.

Dr Lojevsky remained a member of the Board until his unexpected death on 12 April 2020.

A strong governance structure

Rt Hon The Lord Barker of Battle PC
Executive Chairman of the Board
Appointed: 17 October 2017
Appointed as Executive Chairman of the Board: 8 February 2019

After an early career spanning both international corporate finance and the Russian energy sector, Lord Barker entered the British House of Commons in 2001 through to 2015, during which time he served as UK Minister of State for Energy & Climate Change and Prime Minister David Cameron's special envoy on Climate Change.

He was made a life Peer in 2015. In February 2019, Lord Barker took a leave of absence from the House of Lords following his appointment as Executive Chairman of the En+ Group.

Lord Barker has served on the boards of the Environmental Defense Fund Europe and The Climate Group, and also chaired the London Sustainable Development Commission for Mayor Boris Johnson 2014-2016. He is also currently non-executive chairman of EVN Group, the leading UK developer of electric vehicle infrastructure.

Lord Barker was educated at Lancing College, London University and London Business School.

Hon Christopher Bancroft Burnham
Independent Non-Executive Director, Senior Independent Director
Appointed: 27 January 2019
Appointed as Senior Independent Director: 8 February 2019

Christopher has a distinguished career in government, diplomacy, banking, and private equity. He is a globally recognised expert in the implementation of accountability and transparency, having served as Under Secretary General for Management of the UN, Under Secretary of State for Management (acting), Assistant Secretary of State for Resource Management and CFO of the US Department of State.

Christopher serves as Chairman and CEO of Cambridge Global Capital, which he co-founded. He is the former Vice Chairman and Managing Director of Deutsche Asset Management.

He studied at Georgetown's National Security Studies Program, graduated from Washington and Lee University, and Harvard University, where he earned an MPA in 1990.

Carl D. Hughes
Independent Non-Executive Director
Appointed: 27 January 2019

Throughout his career, Carl has specialised in the oil and gas, mining and utilities sectors. He joined Arthur Andersen in 1983 and became a partner in 1993. He was appointed the head of the UK energy and resources industry practice of Andersen in 1999 and subsequently of Deloitte in 2002. When Carl retired from the partnership of Deloitte in 2015, he was a vice-chairman, senior audit partner and leader of the firm's energy and resources business globally.

Carl holds a number of corporate and charitable appointments. He is a non-executive director and chairman of the audit committee of EnQuest Plc; a member of the finance and audit committee of the Energy Institute; a board member of the Audit Committee Chairs' Independent Forum; a member of the General Synod of the Church of England; and deputy chairman of the finance committee of The Archbishops' Council.

He holds an MA in Philosophy, Politics and Economics from the University of Oxford, is a Fellow of the Institute of Chartered Accountants in England and Wales, and a Fellow of the Energy Institute.

Joan MacNaughton CB Hon FEI
Independent Non-Executive Director
Appointed: 27 January 2019

Joan is currently Chair of The Climate Group and of the Advisory Board of the New Energy Coalition of Europe. She sits on the Strategic Advisory Boards of ENGIE UK, the Grantham Institute at Imperial College and LSE, London and of the Joint Institute of Strategic Energy Analysis in the USA.

Her former positions include Chair of the International Energy Agency, Executive Chair of the "World Energy Trilemma" of the World Energy Council and membership of many academic and corporate Boards.

Joan held a wide range of positions in the UK Government until 2007. As Director General of Energy, she played a key role in shaping UK energy policy, including leading the Clean Energy Action Plan of the 2005 Gleneagles G8 Summit.

Full biographies can be found on the Company's website: www.enplusgroup.com/en/company/corporate-governance/board-of-directors/

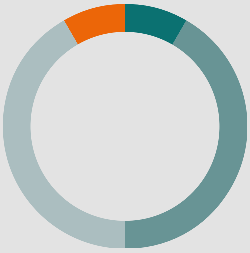
Gender diversity

- 8 Male
- 4 Female

Board independence

- 1 Executive Chairman
- 7 Independent directors
- 4 Non-executive directors

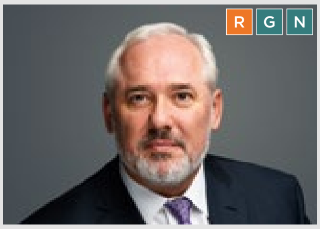
Age



- 1 35–45
- 5 46–55
- 5 56–65
- 1 65+

Key

- Committee chair
- A Audit and Risk Committee
- R Remuneration Committee
- G Corporate Governance Committee
- H Health, Safety and Environment Committee
- C Compliance Committee
- N Nominations Committee



Nicholas Jordan

Independent Non-Executive Director

Appointed: 27 January 2019

Nicholas has more than 30 years' experience in senior positions in leading global financial institutions.

Nicholas serves as a Non-Executive Director at ITI Capital. His previous roles include Chairman of the Supervisory Board at 4finance Group S.A, CEO at Finstar Financial Group, Co-CEO of Goldman Russia and CEO of Russia & CIS at UBS Group AG.

Nicholas worked for more than 10 years with Deutsche Bank, becoming Vice Chairman and Head of the Russian Office where he was responsible for overseeing the securities, trading and asset management departments.

He has a BA in Political Science from Boston University.

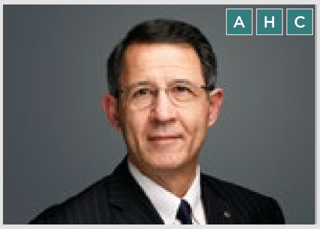
Andrey Sharonov

Independent Non-Executive Director

Appointed: 27 January 2019

Andrey is a President of the SKOLKOVO Business School, Chairman of the Board of NefteTransService, and the Skolkovo Foundation, and a member of several other boards.

He was a People's Deputy of the USSR, Chairman of the State Committee for Youth Affairs, served in the Ministry of Economic Development and Trade, was managing director and chairman of the Board of Troika Dialog, Deputy Mayor of Moscow for Economic Policy, Chairman of the Regional Energy Commission, and headed the Executive Committees of Moscow Urban and Open Innovations Forums. He graduated from Ufa State Aviation Technical University and the Russian Academy of Public Administration, and holds a PhD in sociological science.



Alexander Chmel

Independent Non-Executive Director

Appointed: 27 January 2019

Alexander is a Senior Advisor to the Board Practice of Korn Ferry in Russia and the CIS. He has extensive experience working as an independent director, chairman, and member of the audit committees of Russian public companies, including ENEL RUSSIA, ChelPipe, and Vysochaishy (GV Gold).

He spent 22 years in senior management roles in PricewaterhouseCoopers, and worked as an Adjunct Professor and a Director of Corporate Programmes at the Moscow School of Management, SKOLKOVO. In 2016, 2019 and 2020 Alexander was ranked as one of the Top 50 Independent Directors in Russia in the national "Director of the Year" rating. He holds a Diploma in Company Direction from the Institute of Directors (UK).

Andrey Yanovsky

Independent Non-Executive Director

Appointed: 25 September 2020

Andrey has been CEO of the Moscow-based hospital operator European Medical Center and a member of its Board since 2014.

During his career, Andrey was CEO of the Coca-Cola Company franchise in Russia, CEO of Nidan Juices (2003-2009), vice-president for organisational development and personnel at TNK-BP (2009-2013), and Director for strategy and organisational development at NefteTransService (2013-2014).

Andrey graduated from the Riga High Military School, Kingston University, Strategic Management, MBA.

Ekaterina Tomilina

Non-Executive Director

Appointed: 8 February 2019

Ekaterina is currently the Director of Corporate Finance at Basic Element.

She joined RUSAL in 2000 as the Head of its Structured Finance and Capital Markets Department. In 2012, Ekaterina was appointed as Director of Corporate Finance at RM Rail, which was a part of Russian Machines, an industrial and engineering company controlled by Basic Element.

Ekaterina held various finance positions at the investment company Alfa Group and at Tyumen Oil Company from 1997 until 2000, where she oversaw finance, trade and international matters.

Ekaterina is a graduate of the Moscow State University of International Relations (MGIMO), with a degree in International Economics.

Elena Nesvetaeva

Non-Executive Director

Appointed: 8 February 2019

Elena has extensive experience working on investments and in the banking sector. She currently heads the Investment Department at Basic Element, which she joined in 2009. At Basic Element she manages the company's investment projects and portfolio, and is responsible for driving the group's investment strategy and asset valuation, acquisition projects and M&A transactions.

She has worked in the banking sector and for a timber-processing holding.

Elena graduated with distinction from the Faculty of Economics of the Syktyvkar State University, the Russian Academy of National Economy under the Government of the Russian Federation, and the Institute of Business and Business Administration with a degree in Management.

Vadim Geraskin

Non-Executive Director

Appointed: 8 February 2019

Vadim has significant experience in government relations at both a national and regional level.

Since September 2012, he has been the deputy CEO for Government Relations at Basic Element and heavily involved in pushing the company's socioeconomic development programmes in the regions where it operates.

Vadim headed RUSAL's Natural Monopolies Administration for eight years before joining Basic Element, and previously headed RUSAL's transport and logistics administration and Transport Department. From 1997 to 2000 he served as CEO of Zarubezhcontract, a company operating on the non-ferrous metals market. From 1993 to 1997 he worked for Aluminproduct Company.

Vadim graduated from Lomonosov Moscow State University with a degree in Physics.

Anastasia Gorbatova

Non-Executive Director

Appointed: 29 May 2019

Anastasia is the head of M&A and International Projects at Basic Element which she joined in 2013.

Anastasia has over 20 years of professional experience with top tier law firms and Russian key blue-chip companies advising on multibillion dollar cross-border transactions on M&As, EPC, capital markets and corporate finance.

Anastasia graduated from Moscow State University of International Relations (MGIMO) with a degree in Law (cum laude).

Committees of the Board

Overview

As at the date of this Report the Board has established six committees to assist it in exercising its functions:
- The Audit and Risk Committee (the "A&RC")
- The Corporate Governance Committee (the "CGC")
- The Nominations Committee (the "NC")
- The Remuneration Committee (the "RemCom")
- The Health, Safety and Environment Committee (the "HSE Committee")
- The Compliance Committee (the "CC")

All of the Committees are advisory bodies, whose primary function is to make recommendations to the Board on the matters falling within their remit.

The composition of the Company's existing Board committees was amended on 21 May 2020 and 28 September 2020. They were further amended on 1 December 2020 simultaneously with the reorganisation of the Corporate Governance and Nominations Committee which was divided into the Corporate Governance Committee and the Nominations Committee. Details on each of the Committees, including the reorganised Corporate Governance and Nominations Committee, are set out below.

Committee attendance and number of meetings in 2020[1]

	A&RC	RemCom	CGNC	HSE Committee	CC	CGC	NC
Executive Chairman of the Board							
Lord Barker	—	—	—	7/7	5/5	—	—
Non-executive directors							
Vadim Geraskin	—	—	—	6/7	—	—	—
Anastasia Gorbatova	—	—	—	—	1/1	0/0	—
Elena Nesvetaeva	—	0/0	—	—	—	—	—
Independent non-executive directors							
Christopher Burnham	11/11	3/3	—	—	5/5		
Alexander Chmel	11/11	3/3	—	7/7	2/2	—	—
Carl Hughes	11/11	1/1[2]	4/4	—	5/5	0/0	0/0
Nicholas Jordan	—	3/3	4/4	—	—	0/0	0/0
Igor Lojevsky (until 12 April 2020)	—	2/2	—	—	1/1	—	—
Joan MacNaughton	—	—	4/4	7/7	3/3[3]	0/0	0/0
Andrey Sharonov	11/11	—	4/4	—	—	0/0	0/0
Andrey Yanovsky	3/3	0/0	—	—	—	—	—
Total number of meetings	**11**	**3**	**4**	**7**	**5**	**0**	**0**

1 The number of meetings attended/maximum number of meetings the directors could have attended.
2 Until 1 December 2020.
3 Until 1 December 2020.

Environmental Advisory Board[1]

In order to enhance its commitment to sustainability, on 25 September 2019 the Company announced the launch of its new Environmental Advisory Board (the "EAB"). The EAB is chaired by Adnan Z. Amin, who was the first Director-General of the International Renewable Energy Agency, an intergovernmental organisation charged with driving the transition towards the use of renewable energy on a global scale.

The EAB function is to advise the Board on delivering its environmental agenda and identifying emerging environmental issues.

The members of the EAB include Joan MacNaughton, Chair of The Climate Group and of the Advisory Board of the New Energy Coalition of Europe, as well as external advisors with specific expertise in both environmental and wider sustainability issues.

Share Dealing Code

Upon admission to the Main Market of the London Stock Exchange in November 2017, the Company adopted a code on dealing in securities in relation to the GDRs, the ordinary shares, and any other securities of the Company, which is based on the requirements of EU Market Abuse Regulation (EU) 596/2014. This code applies to the directors and other relevant employees of the Group (to the extent it does not contradict the Charter and the applicable Russian law provisions).

Shareholdings of directors

As at the date of this Report Mr Carl Hughes holds 5,000 GDRs in the Company, which he acquired on 3 April 2020. Aside from this, throughout 2020, none of the directors directly or indirectly held any shares in the Company and none of the directors concluded any transactions with the Company shares.

Responsibility statement

The members of the Board confirm that, to the best of their knowledge:

The consolidated financial statements, prepared in accordance with IFRS as issued by the International Accounting Standards Board and as adopted by the European Union, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and its subsidiaries, taken as a whole.

This Annual Report includes a fair review of the development and performance of the business and the position of the Company and its subsidiaries, taken as a whole, together with a description of the principal risks and uncertainties that they face.

Sole executive body – CEO

Under the Charter, the CEO acts as the sole executive body of the Company.

The CEO is responsible for directing the Company's day-to-day operations and holds all powers falling outside the exclusive competence of the GSM and the Board, including, *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)
- Passing resolutions to establish branches and representative offices of the Company
- Issuing powers of attorney, authorising their holders to represent the Company.

The CEO is appointed by the Board for a period of five years unless another term of office is established by the Board.

Currently, the position of CEO is held by Vladimir Kiriukhin.

1 On 28 April 2020, the Board decided to temporarily suspend the work of the EAB due to COVID-19 pandemic. The Group remains committed to its climate and broader environmental agenda.

Audit and Risk Committee

Dear fellow shareholder,
The work of the Audit & Risk Committee increased substantially in 2020 due to the impact of the COVID-19 pandemic on the Group and the decision to tender our external audit services with a view to appointing new external auditors. However, these additional matters did not detract from the Committee's focus on ensuring that our systems of risk management and internal control remained effective throughout the year and continuing attention to the Group's financial position and performance during this challenging period.

This report explains how the Committee has addressed the Group's financial and audit risks in the context of the macroeconomic environment and day-to-day operations, and how we have taken these into account in our oversight of risks, controls, financial performance and debt management.

Our work in 2020 focused on the following areas:

- Reviewing and challenging management's plans to address the additional risks and financial consequences of the COVID-19 pandemic, including reviewing and recommending to the Board a revised 2020 Business Plan reflecting the changed operating environment
- Overseeing the execution of our internal audit and risk management plans, with particular focus being given to cyber security, financial control effectiveness, project management and business planning
- Reviewing and challenging key business performance metrics and accounting judgements, particularly as regards the half-year and year-end financial statements and disclosures and
- Initiating and overseeing an external audit tender process giving rise to a final recommendation for the appointment of Ernst & Young LLC ("EY") as the Group's external auditor with effect from 2021.

The external audit tender process was a significant additional activity of the Committee in 2020, undertaken jointly with the audit committee of UC RUSAL and in compliance with the Group's tendering requirements. Based upon the Committee's recommendation to the Board, the Board has approved EY as the Group's external auditor for the audit of IFRS financial statements and, subject to approval by shareholders, EY will also be appointed as the Group's external auditor for the audit of the accounting (financial) statements prepared under RAS, for the year ending 31 December 2021. Therefore, the year ended 31 December 2020 is the final year for the exercise of audit functions by JSC KPMG ("KPMG").

The Audit & Risk Committee's core responsibilities are detailed below in this section of the Annual Report and can also be found on the Company's website (www.enplusgroup.com; under Corporate Governance). These responsibilities include, *inter alia*, to:

- Review the content and integrity of the annual and interim financial statements and advise the Board on whether they are fair and balanced, and provide the necessary information for shareholders to assess the Company's performance, business model and strategy
- Review the appropriateness of the significant accounting policies, judgements and estimates
- Monitor and review the effectiveness of the systems of risk management and internal control
- Monitor and review the effectiveness of the Group's IT environment, including cyber security, ensuring that related controls are adequate, reliable and effective
- Monitor and review the effectiveness of the Internal Audit Directorate (the "IAD")
- Oversee the relationship with the external auditor, including fees for audit and non-audit services; and
- Identify any matters in respect of which it considers that action or improvement is needed and make recommendations to the Board as to the steps to be taken.

Carl Hughes
Chair of the Audit & Risk Committee

Composition

Pursuant to the Regulations on the Audit and Risk Committee, approved by the Board on 13 December 2019, the A&RC consists of members, all of whom have been determined by the Board to be independent directors, recognised as such pursuant to the Listing Rules of the Moscow Exchange. The Committee meets at least once per quarter of the Company's financial year.

The current composition of the A&RC is as follows:
- Carl Hughes, as chairman
- Christopher Burnham
- Alexander Chmel
- Andrey Sharonov
- Andrey Yanovsky

The A&RC is responsible, inter alia, for the following matters:
- Overseeing the integrity, completeness and accuracy of the financial statements of the Company and the consolidated financial statements of the Group
- Reviewing material aspects of the Company's and its subsidiaries' accounting policies to ensure that they are appropriate and consistently applied
- Reviewing the Company's annual report (including the annual consolidated financial statements) and making recommendations to the Board with respect to its contents
- Reviewing material matters and judgements (including significant financial reporting estimates and judgements) regarding the Company and the consolidated financial statements
- Monitoring the adequacy, reliability and effectiveness of operation of the Group's systems of risk management and internal control
- Reviewing and assessing the implementation of risk management and internal control policies to ensure that the systems of risk management and internal control are adequate and operating effectively
- Monitoring and assessing any important new systems (including IT systems) and ensuring that related controls are adequate, reliable and effective
- Ensuring that the internal audit function is independent and unbiased
- Assessing the effectiveness of the internal audit function
- Controlling the operating effectiveness of the system for reporting potential cases of fraud by the Group's employees and third parties, and other violations within the Group.

The A&RC is also responsible for reviewing the effectiveness of the external audit process and of the external auditor, in conjunction with any other relevant Board committees.

Audit and Risk Committee continued

Role and composition of the Audit & Risk Committee

The Board has responsibility for the efficiency and effectiveness of the financial and economic activities of the Group and is responsible for maintaining and reviewing the effectiveness of the Company's systems of internal control and risk management.

The Board has established the Audit and Risk Committee to assist the Board in its review of the financial statements of the Group; ensure that systems of internal control and risk management are in place and operating effectively; oversee the internal and external audit processes and perform such other activities as are requested by the Board.

The Committee exclusively comprises independent non-executive directors as set out above in this section of the Annual Report.

Meetings of the Committee are normally attended by the Chief Financial Officer, the Head of the IAD, and the lead external audit partner. The Chief Executive Officer also attends certain meetings as well as other management representatives according to agenda.

The Chairman of the Committee regularly meets with the external audit partner to discuss matters relevant to the Company.

The Committee monitors its own effectiveness and that of the IAD and the external auditor at least annually. Through the annual review of the Regulations of the Audit & Risk Committee, and regular meetings with the IAD, key management personnel and the external auditor, the Committee has concluded that its core duties in relation to financial reporting, internal controls and risk management systems, whistleblowing and fraud, internal audit, external audit and reporting responsibilities are being performed well.

Committee meetings during 2020

In line with the Committee's annual schedule, the Committee met on 5 occasions during 2020. A summary of the main items discussed is set out below:

Financial reporting

- Key risks, judgements and uncertainties impacting the half-year and year-end financial statements, including reports from both management and the external auditor
- Appropriateness of the going concern assumption
- Review of half-year or full-year press release and results statements

Internal audit, control and risk management

- Internal audit progress against the 2020 plan, including key findings arising since the Committee's last meeting
- Internal audit plan and budget for 2021
- Cyber security update
- Review of process and controls relating to the development of the Group's internal control framework

External audit

- Review of KPMG's plan for the 2020 audit, including key risks and planned approach
- Review of external audit fees subject to the audit plan
- Level of non-audit services provided by the external auditor
- Evaluation of the quality, independence and objectivity of KPMG
- Tender of external auditor services and recommending the appointment of EY

Performance and effectiveness reviews

- The Committee and its governing Regulations
- IAD
- External audit firm

Financial reporting and significant financial statement reporting issues

One of the Committee's primary roles in relation to financial reporting is to assess, amongst other things:

- The appropriateness of the accounting policies selected and disclosures made, including whether they comply with IFRS; and
- Those judgements, estimates and key assumptions that could have a significant impact on the Group's financial performance and position, or on the remuneration of executive and senior management.

The Committee considers these items together with both management and our external auditor, who each provide reports to the Committee in respect of these areas. The main areas considered during 2020 included:

- Implications of the COVID-19 pandemic for the Group's operations and financial performance
- Accounting for the Group's interest in Norilsk Nickel
- Property, plant and equipment, including valuation of Group's hydro assets, impairment testing and related assumptions

- Assessment of the appropriateness of the going concern assumption, including liquidity and loan covenants compliance
- Separate judgements relating to the Company's standalone financial statements
- Judgements relating to provisions for taxation, legal, environmental and other matters, including review of strategic options.

A key requirement of our Annual Report is for the report to be fair and balanced. The Committee and the Board are satisfied that the Annual Report meets this requirement, with appropriate weight being given to both positive and negative developments in the year, as a result of a robust preparatory process, including:

- Clear guidance and instructions provided to all contributors
- Revisions to regulatory requirements communicated and monitored
- A thorough process of review, evaluation and verification of the content of the Annual Report and Accounts to ensure accuracy and consistency
- External advisors, including the external auditor, providing advice to management and the Committee on best practice with regard to the creation of the Annual Report and Accounts; and
- A Committee meeting was held in April 2021 to review and approve the draft 2020 Annual Report in advance of the sign-off by the Board.

External audit

One of the A&RC's principal responsibilities is to monitor the performance, objectivity and independence of the Group's external auditor.

KPMG has been the external auditor to the Company since 2009. Until June 2020, the lead audit partner for the Group was Yerkozha Akylbek; he was succeeded by Andrei Ryazantsev.

As part of the annual external audit review, the A&RC considers the fee proposals and, in the context of the relevant professional and regulatory requirements, the effectiveness of the external audit process in determining whether to recommend the reappointment of the external auditor. The effectiveness of KPMG was formally evaluated by the Committee during the year and it was concluded that the Committee continued to be satisfied with KPMG's performance and the firm's objectivity and independence.

Given the longevity of KPMG's tenure as the Group's external auditor, the Committee initiated and oversaw a formal tender of the Group's external audit services during the year, jointly with the audit committee of RUSAL, in compliance with the Group's tendering requirements. As a consequence of this process the Committee recommended to the Board that EY be appointed as the Group's external auditor with effect from 2021. The lead group audit partner from EY will be Mikhail Khachaturian. The Board has appointed EY as the Company's auditor for the audit of the IFRS financial statements. The appointment of EY with respect to the audit of accounting (financial) statements prepared under RAS is subject to shareholder approval at the Company's annual GSM in 2021.

A transition plan and process has been agreed by KPMG and EY with management and the A&RC to ensure the smooth transition of external audit responsibilities during 2021.

The Committee believes that the external auditor's independence and objectivity can potentially be affected by the level of non-audit services provided to the Company. However, the Committee acknowledges that certain work of a non-audit nature is best undertaken by the external auditor.

For the year ended 31 December 2020, the total fees for audit and non-audit services provided by the Group's external auditor, KPMG, are set out below:

	USD mn	%
Total audit services	6.7	85%
Total non-audit services	1.2	15%
Total fees paid to the audit firm[1]	**7.9**	**100%**

1 Total audit fees include RUSAL's fees disclosed in its Annual report.

Corporate Governance and Nominations Committee[1]

Dear shareholders,
En+ Group is committed to the highest standards of corporate governance, recognising that transparency and accountability are essential for us to successfully create value for all our stakeholders.

We recognise the significant advantage attained through independent oversight of business operations and ensure the composition of the Board reflects the need for constructive engagement and evaluation across a diverse range of issues. Seven out of the twelve directors on our Board are independent non-executives and all of our Board committees are chaired by these independent non-executive directors.

In 2020, the Company approved a number of corporate policies and undertook a comprehensive restructuring to further enhance our governance structure. For example, in December, we reorganised our Corporate Governance and Nominations Committee into separate committees focused on the two different functions.

The Company is committed to meeting internationally recognised standards for corporate governance. However, we want to go further. Our aspiration is to set a benchmark for Russian companies listed on the London Stock Exchange. With this goal in mind, we constantly strive to identify global best practice for corporate governance.

We are proud of the progress made over the past year. The business is committed to maintaining this continuous improvement and will ensure high standards of corporate governance remain a central pillar of our strategy for attracting new investment and enhancing shareholder value.

Andrey Sharonov
Chair of the Corporate Governance Committee and the Nominations Committee

Composition

Corporate Governance Committee

Pursuant to the Regulations on the Corporate Governance Committee approved by the Board on 1 December 2020, the majority of Corporate Governance Committee members are represented by independent directors recognised as such pursuant to the Listing Rules of the Moscow Exchange. The CGC meets at least three times a year.

The current composition of the CGC is as follows:
- Andrey Sharonov, as chairman
- Anastasia Gorbatova
- Carl Hughes
- Nicholas Jordan
- Joan MacNaughton

Nominations Committee

Pursuant to the Regulations on the Nominations Committee approved by the Board on 1 December 2020, the NC members are represented by independent directors recognised as such pursuant to the Listing Rules of the Moscow Exchange. The NC meets at least three times a year.

The current composition of the NC is as follows:
- Andrey Sharonov, as chairman
- Carl Hughes
- Nicholas Jordan
- Joan MacNaughton

1 On 1 December 2020 the CGNC was divided into the Corporate Governance Committee and the Nominations Committee.

Corporate Governance and Nominations Committee

Pursuant to the Regulations on the Corporate Governance and Nominations Committee approved by the Board on 13 December 2019, the CGNC consisted of four members, all being independent directors recognised as such pursuant to the Listing Rules of the Moscow Exchange. The CGNC met at least three times a year.

The CGNC's primary role was to oversee the Company's corporate governance matters and determine the priorities of the Group in the area of corporate governance.

The primary responsibilities of the CGNC were, inter alia, the following:

- Conducting a detailed formalised self-evaluation and external performance evaluation of the Board and its members and the Board committees on an annual basis and determining priority areas to improve the Board's capacity
- Organising external performance evaluation of the Board and its members and of the Board committees
- Interacting with shareholders (including minority shareholders) to develop recommendations to shareholders regarding voting on the Board elections
- Analysing the corporate governance system and corporate values of the Company for compliance with the goals and objectives of the Company, and the scale of its business and risks assumed
- Planning appointments so as to ensure continuity of activities of the CEO, and developing recommendations to the Board regarding nominees to the positions of Corporate Secretary (head of the unit functioning as the Corporate Secretary) and head of the Internal Audit Service, and the CEO of the Company
- Assessing the independence of the Board members
- Taking part in the ongoing professional advanced training of the Board members
- Analysing the current and expected needs of the Company in terms of the professional qualifications of the Company's CEO, as dictated by the interests of the Company's competitiveness and development of the Company, and succession planning for such persons.

In 2020, the CGNC held 4 meetings. The majority of CGNC meetings have been to consider selection of candidates as Board members of the Company or its subsidiaries and recommendations to the Board on approval of D&O policy.

Corporate Governance Committee

The CGC was established following the reorganisation of the Corporate Governance and Nominations Committee of the Board on 1 December 2020.

The CGC's primary role is to oversee the Company's and the Group's corporate governance matters.

The responsibilities of the CGC are the following:

- Determining the priorities of the Group in the area of corporate governance
- Reviewing the corporate governance system and corporate values of the Company for compliance with the goals and objectives of the Company, and the scale of its business and risks assumed.

In 2020, the CGC did not hold any meetings due to the fact that it was only created in December 2020.

Nominations Committee

The NC was established following the reorganisation of the Corporate Governance and Nominations Committee on 1 December 2020.

The NC's primary role is to develop recommendations to the Board on Board performance evaluation and planning internal appointments.

The primary responsibilities of the NC are, inter alia, the following:

- Conducting a detailed formalised self-evaluation and external performance evaluation of the Board, its members, and the Board committees on an annual basis, and determining priority areas to improve the Board's capacity
- Organising external performance evaluation of the Board and its members and of the Board committees
- Interacting with shareholders (including minority shareholders) to develop recommendations to shareholders regarding voting on the Board elections
- Planning appointments so as to ensure the continuity of activities of the CEO, developing recommendations to the Board regarding nominations for the position of the Corporate Secretary (head of the unit functioning as the Corporate Secretary), and head of the Internal Audit Service, and the CEO of the Company
- Assessing the independence of the Board members
- Taking part in the ongoing advanced professional training of the Board members
- Considering the current and expected needs of the Company in terms of the professional qualifications of the Company's CEO, in the interests of the Company's competitiveness and development, and succession planning for such persons.

In 2020, the NC did not hold any meetings due to the fact that it was only created in December 2020.

Remuneration Committee

Dear shareholders,
In a very difficult year, which began with a once in a life time global COVID-19 pandemic, resulting in excruciating social and economic consequences, the En+ management team excelled and worked tirelessly on two fronts, safeguarding the safety and health of our worldwide employees while also ensuring the Company's finances remained strong. The Board wholeheartedly thanks them for their tremendous effort.

Despite all the challenges, the Company continued to deliver the robust operational performance, resilience of its business model and the viability of its strategy. In 2020, the Remuneration Committee continued its work with the aim to ensure that the remuneration policy is directly linked to the achievement of our strategic goals and operational excellence.

The RemCom performed preliminary reviews of matters relating to the formation of effective and transparent remuneration practices. Achievement of the 2019 KPIs by the CEO was discussed and relevant recommendations to the Board were made. We also reviewed and recommended to the Board the 2020 KPIs for the CEO.

We continue to review our remuneration policy and approach to assure a balance between the achievement of short-term results of operating activities and the long-term objectives of the Company.

Nicholas Jordan
Chair of the Remuneration Committee

Composition

The RemCom consists of a majority of independent directors. The RemCom meets at least three times during the Company's financial year. The current composition of the RemCom is as follows:
- Nicholas Jordan, as chairman
- Christopher Burnham
- Elena Nesvetaeva
- Andrey Yanovsky

The RemCom is responsible, inter alia, for the following matters:
- Developing and revising from time to time the Company's remuneration policy approaches applicable to the Board members, the CEO, the Corporate Secretary, the head of the IAD, and developing parameters of short-term and long-term incentive programmes for the CEO
- Supervising the introduction and implementation of remuneration policy and various incentive programmes in the Company, and revising the policy and programmes as and when necessary
- Performing preliminary year-end performance evaluation of the CEO in the context of the established remuneration criteria, and performing a preliminary assessment of achievement by the CEO of the targets under the long-term incentive programme
- Developing recommendations to the Board on determining the amount of remuneration and principles of bonus payment for the Company's Corporate Secretary, performing a preliminary year-end performance evaluation of the Company's Corporate Secretary, and issuing proposals on bonus payments to the Company's Corporate Secretary
- Supervising the disclosure of remuneration policies and procedures, and of the ownership of the Company shares by Board members and the person acting as the CEO in the annual report and on the Company's website.

In 2020, the RemCom held three meetings and mainly considered KPIs of the CEO.

Remuneration Disclosure Report

Objectives of the remuneration policy

Our remuneration policy is based on the following principles:

- Attract, remunerate and retain qualified specialists who will, in their turn, enable the Company to achieve its strategic objectives
- Provide for a balance between the achievement of short-term operating results and the long-term objectives of the Company
- Create value for our shareholders, given the risks that may impact the variable component of remuneration.

Remuneration structure

The Group's remuneration structure is designed to ensure a balance between engaging and retaining highly qualified managers and the interests of our shareholders. The established remuneration system comprises fixed and variable components. The fixed component consists of base salary, which is set in line with the market to ensure retention of key executives, and reflects the level of competence, experience, responsibility and personal achievements of the respective manager. The variable component consists of annual bonuses and may also include one-off and target bonus payments and other payments, that are determined based on the performance against pre-set key performance indicators (KPIs).

Remuneration of executive management[1]

In 2020, the remuneration of the key management personnel, including the CEO, amounted to USD 12 million. This remuneration includes base salary in the amount of USD 6 million and bonuses in the amount of USD 6 million.

Remuneration of Board members

In 2019, the Board considered and approved the general levels of compensation for Board members.

All members of the Board, except for the Executive Chairman, are entitled to receive remuneration of EUR 215 thousand (c. USD 264 thousand)[2] gross per annum, paid monthly.

All members of the Board, except for the Executive Chairman, are entitled to receive additional remuneration for serving on a committee or other structural unit of the Board[3]:

- EUR 26 thousand (c. USD 32 thousand)[2] gross per annum for chairing a committee or other structural unit of the Board
- EUR 18 thousand (c. USD 22 thousand)[2] gross per annum for participation in each committee or other structural unit of the Board as a member

The aggregate amount of remuneration to Board members in 2020 amounted to USD 7 million, excluding social insurance[4].

In addition, in 2020, the Company paid a total of USD 0.3 million as reimbursement of expenses incurred by Board members in connection with the performance of their functions.

Total annual remuneration of the members of the Board of Directors in 2020[1]

	Year ended 31 December 2020		
	Directors' fee USD million (% of total compensation)	Discretionary bonuses USD million (% of total compensation)	Total USD million
Executive Chairman	**2,0**	**2,0**	**4,0**
	50%	50%	
Independent Non-executive Directors	**2,1**	—	**2,1**
	100%		
Non-executive Directors	**0,9**	—	**0,9**
	100%		
Total	**5,0**	**2,0**	**7,0**
	71%	29%	

1 Accrual basis.
2 Calculated based on a EUR/USD exchange rate of 1.23 as at 31 December 2020.
3 The CGC members (including the chairman) do not receive compensation for membership (chairmanship) in the CGC, if they at the same time participate in the NC of the Board and receive relevant compensation for participation in (chairing) the NC of the Board.
4 Mandatory payments (pension provision, mandatory health insurance, etc.) as required by the legislation of Russian Federation.

Remuneration Committee continued

Structure of remuneration:

Element of remuneration	Approach	Indices and dependencies	Key changes during the year
Base salary Base salary is stipulated by the agreements concluded with each member of the Group's management team and is aimed at attracting and retaining high calibre professionals	– Salary is set to ensure competitiveness with other comparable Russian and foreign industry peers – Fixed remuneration reflects the level of competence, responsibility and personal achievements of the respective manager, and his/her professional experience	Not applicable	No changes made during the year
Benefits Provided to support successful fulfilment of responsibilities by compensation of additional expenses associated with these responsibilities	– The company ensures a competitive total compensation portfolio for its employees, providing them with meal expenses, certain other reimbursements and medical insurance	Not applicable	No changes made during the year
Pension Retirement funding provision	– We do not fund any pension contributions or retirement benefits, except for mandatory contributions to the pension fund of the Russian Federation, as required by Russian law, which permits retiring employees to receive a defined monthly pension for life from the statutory pension fund	Not applicable	No changes made during the year
Annual bonus Ensures focus on and alignment with strategic goals of the Group	– Bonus payments for achieving personal KPIs – KPIs for the CEO are developed by the Remuneration Committee and approved by the Board – KPIs are set at the beginning of each financial (calendar) year – KPIs are regularly reviewed and updated to ensure that they align with the Group's goals	Examples: – **Financial performance** – Adjusted EBITDA; Free Cash Flow – **HSE & sustainability** – Lost Time Injury Frequency Rate (LTIFR); ensuring the absence of environmental incidents, accidents or violations – **Strategy** – Achievement of strategic goals and successful realisation of development projects – **Other objectives** – In accordance with the manager's area of responsibility	No changes made during the year
Board of Directors members' fee (excluding Chairman of the Board of Directors) For participation in/chairing board committees in addition to payments as Board members	– The objective in setting the fees paid to Board of Directors members (excluding Chairman of the Board) is to be competitive with other comparable, listed peer companies – Members of the Board receive a fixed fee for participation in/chairing each Board committee	Not applicable	No changes made during the year
Additional compensation and benefits Optional bonus payments for achievements beyond the scope of the KPIs for the relevant year	Paid for achievements that are important for the Company, but which are outside the main KPIs	Task specific	No changes made during the year
Remuneration for other risk-taking employees To attract and retain high calibre professionals	– Top managers of En+ Group subsidiaries are considered as risk-taking employees – Application of the Group's executive remuneration policy	– Aligned with the Group's executive remuneration structure	No changes made during the year

Compliance Committee

Dear shareholders,
Corporate governance is foundational to business success. With more than thirty years' experience in the area, and as Chairman of the Compliance Committee, this is something I take extremely seriously. I am very proud of the progress En+ has made over the last two years in corporate governance. In all areas the Company is led by a set of fundamental principles: we are committed to transparency, legal compliance and to clear and open decision-making. Furthermore, we are focused on value creation for the benefit of all shareholders and stakeholders and ensure everything we do reflects our responsibility to protect the environment and safeguard the health and wellbeing of our employees.

In 2020, we enhanced our high standards further through new corporate policies focused on, among other things, our code of ethics, conflicts of interest, anti-bribery and anti-corruption.

An important part of the Board of Directors' remit is continued compliance with the terms of sanctions removal agreed with OFAC. OFAC described the measures undertaken by the Company as delivering "unprecedented transparency"—a standard to which we remain fully committed. We are in regular dialogue with OFAC and uphold a continuous process of regular extensive audits and monthly certification.

Adherence to the terms of sanctions removal is just part of our comprehensive compliance regimen. As is expected for a group of our size, complexity and international presence, this regimen covers every aspect of our business. It is supported through an independent compliance function which reports directly to the Board and the Compliance Committee.

En+ is committed to setting the standard of global governance, as we continuously seek to attract investment, strengthen our competitive position and enhance shareholder value.

Christopher Burnham
Chair of the Compliance Committee

Composition

The CC was established following the removal of the Company from OFAC's SDN list. The CC holds meetings at least once per quarter of the Company's financial year.

The current composition of the CC is as follows:
- Christopher Burnham, as chairman
- Lord Barker
- Anastasia Gorbatova
- Carl Hughes

The primary responsibilities of the CC are, inter alia, the following:
- 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 in the Group
- Conducting due diligence in the event of any reasonable doubt regarding observance of compliance requirements and the provisions of compliance documents.

The CC reviews its own performance and reassesses the adequacy of procedures and guidelines in respect of regulatory compliance.

In 2020, the CC held five meetings and considered regular compliance reports and goals for 2021.

Health, Safety and Environment Committee

Dear shareholders,
The HSE Committee had a particularly busy year in 2020. As well as reinforcing management efforts to strengthen health and safety performance, the HSE Committee reviewed environmental risks at its facilities in the wake of the diesel spill at Norilsk Nickel, given that warming temperatures appear to have been a factor. The Committee were satisfied that all risks were being closely monitored and necessary actions were in place to address them. The Committee also oversaw the evolution of a unified environmental strategy for the Group, which is fundamental to our success as a business and to our leading role in delivering a sustainable future.

We deeply regret that there were four fatal accidents involving En+ Group employees during the year. We have comprehensively reviewed each accident to determine critical factors and root causes, and to ensure that all appropriate actions are taken to prevent similar incidents occurring again.

While our lost time injury frequency rate decreased for the Metals segment, it increased overall in 2020 owing to an accident involving a bus carrying our employees in Ust-Ilimsk. Fortunately, all those involved are safe. Preventative measures have been implemented.

We have clear HSE policies and management systems at all facilities, with results and performance indicators discussed at monthly top management meetings and training regularly reviewed to ensure employees are fully equipped to operate safely. The HSE Committee keeps a close watch on performance and supports management efforts to embed a strong health and safety culture throughout our operations.

This year we have strengthened our position as an environmental leader and have continued to drive progress towards greater emissions transparency for aluminium.

As a Group, we were among the first aluminium producers to commit to a 1.5°C pathway by 2050. In January 2021, we announced the aluminium industry's most ambitious greenhouse gas emissions reduction targets: a 35% decrease by 2030 (compared with 2018 levels) for Scope 1&2 emissions and a pledge to be net zero by 2050. To ensure our strategy for achieving these goals is robust, and reflects the diverse interests of our stakeholders, we are undertaking in-depth consultations. The newly created En+ Climate Change Taskforce led by our Chief Operating Officer and reporting to the Executive Chairman will help drive the transformative change required by the business. We intend to outline our net zero pathway in September 2021.

Joan MacNaughton
Chair of the Health, Safety and Environment Committee

Composition

The HSE Committee meets at least once per quarter of the Company's financial year.

The current composition of the HSE Committee is as follows:
- Joan MacNaughton, as chair
- Lord Barker
- Alexander Chmel
- Vadim Geraskin

The primary responsibilities of the HSE Committee are, inter alia, the following:
- Reviewing leading international research and best practices in the area of health, safety and environment, and, if necessary, assessing their impact and preparing respective strategic recommendations to the Board in relation to the Group
- Preparing recommendations to the Board on formulating Group strategies, policies and instructions in the areas of health, safety and environment
- Taking part in the development of policies and other bylaws of the Company regarding health, safety and environment
- Preparing recommendations to the Board on possible participation, cooperation and consultations on health, safety and environmental matters with government authorities, NGOs and other companies or associations
- Controlling the Company's compliance with international standards, applicable laws and the Company bylaws on health, safety and environment
- Benchmarking the Group's operating results on occupational safety and environment against global best practices, and considering the results of such benchmarking.

In 2020, the HSE Committee held seven meetings and considered measures to prevent COVID-19 infection, the diesel spill in Norilsk and actions to be taken by the management, Health, Occupational, Industrial and Fire Safety Policy, and the environmental and climate strategy development plan.

Our leadership team

Vladimir Kiriukhin

Chief Executive Officer (CEO)

Appointed: 1 November 2018
Joined the Group: January 2000

Vladimir oversees the Company's long-term strategy, business development and cooperation with key external stakeholders, including regulators.

A long-serving member of En+ Group, previously Vladimir held several senior positions at EuroSibEnergo, including CEO. He held senior positions at Russian Aluminium and MAREM+. Vladimir was also a Chairman of the Board at Irkutskenergo, Chairman of the Board at Krasnoyarsk HPP, served in the Board of RUSAL.

He is a member of the Governmental Commission on Electric Power Sector Development, which coordinates regulatory decisions on key issues facing the Russian electric power industry.

He graduated from the All-Union Institute of Interindustrial Information with a PhD in engineering, having previously obtained a major in mathematics from the Higher Naval School of Radio Electronics.

Vladimir does not hold any shares in the Company and has not entered into any transactions with the Company shares during 2020.

Mikhail Khardikov

Deputy CEO –
Chief Financial Officer

Joined the Group: November 2010

Mikhail is responsible for finance, tax, treasury and supervision of budget, reporting and consolidation of subdivisions on the Group level, as well as operational management of the Power segment.

He joined the Company's subsidiary EuroSibEnergo in 2010 as Investor Relations Director, and then served as Corporate Finance Director. In 2014, he was appointed as CFO and in 2018 as a CEO of EuroSibEnergo. Mikhail was appointed as Deputy CEO – Chief Financial Officer of En+ Group in 2019.

Prior to that Mikhail held senior positions at Bashkirenergo, OGK-3, HC Metalloinvest and COALCO.

Mikhail graduated from the Academy of Public Administration under the President of the Russian Federation with a PhD in economics in 2009, having previously obtained a major in Business Administration from the Academy of National Economy under the Government of the Russian Federation in 2007.

Vyacheslav Solomin

Deputy CEO –
Chief Operating Officer

Joined the Group: November 2007

Vyacheslav focuses on day-to-day operations and project management, implementation of management best practices, and digital strategy, as well as strengthening the Group's environmental practices and overlooking sustainable development strategy.

He joined the Group in 2007 as CFO of EuroSibEnergo, where he was appointed as Deputy CEO in 2010. In 2014, he was appointed as CEO of EuroSibEnergo.

Before joining EuroSibEnergo, he held senior positions with the financial departments of INTER RAO UES Power Generating Company and SIBUR Holding. He also worked for PricewaterhouseCoopers for nine years.

Vyacheslav graduated from Far Eastern State University, Vladivostok and the University of Maryland University College (USA).

Natalia Albrekht

Deputy CEO –
Chief People Officer

Joined the Group: September 2019

Before to joining the Group, Natalia was Executive Vice President for Organisational Development and Human Resources at VimpelCom for six years.

Prior to that, she headed the HR department of VTB Bank as a Senior Vice President, held the position of Vice President of Rostelecom, was Deputy General Director for Organisational Development, Human Resources and Administrative Issues in CTC Media holding. She also served as Director of the Subscription Services Department at NTV Plus, Deputy Director General for Sales and Development of the Federal Sales Center and General Director of Integrated Settlement Center.

Natalia graduated from Bauman Moscow State Technical University, majoring in Applied Mechanics.

Natalia has an international CIPD certification in HR management.

Gender diversity

9 Male
3 Female

Age

6 35–45
5 46–55
1 56+

Tenure

4 1-3 years
1 4-9 years
7 10+ years

Vera Kurochkina

Deputy CEO for Public Relations

Joined the Group: February 2003

Vera is responsible for developing and implementing communications strategy, supporting the company's key projects through the media, charity and social programmes, internal communications, establishing cooperation with industrial and non-commercial associations.

Vera served as PR Director of RUSAL. Between 2003 and 2006, she was head of RUSAL's media relations department. She also managed a group of projects at Mikhailov & Partners, a strategic communications agency. Prior to this, she was a marketing and communications manager at PricewaterhouseCoopers.

Vera graduated from the Peoples' Friendship University of Russia with honours, and from the Finance Academy under the Government of the Russian Federation.

Igor Galanin

Human Resources Director

Joined the Group: June 2010

Igor is responsible for HR management strategy, the implementation of staff engagement policies and the management of recruitment programmes.

From 2015 until 2019, he served as Human Resources Director at Irkutskenergo. Prior to that, Igor has had extensive experience in human resource management, in a range of industries.

Igor graduated with a degree in Engineering from the Nizhny Novgorod State University of Architecture and Civil Engineering in 1998. He also received a degree in economics from Lobachevsky State University, Nizhny Novgorod, in 2000. He obtained his MBA degree (Personnel Management) from Nizhny Novgorod State Technical University in 2005.

Egor Ivanov

Head of Control and Internal Audit

Joined the Group: July 2001

Egor is responsible for the implementation, structuring and improvement of the internal control system, supporting the risk management system and implementation and maintenance of internal control over the purchasing activities of the Company.

From 2012 to 2017, he served as Head of Control, Internal Audit and Business Coordination at RUSAL. Previously he led RUSAL's planning and budgeting department, and served as the Company's First Deputy CFO.

Prior to joining RUSAL, Egor worked at ITERA Group.

Egor graduated with a degree in accounting, analysis and business auditing from the Financial Academy under the Government of the Russian Federation.

Alexander Danilov

General Counsel

Joined the Group: July 2018

Alexander is responsible for legal support to the Company's business/projects, legal proceedings and general supervision of legal functions at En+ Group's businesses.

Before joining the Company, he held various legal positions at LUKOIL Overseas Group. Prior to his experience with LUKOIL, he was a Partner at Akin Gump Strauss Hauer & Feld LLP from December 2006.

Alexander graduated cum laude from the international law faculty of the Moscow State Institute of International Relations in 1995, and received his LLM from the University of Michigan Law School in 2000, along with an MBA degree from the University of Chicago Booth School of Business in 2016.

Yulia Chekunaeva

Director for Capital Markets and Strategic Initiatives

Joined the Group: September 2016

Yulia is responsible for capital markets, investor relations, international strategic partnerships, stakeholder management, ESG, sustainability reporting and Climate Change initiatives.

She is serving as an Independent Non-Executive Director at Nordgold since March 2021. Yulia was Executive Director of Goldman Sachs Global Investment Research and Head of Metals and Mining Corporate lending in Sberbank CIB.

She graduated from Harvard Business School Advanced Management Program.

Yulia holds an MSc from Warwick Business School (Economics and Finance), a BSc in Economics from Higher School of Economics, and a BSc in Banking and Finance from The London School of Economics and Political Sciences.

Georgy Borisov

Chief Compliance Officer

Joined the Group: September 2019

Georgy oversees compliance with Group policies, standards and procedures, provides guidance to En+ Group businesses and drives compliance with regulatory obligations.

He is a transactional lawyer with 25 years of post-qualification experience in Russia and in the US, holding Russian and US law degrees. For many years prior to joining En+ Group he practiced law as an associate and later as a partner at various international law firms including Baker Botts, Latham Watkins and K&L Gates.

Georgy graduated from the international law faculty of the Moscow State Institute of International Relations in 1995, and received his LLM degree in 1996 from The John Marshall Law School in Chicago, Illinois, USA.

Andrey Lymarev

Chief Technical Officer

Joined the Group: January 2017

Andrey is in charge of the development of a medium- and long-term technical strategy for the Company. He manages the maintenance of the Company's energy assets and oversees the accident rate reduction strategy.

Before joining the Group, Andrey was Deputy Chief Engineer for Repairs and then Deputy Chief Engineer for Maintenance at INTER RAO Electricity Generation Management from 2015 to 2016.

Prior to that, he worked his way up from a turbine inspection operator to Chief Technical Officer at the Siberian Energy Company.

Andrey was awarded the Gratitude of the Ministry of Energy of the Russian Federation in 2008 and an Honorary Diploma from the Ministry of Energy of the Russian Federation in 2012.

David Pogosbekov

Commercial Director

Joined the Group: June 2008

David's responsibilities include price optimisation in procurement by streamlining and consolidating purchases across the Company, the development of a unified procurement policy, and the development of uniform engagement standards for suppliers and contractors.

He joined En+ Group in 2008 as a tax manager of the Company's hydropower segment, EuroSibEnergo, where he was appointed as Commercial Director in 2011. David subsequently became the CEO of EuroSibEnergo Trading House in 2015. He started his career in tax consulting with both Russian and international consultancies including Deloitte.

David graduated from the Financial Academy under the Government of the Russian Federation with a degree in Finance and Credit.

Sergey Makarchuk
Corporate Secretary

Corporate Secretary
Pursuant to the Regulations on the Corporate Secretary, the Corporate Secretary of the Company is responsible for the Company's efficient ongoing interaction with shareholders, coordination of the Company's activities in protecting the rights and interests of shareholders, and support of the effective operation of the Board and Board Committees.

The functions of the Corporate Secretary include, inter alia:

- Participation in preparation and holding of GSMs
- Supporting the activities of the Board and the Board Committees
- Implementing the Company's disclosure policy and ensuring the storage of the Company's corporate documents
- Liaisons between the Company and its shareholders, and preventing corporate conflicts
- Improving the corporate governance system and practices of the Company.

Sergey Makarchuk (year of birth: 1982) was appointed as Secretary of the Board on 10 April 2019 and Corporate Secretary of En+ on 14 November 2019.

After working at various law firms, Sergey Makarchuk worked for RUSAL Group in 2007–2010 at the Corporate Governance Department of RUSAL Global Management B.V., responsible for legal corporate procedures, as well as compliance of the Group's foreign entities, the RUSAL Board, and Board Committee support. He was also involved in the Hong Kong SE & NYSE Euronext IPO of RUSAL, and served as Secretary to the Disclosure Committee of RUSAL, established in accordance with HK Listing Rules compliance requirements.

In 2011–2014, after his experience with RUSAL, Mr Makarchuk was Deputy Director of the Corporate Governance Department at JSC TNK-BP Management, in charge of support of the TNK-BP Office of the Board Secretary and other departments on legal corporate matters, registration procedures, approvals, compliance, document flow, the development of corporate governance system methodology, and coordinating shareholders representatives relations.

After the acquisition of TNK-BP by Rosneft, Mr Makarchuk continued working at Rosneft as Deputy Head of the Foreign Assets Department/Project Director of the Corporate Governance Department, with a similar remit.

Sergey Makarchuk graduated from the law faculty of Lomonosov Moscow State University in 2004, where he also obtained a special certificate in legal English translation.

The Corporate Secretary can be contacted with any queries at: CS@enplus.ru.

Shareholdings of CEO and management team
As at the date of this Report, neither the CEO nor members of the management team directly or indirectly hold any shares in the Company. Throughout 2020, neither the CEO nor members of the management team concluded any transactions with the shares of the Company.

Conflicts of interest and loans issued to members of the Board and the CEO
In 2020 and up to the date of this Report, the Company has not been aware of any conflicts of interest affecting any member of the Board or the CEO (including in connection with their participation in the managing bodies of the Company's competitors).

In 2020, no loans have been issued by the Company (or any Group company) to members of the Board or the CEO.

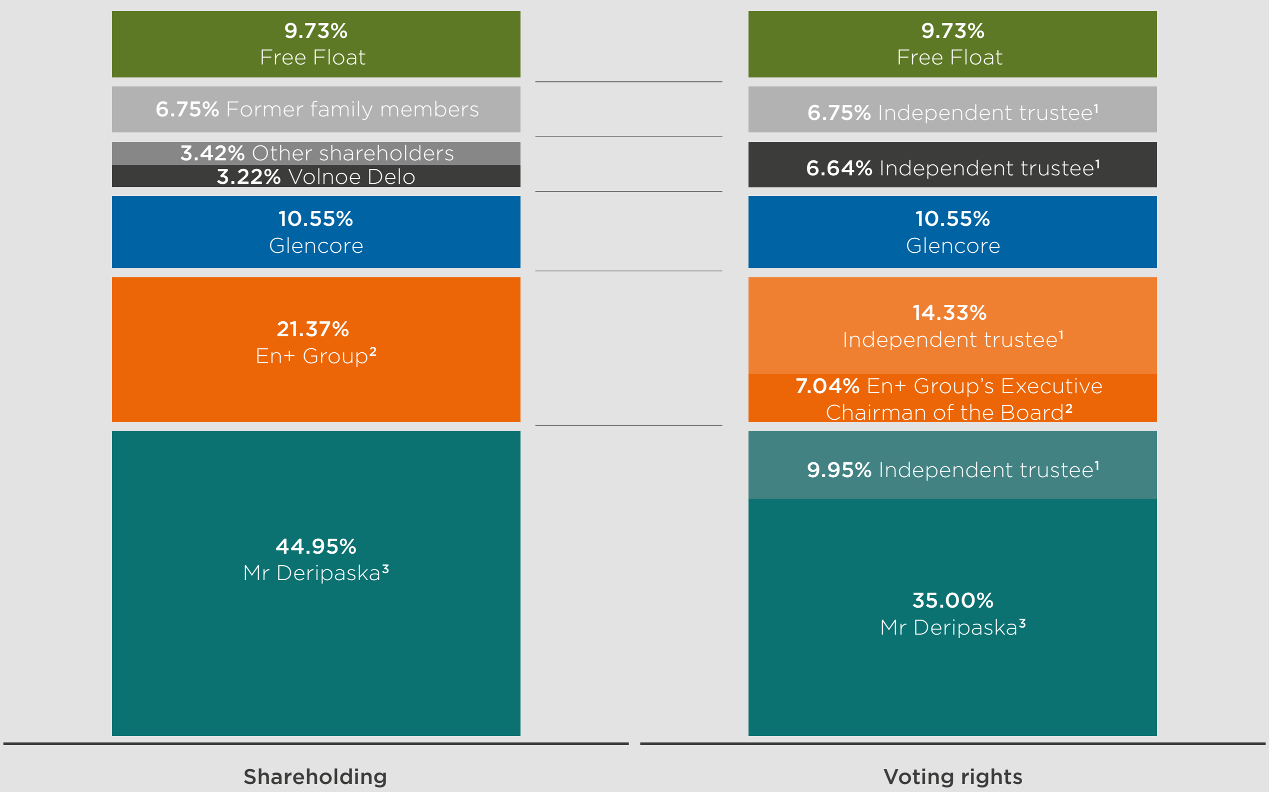
Information for shareholders and investors

Ordinary shares
As at 31 December 2020, the share capital of En+ Group was divided into 638,848,896 ordinary shares with the par value of USD 0.00007 each.

Following the completion of the Lord Barker Plan, 67,420,324 new shares in the form of Global Depositary Receipts (GDRs) were issued to a subsidiary of Glencore International AG, representing approximately 10.55% of the enlarged share capital of the Company (638,848,896 shares), in exchange for the transfer to the Company by Amokenga Holdings Limited of its 8.75% holding in RUSAL in two stages. The first stage was settled on 31 January 2019, and 1.97% of RUSAL's shares were transferred to the Company following the removal of the Company and RUSAL from the SDN list. The second stage was settled on 3 February 2020, and the remaining 6.78% of RUSAL's shares were transferred to the Company.

On 18 February 2020, En+ Group's ordinary shares started to be traded on the Moscow Exchange under the trading ticker ENPG. The Moscow Exchange included ordinary shares of the Company in its Level One Quotation List. This listing created a diversified platform for investors in equity securities of the Company, and increased the accessibility of the Company to capital markets. The Company's GDRs are listed on the London Stock Exchange. Investors are given optionality: they may trade their preferred form of the Company's securities on their preferred stock exchange.

En+ Group voting and shareholder structure as at 31 December 2020



Note: percentages may not add up to 100% due to rounding.

1 Independent trustees, who exercise voting rights attaching to certain shares of the Company (37.68% in total), as required by OFAC: D.J. Baker, David Crane, Arthur Dodge, Ogier Global Nominee (Jersey) Limited.

2 Shares acquired from VTB by En+ Group's subsidiary as per Company's announcements on 6 and 12 February 2020. Voting rights in respect of 14.33% of shares are held by an independent trustee, while the remaining voting rights in respect of 7.04% of shares are exercised by Executive Chairman of the Board, Lord Barker, at the Board's direction.

3 Directly or indirectly. Under the agreement between the Company and OFAC, the major shareholder's share cannot exceed 44.95% and the voting rights cannot exceed 35%

The Company's management is not aware of any holdings in excess of 5% of the Company's share capital save for those disclosed by the Company immediately above.

Global Depositary Receipts

En+ Group's ordinary shares, in the form of GDRs, are listed on the London Stock Exchange (ticker: ENPL). One GDR represents one share.

Until 17 April 2020 inclusive, En+ Group's GDRs were listed on the Moscow Exchange (ticker: ENPL), and were included in the Level One Quotation List. The GDRs were subsequently delisted from the Moscow Exchange on 20 April 2020.

Financial calendar 2021

8 February 2021	4Q and FY 2020 Trading update
25 March 2021	FY 2020 Financial results
27 April 2021	1Q 2021 Trading update
27 July 2021	2Q and 1H 2021 Trading update
19 August 2021	1H 2021 Financial results (date TBC)
27 October 2021	3Q and 9M 2021 Trading update

Depositary bank

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

The contact details of Citibank N.A. are:
Citibank N.A.
Tel: +1 (212) 723 5435
E-mail: CitiADR@Citi.com
Website: www.citiadr.factsetdigitalsolutions.com/www/drfront_page.idms

Registrar

The Company's registrar is Joint Stock Company "Interregional Registration Center" (the "IRC").

Contact details of IRC are:
JSC "IRC"
Tel: +7 (495) 234 4470
E-mail: info@mrz.ru
Website: www.mrz.ru

p. 30 Our competitive advantages

En+ Group's international securities identification numbers

London Stock Exchange

London Stock Exchange

	Rule 144A GDR	Regulation S GDR
Ticker	ENPL	ENPL
ISIN[1]	US29355E1091	US29355E2081
Common Code[2]	171560667	170465199
CUSIP[3]	29355E109	29355E208

Moscow Exchange

MOSCOW EXCHANGE

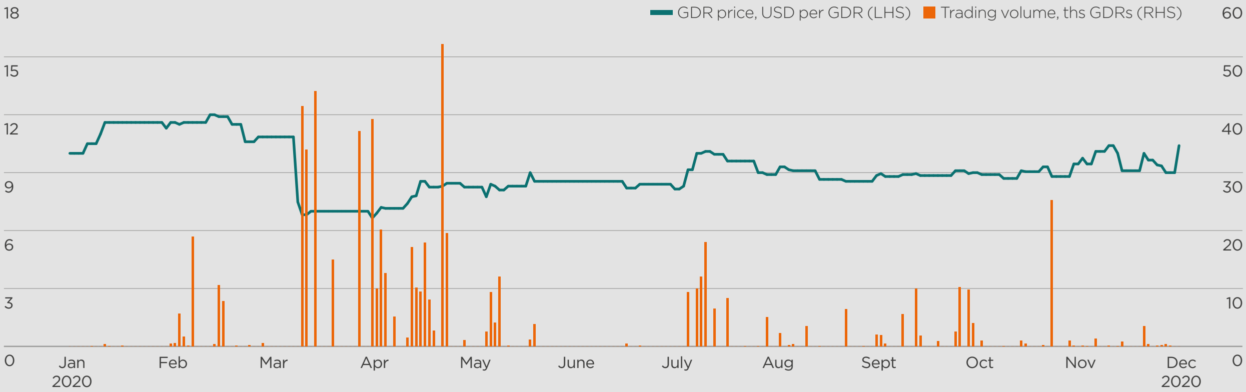
	Regulation S GDR (until 17 April 2020 inclusive)	Ordinary shares
Ticker	ENPL	ENPG
ISIN	US29355E2081	RU000A100K72

Instrument	Trading platform	Bloomberg code
GDRs	London Stock Exchange	ENPL LI
GDRs	Moscow Exchange (until 17 April 2020 inclusive)	ENPL RM
Ordinary shares	Moscow Exchange (since 18 February 2020)	ENPG RM

1 ISIN (International Securities Identification Number) – international identification number of the share.
2 Common Code – a nine-digit identification code issued jointly by CEDEL and Euroclear.
3 CUSIP (Committee on Uniform Security Identification Procedures) – identification number given to the issue of shares for the purposes of facilitating clearing.

En+ Group share performance and trading volumes

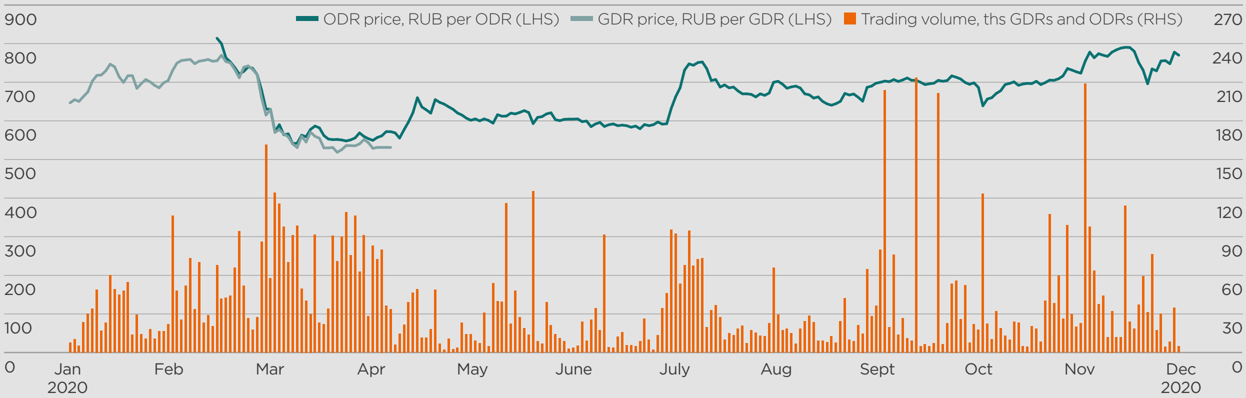
London Stock Exchange



Source: Bloomberg.

The price of En+ Group's GDRs on the LSE increased from USD 10 as at 2 January 2020 to USD 10.4 as at 31 December 2020. En+ Group's market capitalisation increased from USD 6.4 billion at the beginning of the year to USD 6.6 billion on 31 December 2020. The average daily trading volume during that period was 6,817 GDRs.

Moscow Stock Exchange



Source: Bloomberg.

The En+ Group's GDR price on the Moscow Exchange increased from RUB 646.6 as at 3 January 2020 to RUB 770 per ordinary share as at 30 December 2020. En+ Group's market capitalisation increased from RUB 413.1 billion at the beginning of the year to RUB 491.9 billion on 30 December 2020. The average daily trading volume during the year was 38,255 GDRs/ordinary shares.

Share repurchases

In the reporting period the Company has undertaken the transaction discussed in more detail in the section of this Annual Report entitled "Acquisition of VTB's Stake". Save in relation to this transaction, during the reporting period, the Company did not, either itself or through a person acting in their own name but on the Company's behalf, repurchase any of the Company's own shares, and did not, either itself or through a person acting in their own name but on the Company's behalf, hold any shares in treasury.

Analyst coverage

As at the end of 2020, eleven banks were covering En+ GDRs, with seven investment banks issuing a 'BUY' recommendation:

- Aton
- BofA Securities
- Citi
- Credit Suisse
- Gazprombank
- J.P. Morgan
- Renaissance Capital
- Sberbank CIB
- Societe Generale
- SOVA Capital
- UBS

En+ Group's IR team interfaces with remaining brokers in order to extend analyst coverage, while monitoring and regularly communicating analyst consensus to the Company's Board of Directors and top management.

Credit rating

En+ Group credit rating:
- As at 31 December 2020, the Group had the Fitch rating 'B+', Outlook Stable

RUSAL credit ratings:
- Fitch: 'B+', Outlook Stable
- Moody's: 'Ba3', Outlook Stable
- CCXR (Chinese rating agency): 'AAA', Outlook Stable, assigned due to Panda Bonds issued in mainland China

Acquisition of VTB's stake

On 12 February 2020, the Company simplified its ownership structure through the USD 1.58 billion acquisition of VTB Group's 21.37% stake in En+ Group.

En+ Group acquired 136,511,122 shares from VTB Group for cash at a price of USD 11.57 per share, a significant discount to En+ Group's fundamental valuation. The removal of the VTB Group's overhang causes no disruption to arrangements made under the Barker Plan. The acquisition was financed by a RUB 100.8 billion loan from Sberbank.

The deal provides future optionality to further simplify the Group's ownership structure. All or part of the shares acquired may be used:
- In connection with strategic activity; and/or
- To undertake a secondary offering to increase free float, broaden institutional ownership and improve liquidity, subject to market conditions.

Dividend policy

On 14 November 2019, the Board approved the Regulations on Dividend Policy, which provide that when determining the size of the dividends recommended to the GSM, the Board shall calculate the minimum dividends as:
- One hundred per cent (100%) of dividends received from RUSAL[1] (as long as the Company is a RUSAL shareholder), and
- Seventy-five per cent (75%) of Free Cash Flow of the En+ Power Segment, but in any event at least USD 250 million per year.

The Regulations on Dividend Policy is available on the Company's website.

Dividend payments

During 2020, the GSM of the Company did not approve any dividend distributions. The Company anticipates that dividend payments shall be resumed as soon as market condition allow.

Information disclosure

The Company pays considerable attention to ensure that any relevant information is delivered to all shareholders and analysts at the same time, in accordance with the applicable provisions of Russian law and the Moscow Exchange disclosure requirements, as well as the Market Abuse Regulations and the FCA's Disclosure Guidance and Transparency Rules.

Information is distributed through the following channels:
- The Moscow Exchange and UK regulatory news service (RNS): the Company's price-sensitive information is disclosed through information disclosure systems
- The Company's website: the Company publishes releases on key events as well as operational and financial results
- The Company's webpage on the Russian regulatory newsfeed (Interfax e-Disclosure).

Diversity

The Company is committed to promoting a diverse and inclusive workforce, and recognises and embraces the benefits of having a diverse Board to enhance the quality of its performance.

The Board recognises the desire of stakeholders to have greater diversity in senior management and on boards.

In 2020 En+ adopted the Board of Directors Diversity Policy which aims to set out the Company's approach to promoting and maintaining the diversity of the Board.

To download the Diversity Policy from our website:
www.enplusgroup.com/upload/iblock/c86/Board-of-Directors-Diversity-Policy-_Eng_.pdf

Inclusion

En+ aims to create an environment of inclusion, where everyone is treated without discrimination.

We are working to ensure equal opportunity in recruitment, promotion, training and reward for all employees regardless of ethnicity, national origin, religion, gender, age, sexual orientation, marital status, disability, or any other characteristic protected by applicable laws.

In the unfortunate event that existing employees should become disabled, our ambition is to provide continued employment, training and occupational assistance where needed.

Email

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

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

EN+ GROUP IPJSC

Consolidated Financial Statements for the year ended 31 December 2020

Contents

Statement of Management's Responsibilities for the Preparation and Approval of the Consolidated Financial Statements

for the year ended 31 December 2020

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 129-132, 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 EN+ GROUP IPJSC and its subsidiaries.

Management is responsible for the preparation of the consolidated financial statements for the year ended 31 December 2020 in accordance with International Financial Reporting Standards ("IFRS").

In preparing the consolidated financial statements, management is responsible for:
- selecting suitable accounting principles and applying them consistently;
- making judgements and estimates that are reasonable and prudent;
- 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 irregularities.

These consolidated financial statements were approved by the Board of Directors on 24 March 2021 and were signed on its behalf by:

General Director of
EN+ GROUP IPJSC

Vladimir Kiriukhin

Independent Auditors' Report

To the Shareholders of EN+ GROUP IPJSC

Opinion

We have audited the consolidated financial statements of EN+ GROUP IPJSC (the "Company") and its subsidiaries (the "Group"), which comprise the consolidated statement of financial position as at 31 December 2020, the consolidated statements of profit or loss and other comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2020, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the independence requirements that are relevant to our audit of the consolidated financial statements in the Russian Federation and with the International Ethics Standards Board for Accountants International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with the requirements in the Russian Federation and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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.

Audited entity: EN+ GROUP IPJSC.
Registration number. in the Unified State Register of Legal Entities: No. 1193926010398.
Kaliningrad, Russia.

Independent auditor: JSC "KPMG", a company incorporated under the Laws of the Russian Federation, a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee.
Registration number. in the Unified State Register of Legal Entities: No. 1027700125628.
Member of the Self-regulatory Organization of Auditors Association "Sodruzhestvo" (SRO AAS). Principal registration number of the entry in the Register of Auditors and Audit Organizations: No. 12006020351.

EN+ GROUP IPJSC
Independent Auditors' Report
Page 2

Valuation of property, plant and equipment	
Please refer to the Note 11 in the consolidated financial statements.	
The key audit matter	**How the matter was addressed in our audit**
The Group has significant property, plant and equipment balance which is material to the consolidated financial statements as at 31 December 2020. Current global market conditions, including fluctuations in LME aluminium prices, coal prices, market premiums and alumina purchase prices, uncertainty regarding volumes and tariffs for electricity transmission, together with their long-term forecasts, may indicate that some property, plant and equipment items may be subject to either impairment loss or reversal of previously recognised impairment loss. This is in particular related to such cash generating units (CGUs) as aluminium and alumina plants, bauxite mines, coal mines, Irkutsk GridCo and CHP. As at the reporting date management performs valuation of the recoverable amount of the Group's assets and cash generating units as their value in use. Due to the inherent uncertainty involved in forecasting and discounting future cash flows, which are the basis of the assessment of recoverability, this is one of the key judgmental areas that our audit is concentrated on.	For aluminium, alumina, bauxite, coal, Irkutsk GridCo and CHP CGUs we evaluated the reasonableness of the expected cash flow forecasts by comparing them with the latest budgets approved by the Board of Directors, externally derived data as well as our own assessments in relation to key inputs such as production levels, forecasted aluminium sales prices, forecasted coal sales prices, forecasted volumes and tariffs of electricity transmission and electricity and heat sales, forecasted alumina and bauxite purchase prices, costs inflation, foreign currency exchange rates, discount rates and terminal growth rates. We also considered the historic accuracy of management's forecasts by comparing prior year forecasts to actual results. We used our own valuation specialists to assist us in evaluating the assumptions and methodology used by the Group. In particular, we challenged: – aluminium and alumina smelters, bauxite mines costs projections by comparing them with historical results and industry peers; – coal prices, tariffs for electricity transmission and electricity and heat sales by comparing them with historical data, economic and industry forecasts; – volumes of electricity transmission by comparing them with historical volumes and potential Taishet aluminium smelter demand; – the key assumptions for long term revenue and costs growth rates in the forecasts by comparing them with historical results, economic and industry forecasts; and – the discount rates used. Specifically, we recalculated the Group's weighted average cost of capital using market comparable information. We also performed sensitivity analysis on the discounted cash flow forecasts and assessed whether the Group's disclosures about the sensitivity of the outcome of the impairment assessment to changes in key assumptions reflected the risks inherent in the valuation of property, plant and equipment.

Revaluation of hydro assets	
Please refer to the Note 11(e) in the consolidated financial statements.	
The key audit matter	**How the matter was addressed in our audit**
The Group has a significant class of assets which is material to the consolidated financial statements as at 31 December 2020 and is measured under revaluation model. Changes in macroeconomic environment including, but not limited to discount rates and inflation, as well as a two year period from last revaluation may indicate that as at 31 December 2020 carrying amount of hydro assets could be different from their fair value. As at the reporting date management performed a revaluation of hydro assets involving independent valuer. Due to the significant judgement required to determine depreciated replacement costs ("DRC") as well as inherent uncertainty involved in forecasting and discounting future cash flows used to test DRC for economic obsolescence, this is one of the key judgmental areas that our audit is concentrated on.	We evaluated competence, capabilities and objectivity of the independent valuer used by the Group. We used our own valuation specialists to assist us in evaluating the assumptions and methodology used by the Group. In particular, we challenged: – methodology used for different types of assets; – key assumptions including costs to reproduce or replace property, plant and equipment, adjustments for physical depreciation and functional obsolescence; – reliability and appropriateness of market data sources used by independent valuer; – volumes of electricity sales and tariffs as well as costs projections by comparing them with historical data, approved budgets and economic and industry forecasts; – the key assumptions for long term revenue growth rates in the forecasts by comparing them with historical results, economic and industry forecasts; and – the discount rates used. We also assessed whether the Group's disclosures about the revaluation of hydro assets are adequate.

Other Information

Management is responsible for the other information. The other information comprises the information included in the Group's Annual Report but does not include the consolidated financial statements and our auditors' report thereon. The Group's Annual Report is expected to be made available to us after the date of this auditors' 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 Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.— Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

EN+ GROUP IPJSC
Independent Auditors' Report
Page 4

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and 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 those charged with governance, 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 auditors' 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 engagement partner on the audit resulting in this independent auditors' report is:

Andrei Ryazantsev
JSC "KPMG"
Moscow, Russia
24 March 2021

Consolidated Statement of Profit or Loss and Other Comprehensive Income

for the year ended 31 December 2020

		Year ended 31 December	
	Note	2020 USD million	2019 USD million
Revenues	5	10,356	11,752
Cost of sales		(7,808)	(8,873)
Gross profit		**2,548**	**2,879**
Distribution expenses		(545)	(632)
General and administrative expenses		(775)	(839)
Impairment of non-current assets		(58)	(321)
Net other operating expenses	6	(160)	(111)
Results from operating activities		**1,010**	**976**
Share of profits of associates and joint ventures	13	971	1,669
Finance income	8	160	83
Finance costs	8	(1,016)	(1,148)
Profit before tax		**1,125**	**1,580**
Income tax expense	10	(109)	(276)
Profit for the year		**1,016**	**1,304**
Attributable to:			
Shareholders of the Parent Company		684	860
Non-controlling interests	16(g)	332	444
Profit for the year		**1,016**	**1,304**
Earnings per share			
Basic and diluted earnings per share (USD)	9	**1.320**	**1.356**

The consolidated statement of profit or loss and other comprehensive income is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 140 to 207.

Consolidated Statement of Profit or Loss and Other Comprehensive Income

for the year ended 31 December 2020 (continued)

		Year ended 31 December	
	Note	2020 USD million	2019 USD million
Profit for the year		1,016	1,304
Other comprehensive income/(loss)			
Items that will never be reclassified subsequently to profit or loss:			
Actuarial gain/(loss) on post-retirement benefit plans	18(b)	3	(17)
Revaluation of non-current assets	11(e)	230	—
Taxation	10(c)	(46)	—
		187	(17)
Items that are or may be reclassified subsequently to profit or loss:			
Foreign currency translation differences on foreign operations		(210)	202
Foreign currency translation differences for equity-accounted investees	13	(667)	450
Disposal of subsidiary		—	4
Change in fair value of cash flow hedge	19	(53)	34
Change in fair value of financial assets		(1)	(2)
		(931)	688
Other comprehensive (loss)/income for the year, net of tax		**(744)**	**671**
Total comprehensive income for the year		**272**	**1,975**
Attributable to:			
Shareholders of the Parent Company		405	1,236
Non-controlling interests	16(g)	(133)	739
Total comprehensive income for the year		**272**	**1,975**

The consolidated statement of profit or loss and other comprehensive income is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out on pages 140 to 207.

Consolidated Statement of Financial Position

as at 31 December 2020

	Note	31 December 2020 USD million	31 December 2019 USD million
ASSETS			
Non-current assets			
Property, plant and equipment	11	9,577	9,883
Goodwill and intangible assets	12	2,181	2,376
Interests in associates and joint ventures	13	3,832	4,248
Deferred tax assets	10(b)	244	165
Derivative financial assets	19	20	33
Other non-current assets	15(e)	208	108
Total non-current assets		**16,062**	**16,813**
Current assets			
Inventories	14	2,339	2,542
Trade and other receivables	15(b)	1,431	2,082
Short-term investments		237	241
Derivative financial assets	19	30	75
Cash and cash equivalents	15(d)	2,562	2,278
Total current assets		**6,599**	**7,218**
Total assets		**22,661**	**24,031**
EQUITY AND LIABILITIES			
Equity	16		
Share capital		—	—
Share premium		1,516	1,516
Treasury shares		(1,579)	—
Additional paid-in capital		9,193	9,193
Revaluation reserve		2,902	2,722
Other reserves		169	198
Foreign currency translation reserve		(5,923)	(5,493)
Accumulated losses		(3,122)	(3,806)
Total equity attributable to shareholders of the Parent Company		**3,156**	**4,330**
Non-controlling interests	16(g)	2,909	3,042
Total equity		**6,065**	**7,372**
Non-current liabilities			
Loans and borrowings	17	10,215	11,258
Deferred tax liabilities	10(b)	1,139	1,243
Provisions — non-current portion	18	518	536
Derivative financial liabilities	19	28	27
Other non-current liabilities		121	121
Total non-current liabilities		**12,021**	**13,185**
Current liabilities			
Loans and borrowings	17	2,173	1,224
Provisions — current portion	18	89	71
Trade and other payables	15(c)	2,156	2,152
Derivative financial liabilities	19	157	27
Total current liabilities		**4,575**	**3,474**
Total equity and liabilities		**22,661**	**24,031**

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 140 to 207.

Consolidated Statement of Cash Flows

for the year ended 31 December 2020

	Note	Year ended 31 December 2020 USD million	Year ended 31 December 2019 USD million
OPERATING ACTIVITIES			
Profit for the year		**1,016**	**1,304**
Adjustments for:			
Depreciation and amortisation	11,12	781	806
Impairment of non-current assets		58	321
Net foreign exchange (gain)/loss	8	(98)	114
Loss on disposal of property, plant and equipment	6	12	24
Share of profits of associates and joint ventures	13	(971)	(1,669)
Interest expense	8	790	1,000
Interest income	8	(61)	(82)
Dividend income	8	(1)	(1)
Income tax expense	10	109	276
Impairment/(reversal of impairment) of inventories		3	(18)
Impairment of trade and other receivables	6	10	2
Provision for legal claims		10	22
Change in fair value of derivative financial instruments	8	226	21
Operating profit before changes in working capital		**1,884**	**2,120**
Decrease in inventories		212	535
Decrease/(increase) in trade and other receivables		166	(238)
(Decrease)/increase in trade and other payables		(146)	588
Cash flows from operations before income tax		**2,116**	**3,005**
Income taxes paid	10(f)	(226)	(444)
Cash flows from operating activities		**1,890**	**2,561**

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 140 to 207.

	Note	Year ended 31 December 2020 USD million	2019 USD million
INVESTING ACTIVITIES			
Proceeds from disposal of property, plant and equipment		19	46
Acquisition of property, plant and equipment		(1,108)	(1,024)
Acquisition of intangible assets		(20)	(37)
Other investments		(198)	(77)
Return of prepayment for investment in associate		—	44
Interest received		56	62
Dividends from associates and joint ventures		1,170	1,141
Dividends from financial assets		4	5
Proceeds from disposal of financial assets		—	15
Return from/(contribution to joint venture)		1	(78)
Acquisition of subsidiaries		(1)	(35)
Change in restricted cash		—	30
Cash flows (used in)/from investing activities		**(77)**	**92**
FINANCING ACTIVITIES			
Proceeds from borrowings		3,040	5,872
Repayment of borrowings		(1,813)	(6,366)
Acquisition of own shares	16(b)	(1,579)	—
Acquisition of non-controlling interest		—	(5)
Interest paid		(779)	(1,021)
Restructuring fees and expenses related to issuance of shares		(26)	(42)
Settlement of derivative financial instruments		(215)	(26)
Cash flows used in financing activities		**(1,372)**	**(1,588)**
Net increase in cash and cash equivalents		**441**	**1,065**
Cash and cash equivalents at beginning of the year, excluding restricted cash		2,265	1,140
Effect of exchange rate changes on cash and cash equivalents		(157)	60
Cash and cash equivalents at end of the year, excluding restricted cash	15(d)	**2,549**	**2,265**

Restricted cash amounted to USD 13 million and USD 13 million at 31 December 2020 and 31 December 2019, 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 140 to 207.

Consolidated Statement of Changes in Equity

USD million	Attributable to shareholders of the Parent Company: Share premium	Treasury share reserve	Additional paid-in capital	Revaluation reserve
Balance at 1 January 2019	973	—	9,193	2,718
Comprehensive income				
Profit for the year	—	—	—	—
Other comprehensive income	—	—	—	—
Total comprehensive income for the year	—	—	—	—
Transactions with owners				
Change in effective interest in subsidiaries (16(a))	543	—	—	4
Total transactions with owners	543	—	—	4
Balance 31 December 2019	1,516	—	9,193	2,722
Balance at 1 January 2020	1,516	—	9,193	2,722
Comprehensive income				
Profit for the year	—	—	—	—
Other comprehensive (loss)/income for the year:	—	—	—	180
Revaluation of hydro assets as at 31 December 2020 (16(f),11(e))	—	—	—	225
Taxation (10(c))	—	—	—	(45)
Other comprehensive loss	—	—	—	—
Total comprehensive income for the year	—	—	—	180
Transactions with owners				
Acquisition of own shares (1(a))	—	(1,579)	—	—
Total transactions with owners	—	(1,579)	—	—
Balance 31 December 2020	1,516	(1,579)	9,193	2,902

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 140 to 207.

Attributable to shareholders of the Parent Company					
Other reserves	Foreign currency translation reserve	Accumulated losses	Total	Non-controlling interests	Total equity
(62)	(5,024)	(5,143)	2,655	2,747	5,402
—	—	860	860	444	1,304
9	367	—	376	295	671
9	367	860	1,236	739	1,975
251	(836)	477	439	(444)	(5)
251	(836)	477	439	(444)	(5)
198	(5,493)	(3,806)	4,330	3,042	7,372
198	(5,493)	(3,806)	4,330	3,042	7,372
—	—	684	684	332	1,016
(29)	(430)	—	(279)	(465)	(744)
—	—	—	225	5	230
—	—	—	(45)	(1)	(46)
(29)	(430)	—	(459)	(469)	(928)
(29)	(430)	684	405	(133)	272
—	—	—	(1,579)	—	(1,579)
—	—	—	(1,579)	—	(1,579)
169	(5,923)	(3,122)	3,156	2,909	6,065

Notes to the Consolidated Financial Statements

for the year ended 31 December 2020

1. Background

(a) Organisation

EN+ GROUP IPJSC (the "Parent Company") was established as a limited liability company according to the legislation of the British Virgin Islands on 30 April 2002 under the name of Baufinanz Limited. On 18 March 2004, the Parent Company registered a change of its legal name to Eagle Capital Group Limited. On 25 August 2005, the Parent Company changed its domicile to Jersey and was renamed to En+ Group Limited. On 1 June 2017, the Parent Company changed its status to a public company and was renamed to EN+ GROUP PLC. On 9 July 2019, the Parent Company changed its domicile to the Russian Federation with a registration as EN+ GROUP International public joint-stock company (EN+GROUP IPJSC). As at 31 December 2020, the Parent Company's registered office is Oktyabrskaya st. 8, office 34, Kaliningrad, Kaliningrad Region, 236006, Russian Federation.

On 8 November 2017, the Parent Company successfully completed an initial public offering of global depositary receipts on the London Stock Exchange and the Moscow Exchange. On 17 February 2020, the Parent Company's ordinary shares were included into the "Level 1" part of the list of securities admitted to trading on Moscow Exchange. On 20 April 2020, Company's GDRs were delisted from the Moscow Exchange.

EN+ GROUP IPJSC is the parent company for a vertically integrated aluminium and power group, engaged in aluminium production and energy generation (together with the Parent Company referred to as "the Group").

As at 31 December 2020, Mr. Oleg Deripaska beneficially controls and exercises voting rights in respect of 35% of the voting shares of the Company and his direct or indirect shareholding cannot exceed 44.95% of the shares of the Company.

The other significant holders as at 31 December 2020 were as follows:

	Shareholding	Voting rights
Parent Company's subsidiary	21.37%	7.04%
Citi (Nominees), including	14.10%	14.10%
Glencore Group Funding Limited	10.55%	10.55%
Other shareholders	19.58%	6.18%
Independent trustees	—	37.68%

Glencore Group Funding Limited is a subsidiary of Glencore Plc.

Related party transactions are detailed in note 23.

In February 2020, the Group acquired 21.37% of its shares from VTB for cash at a price of USD 11.57 per share. The voting rights in respect of acquired shares representing 14.33% of Parent Company's issued share capital are retained with independent trustees. Votes attaching to the remaining 7.04% of shares are voted by the Chairman of the Parent Company's Board at the Board's direction.

Based on the information at the Group's disposal at the reporting date, there is no individual that has an indirect prevailing ownership interest in the Parent Company exceeding 50%, who could exercise voting rights in respect of more than 35% of the Parent Company's issued share capital or has an opportunity to exercise control over the Parent Company.

(b) Operations

The Group is a leading vertically integrated aluminium and power producer, which combines the assets and results of its Metals and Power segments.

The Metals segment 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 Power segment engages in all major areas of the power industry, including electric power generation, power trading and supply. It also includes supporting operations engaged in the supply of coal resources to the Group. The Group's principal power plants are located in East Siberia and Volga Region, the Russian Federation.

(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.

Starting in 2014, the United States of America, the European Union and some other countries have imposed and gradually expanded economic sanctions against a number of Russian individuals and legal entities. The imposition of the sanctions has led to increased economic uncertainty, including more volatile equity markets, a depreciation of the Russian rouble, a reduction in both local and foreign direct investment inflows and a significant tightening in the availability of credit. As a result, some Russian entities may experience difficulties accessing the international equity and debt markets and may become increasingly dependent on state support for their operations. The longer-term effects of the imposed and possible additional sanctions are difficult to determine. The COVID-19 coronavirus pandemic has further increased uncertainty in the business environment (note 1(e)).

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 Parent Company, JSC EuroSibEnergo ("EuroSibEnergo") and UC RUSAL Plc (from 25 September 2020 UC RUSAL IPJSC, "UC RUSAL",) as Specially Designated Nationals ("SDN") (the "OFAC Sanctions").

As a result, all property or interests in property of the Parent Company and its subsidiaries located in the United States or in the possession of U.S. Persons were blocked, frozen, and could not have been transferred, paid, exported, withdrawn, or otherwise dealt in. Several general licenses were issued at the time of the designation and subsequently certain transactions were authorised with the Parent Company, EuroSibEnergo and UC RUSAL, and with their respective debt and equity.

On 27 January 2019, OFAC announced the removal of the Parent Company and its subsidiaries, including UC RUSAL and EuroSibEnergo, from OFAC's SDN list and Blocked Persons with immediate effect. The removal was subject to and conditional upon the satisfaction of a number of conditions including, but not limited to:

- ending Mr Oleg Deripaska's control of the Group, through the reduction of his direct and indirect ownership interest in the Parent Company to below 50%;
- establishing independent voting arrangements for the Parent Company's shares held by certain shareholders;
- corporate governance changes, including, inter alia, overhauling the composition of the EN+ Board to ensure that independent directors constitute the majority of the Board, and ongoing reporting and certifications by the Parent Company and UC RUSAL to OFAC concerning compliance with the conditions for sanctions' removal.

(e) COVID-19

The first months of 2020 have seen significant global market turmoil triggered by the outbreak of the novel coronavirus. Along with other factors, including a sharp decrease in the price of oil, this has resulted in high volatility on the stock market, with a considerable drop of indices, as well as a depreciation of the Russian rouble. As a result of the COVID-19 outbreak in the first half of 2020, aluminium prices deteriorated. These factors had an adverse impact on the revenue and profitability of the Group during second and third quarter of 2020, partially offset by rouble depreciation, decreases in costs of raw materials linked to the oil price, and relatively stable electricity consumption in Siberia region. During that period, considering depressed level of aluminium prices, management is implementing a number of measures including, but not limited to, cost and working capital optimization. By the start of December 2020, aluminium prices mostly recovered back to the pre-COVID and pre-sanctions level which was also supported by the recovery of global aluminium demand and production. The current consensus is that forecast aluminium prices will continue to remain at a slightly depressed level compared to the spot price as of early December 2020 with subsequent recovery in the long-term. The global demand and production of aluminium is also expected to demonstrate positive trends but may be affected by further COVID-19 developments. At the date of these consolidated financial statements, the Group continues to assess the impact of the above factors on its financial position and future cash flows and thoroughly monitors all developments. Considering the current Group cash flows forecasts, management has concluded that the Group and the Parent Company will continue in operation and be able to meet their obligations as they fall due. To mitigate the risks of potential COVID-19 developments on the Group's operations management has implemented and continues to maintain a number of measures including those related to production and supply processes continuity, staff safety and support of local medical infrastructure in areas where the Group operates.

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").

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".

The following amended standards and interpretations are effective from 1 January 2020 but did not have a significant impact on the Group's consolidated financial statements:
- Amendments to References to Conceptual Framework in IFRS Standards;
- Definition of Material (Amendments to IAS 1 and IAS 8);
- Extension of the Temporary Exemption from Applying IFRS 9 (Amendments to IFRS 4);
- Interest Rate Benchmarking Reform (Amendments to IFRS 9, IAS 39 and IFRS 7).

The Group applied Definition of a Business (Amendments to IFRS 3) to business combinations whose acquisition dates are on or after 1 January 2020 in assessing whether it had acquired a business or a group of assets. The details of accounting policies and details of the Group's acquisition of subsidiary during the year ended 31 December 2020 are set out in notes 12 and 15(e).

A number of new standards are effective for annual periods beginning after 1 January 2021 and earlier application is permitted; however, the Group has not early adopted the new or amended standards in preparing these consolidated financial statements.
- Onerous contracts – Cost of Fulfilling a Contract (Amendments to IAS 37);
- Interest Rate Benchmark Reform – Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16);
- COVID-19-Related Rent Concessions (Amendment to IFRS 16);
- Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16);
- Reference to Conceptual Framework (Amendments to IFRS 3);
- Classification of liabilities as current or non-current (Amendments to IAS 1);
- Sale or Contribution of Assets between an Investor and its Associate or Joint Venture (Amendments to IFRS 10 and IAS 28);
- IFRS 17 Insurance Contracts and amendments to IFRS 17 Insurance Contracts.

The above new standards, except for IFRS 17 Insurance Contracts and amendments to IFRS 17 Insurance Contracts, are not expected to have a significant impact on the Group's consolidated financial statements. The Group is currently assessing the potential impact of IFRS 17 Insurance Contracts and amendments to IFRS 17 Insurance Contracts on the Group's consolidated financial statements.

(b) Basis of measurement

The consolidated financial statements have been prepared in accordance with the historical cost basis except as set out in the significant accounting policies in notes 11, 15(e) and 19.

(c) Functional and presentation currency

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

(d) Use of 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 are discussed in note 25.

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

In December 2009, the Group sold to third parties under share purchase contracts all the shares in two Cypriot companies of the Group controlling 34.16% of the shares in Irkutsk GridCo; subsequently the Group purchased 19.9% of the shares in Irkutsk GridCo. The arrangements attached to the share purchase contracts enable the Group to retain certain rights with respect to the disposed shares and the sale did not result in deconsolidation. As at 31 December 2020, the effective interest in Irkutsk GridCo held by the Group is 52.4% (31 December 2019: 52.4%).

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

3. Significant accounting policies

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

The accounting policies and judgements applied by the Group in these consolidated financial statements are the same as those applied by the Group in its consolidated financial statements as at and for the year ended 31 December 2019.

(a) Basis of consolidation

(i) Subsidiaries and non-controlling interests

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

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

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

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

Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so causes the non-controlling interests to have a deficit balance.
Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling-interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (refer to note 15) or, when appropriate, the cost on initial recognition of an investment in an associate or joint venture (refer to note 13).

(ii) Acquisitions of non-controlling interests

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

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

For a written put or forward option with the non-controlling shareholders in an existing subsidiary on their equity interest in that subsidiary, if the non-controlling shareholders do not have present access to the returns associated with the underlying ownership interest, the contract is accounted for as an anticipated acquisition of the underlying non-controlling interests, as if the put option had been exercised already or the forward had been satisfied by the non-controlling shareholders.

(iii) 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.

(b) Foreign currencies

(i) Foreign currency transactions

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

(ii) Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated from their functional currencies to USD at the exchange rates ruling at the reporting date. The income and expenses of foreign operations are translated to USD at exchange rates approximating exchange rates at the dates of the transactions.

Foreign currency differences arising on translation are recognised in other comprehensive income and presented in the currency translation reserve in equity. For the purposes of foreign currency translation, the net investment in a foreign operation includes foreign currency intra-group balances for which settlement is neither planned nor likely in the foreseeable future and foreign currency differences arising from such a monetary item are recognised in the statement of profit or loss and other comprehensive income.

When a foreign operation is disposed of, such that control, significant influence or joint control is lost, the cumulative amount of the currency translation reserve is transferred to profit or loss as part of the gain or loss on disposal. When the Group disposes of only part of its interest in a subsidiary that includes a foreign operation while retaining control, the relevant proportion of the cumulative amount is reattributed to non-controlling interests. When the Group disposes of only part of its investment in an associate or joint venture that includes a foreign operation while retaining significant influence or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.

When the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely in the foreseeable future, foreign exchange gains and losses arising from such a monetary item are considered to form part of a net investment in a foreign operation and are recognised in other comprehensive income, and presented in the translation reserve in equity.

4. Segment reporting

(a) Reportable segments

An operating segment is a component of the Group that engages in business activities from which it may earn revenue and incur expenses, including revenue and expenses that relate to transactions with any of the Group's other components. All operating segments' operating results are reviewed regularly by the Group's key executive management to make decisions about resources to be allocated to the segment and assess its performance and for which discrete consolidated financial statements are available.

Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

Based on the current management structure and internal reporting the Group has identified two operating segments:
(a) Metals. The Metals segment comprises UC RUSAL with disclosures being based on the public financial statements of UC RUSAL. All adjustments made to UC RUSAL, including any adjustments arising from different timing of IFRS first time adoption, are included in "Adjustments" column. The Power assets of UC RUSAL are included within the Metals segment.
(b) Power. The Power segment mainly comprises the power assets, as described in note 1(b).

These business units are managed separately and the results of their operations are reviewed by the key executive management personnel and Board of Directors on a regular basis.

In 2019, the Board of Directors has commissioned a full review of strategic options with respect to the Irkutsk-region coal and coal-fired power assets as part of the Group's commitment to minimising its carbon footprint. At the date of these consolidated financial statements the Group has completed the spin-off of the Irkutsk region coal-fired heat business unit into an 100% Irkutskenergo subsidiary owned as the first step.

(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 and cash flows attributable to each reportable segment on the following bases:
- Total segment assets include all tangible, intangible assets and current assets.
- Total segment liabilities include all current and non-current liabilities.
- Revenue and expenses are allocated to the reportable segments with reference to sales generated by those segments and the expenses incurred by those segments or which otherwise arise from the depreciation or amortisation of assets attributable to those segments.
- The measure used for reporting segment results is the net profit and Adjusted EBITDA (key non-IFRS financial measure used by the Group as reference for assessing operating effectiveness). Segment profit or loss and Adjusted EBITDA are 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.
- Adjusted EBITDA for any period represents the results from operating activities adjusted for amortisation and depreciation, impairment charges and gain/(losses) on disposal of property, plant and equipment for the relevant period.

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

Year ended 31 December 2020

USD million	Metals	Power	Adjustments	Total
Consolidated statement of profit or loss and other comprehensive income				
Revenue from external customers	8,440	1,916	—	10,356
Primary aluminium and alloys	6,969	—	—	6,969
Alumina and bauxite	534	—	—	534
Semi-finished products and foil	381	166	—	547
Electricity	60	1,109	—	1,169
Heat	39	387	—	426
Other	457	254	—	711
Inter-segment revenue	126	781	(907)	—
Total segment revenue	**8,566**	**2,697**	**(907)**	**10,356**
Operating expenses (excluding depreciation and loss on disposal of PPE)	(7,695)	(1,704)	904	(8,495)
Adjusted EBITDA	**871**	**993**	**(3)**	**1,861**
Depreciation and amortisation	(570)	(214)	3	(781)
(Loss)/gain on disposal of PPE	(13)	1	—	(12)
Impairment of non-current assets	(9)	(49)	—	(58)
Results from operating activities	**279**	**731**	**—**	**1,010**
Share of profits and impairment of associates and joint ventures	976	(5)	—	971
Interest expense, net	(431)	(298)	—	(729)
Other finance costs, net	(108)	(19)	—	(127)
Profit before tax	**716**	**409**	—	**1,125**
Income tax expense	43	(152)	—	(109)
Profit for the year	**759**	**257**	**—**	**1,016**
Additions to non-current segment assets during the year	(987)	(262)	7	(1,242)

Consolidated statement of financial position				
Segment assets, excluding cash and cash equivalents and interests in associates and jointly ventures	11,327	5,632	(692)	16,267
Investment in Metals segment	—	4,595	(4,595)	—
Cash and cash equivalents	2,229	333	—	2,562
Interests in associates and jointly ventures	3,822	10	—	3,832
Total segment assets	**17,378**	**10,570**	**(5,287)**	**22,661**
Segment liabilities, excluding loans and borrowings and bonds payable	3,043	1,340	(175)	4,208
Loans and borrowings	7,792	4,596	—	12,388
Total segment liabilities	**10,835**	**5,936**	**(175)**	**16,596**
Total segment equity	6,543	4,634	(5,112)	6,065
Total segment equity and liabilities	**17,378**	**10,570**	**(5,287)**	**22,661**

USD million	Metals	Power	Adjustments	Total
Consolidated statement of cash flows				
Cash flows from operating activities	**1,091**	**805**	**(6)**	**1,890**
Cash flows from/(used in) investing activities	**128**	**(211)**	**6**	**(77)**
Acquisition of property, plant and equipment, intangible assets	(897)	(237)	6	(1,128)
Other investments	(191)	(7)	—	(198)
Dividends from the jointly controlled entities and other associates	1,170	—	—	1,170
Interest received	26	30	—	56
Other investing activities	20	3	—	23
Cash flows used in financing activities	**(694)**	**(678)**	—	**(1,372)**
Interest paid	(465)	(314)	—	(779)
Restructuring fee and expenses related to issuance of shares	(12)	(14)	—	(26)
Settlements of derivative financial instruments	(215)	—	—	(215)
Other financing activities	(2)	(350)	—	(352)
Net change in cash and cash equivalents	**525**	**(84)**	—	**441**

Year ended 31 December 2019

USD million	Metals	Power	Adjustments	Total
Consolidated statement of profit or loss and other comprehensive income				
Revenue from external customers	9,593	2,159	—	11,752
Primary aluminium and alloys	7,906	—	—	7,906
Alumina and bauxite	668	—	—	668
Semi-finished products and foil	410	153	—	563
Electricity	61	1,239	—	1,300
Heat	44	418	—	462
Other	504	349	—	853
Inter-segment revenue	118	830	(948)	—
Total segment revenue	**9,711**	**2,989**	**(948)**	**11,752**
Operating expenses (excluding depreciation and loss on disposal of PPE)	(8,745)	(1,862)	982	(9,625)
Adjusted EBITDA	**966**	**1,127**	**34**	**2,127**
Depreciation and amortisation	(566)	(240)	—	(806)
Loss on disposal of PPE	(22)	(2)	—	(24)
Impairment of non-current assets	(291)	(30)	—	(321)
Results from operating activities	**87**	**855**	**34**	**976**
Share of profits of associates and joint ventures	1,669	—	—	1,669
Interest expense, net	(557)	(361)	—	(918)
Other finance costs, net	(145)	(2)	—	(147)
Profit before tax	**1,054**	**492**	**34**	**1,580**
Income tax expense	(94)	(181)	(1)	(276)
Profit for the year	**960**	**311**	**33**	**1,304**
Additions to non-current segment assets during the year	(887)	(327)	23	(1,191)

USD million	Metals	Power	Adjustments	Total
Consolidated statement of financial position				
Segment assets, excluding cash and cash equivalents and interests in associates and jointly ventures	11,793	6,409	(697)	17,505
Investment in Metals segment	—	4,595	(4,595)	—
Cash and cash equivalents	1,781	497	—	2,278
Interests in associates and jointly ventures	4,240	8	—	4,248
Total segment assets	**17,814**	**11,509**	**(5,292)**	**24,031**
Segment liabilities, excluding loans and borrowings and bonds payable	2,820	1,534	(177)	4,177
Loans and borrowings	8,247	4,235	—	12,482
Total segment liabilities	**11,067**	**5,769**	**(177)**	**16,659**
Total segment equity	6,747	5,740	(5,115)	7,372
Total segment equity and liabilities	**17,814**	**11,509**	**(5,292)**	**24,031**
Consolidated statement of cash flows				
Cash flows from operating activities	**1,652**	**932**	**(23)**	**2,561**
Cash flows from/(used in) investing activities	**246**	**(177)**	**23**	**92**
Acquisition of property, plant and equipment, intangible assets	(848)	(236)	23	(1,061)
Other investments	(85)	8	—	(77)
Dividends from the jointly controlled entities and other associates	1,141	—	—	1,141
Interest received	31	31	—	62
Other investing activities	7	20	—	27
Cash flows used in financing activities	**(949)**	**(639)**	**—**	**(1,588)**
Interest paid	(553)	(468)	—	(1,021)
Restructuring fee and expenses related to issuance of shares	(33)	(9)	—	(42)
Settlements of derivative financial instruments	(26)	—	—	(26)
Other financing activities	(337)	(162)	—	(499)
Net change in cash and cash equivalents	**949**	**116**	**—**	**1,065**

(i) 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 the bauxite mines and an alumina refinery in Guinea. In the Americas the Group operates one production facility in Jamaica, one in Guyana and a trading subsidiary in the United States of America.

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

	Year ended 31 December	
Revenue from external customers	**2020 USD million**	**2019 USD million**
Russia	3,873	4,235
Turkey	956	1,052
Netherlands	727	985
China	615	119
USA	471	652
Japan	471	440
South Korea	329	577
Poland	338	457
Greece	236	188
Italy	228	573
Germany	211	235
Taiwan	185	53
France	164	209
Sweden	146	162
Norway	134	203
Other countries	1,272	1,612
	10,356	**11,752**

	31 December	
Revenue from external customers	**2020 USD million**	**2019 USD million**
Russia	11,870	12,587
Ireland	606	655
Guinea	225	230
Ukraine	229	158
Unallocated	3,132	3,183
	16,062	**16,813**

5. Revenues

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 of goods delivered is transferred to customers prior to transportation being completed. In these cases rendering of transportation services from when the control of goods has been transferred is considered as a separate performance obligation.

Rendering of electricity supply services: The Group is involved in sales of energy to third 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.

	Year ended 31 December	
	2020 USD million	2019 USD million
Sales of primary aluminium and alloys	**6,969**	**7,906**
Third parties	6,660	5,338
Related parties — companies capable of exerting significant influence	298	2,554
Related parties — other	9	13
Related parties — associates and joint ventures	2	1
Sales of alumina and bauxite	**534**	**668**
Third parties	314	301
Related parties — companies capable of exerting significant influence	12	161
Related parties — associates and joint ventures	208	206
Sales of semi-finished products and foil	**547**	**563**
Third parties	547	563
Sales of electricity	**1,169**	**1,300**
Third parties	1,137	1,259
Related parties — companies capable of exerting significant influence	—	1
Related parties — other	5	6
Related parties — associates and joint ventures	27	34
Sales of heat	**426**	**462**
Third parties	407	438
Related parties — companies capable of exerting significant influence	2	2
Related parties — other	17	22
Other revenues	**711**	**853**
Third parties	587	711
Related parties — companies capable of exerting significant influence	5	9
Related parties — other	8	16
Related parties — associates and joint ventures	111	117
	10,356	**11,752**

The Group's customer base is diversified and includes only one major customer – Glencore International AG (a member of Glencore International Plc Group which is a shareholder of the Parent Company with shareholding of 10.55% at the reporting date) with whom transactions have exceeded 10% of the Group's revenue. In 2020, revenue from sales of primary aluminium and alloys to this customer amounted to USD 1,259 million (2019: USD 2,325 million). All revenue of the Group relates to revenue from contracts with customers.

6. Net other operating expenses

	Year ended 31 December	
	2020 USD million	2019 USD million
Impairment of trade and other receivables	(10)	(2)
Charity	(71)	(41)
Loss on disposal of property, plant and equipment	(12)	(24)
Other operating expenses, net	(67)	(44)
	(160)	**(111)**

7. Personnel costs

Personnel costs comprise salaries, annual bonuses, annual leave and cost of non-monetary benefits. Salaries, annual bonuses, paid annual leave and cost of non-monetary benefits are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

The employees of the Group are also members of retirement schemes operated by local authorities. The Group is required to contribute a certain percentage of their payroll to these schemes to fund the benefits.

The Group's total contribution to those schemes charged to profit or loss during the years presented is shown below.The Group's net obligation in respect of defined benefit pension and other post-retirement plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value and the fair value

of any plan assets are deducted. The discount rate is the yield at the reporting date on government bonds that have maturity dates approximating the terms of the Group's obligations. The calculation is performed using the projected unit credit method. When the calculation results in a benefit to the Group, the recognised asset is limited to the present value of any future refunds from the plan or reductions in future contributions to the plan.

Where there is a change in actuarial assumptions, the resulting actuarial gains and losses are recognised directly in other comprehensive income.

When the benefits of a plan are improved, the portion of the increased benefit relating to past service by employees is recognised in profit or loss immediately.

The Group recognises gains and losses on the curtailment or settlement of a defined benefit plan when the curtailment or settlement occurs. The gain or loss on curtailment comprises any resulting change in the fair value of plan assets, any change in the present value of the defined benefit obligation, any related actuarial gains and losses.The Group also makes contributions for the benefit of employees to Russia's and the Ukrainian State's pension funds. The contributions are expensed as incurred.

	Year ended 31 December	
	2020 USD million	2019 USD million
Contributions to defined contribution retirement plans	(225)	(254)
Contributions to defined benefit retirement plans	(5)	(4)
Total retirement costs	(230)	(258)
Wages and salaries	(1,023)	(1,058)
	(1,253)	**(1,316)**

8. Finance income and costs

Finance income comprises interest income on funds invested, dividend income and foreign currency gains. Interest income is recognised as it accrues, using the effective interest method.

Finance costs comprise interest expense on borrowings, foreign currency losses and changes in the fair value of financial assets at fair value through profit or loss. All borrowing costs are recognised in profit or loss using the effective interest method, except for borrowing costs related to the acquisition, construction and production of qualifying assets which are recognised as part of the cost of such assets.

Foreign currency gains and losses are reported on a net basis. Foreign exchange gain on loans and borrowing for the year ended 31 December 2020 amounted to USD 291 million (2019: loss of USD 213 million).

	Year ended 31 December	
	2020 USD million	2019 USD million
Finance income		
Net foreign exchange gain	98	—
Interest income	61	82
Dividend income	1	1
	160	**83**
Finance costs		
Interest expense	(788)	(987)
Change in fair value of derivative financial instruments (refer to note 19)	(226)	(21)
Net foreign exchange loss	—	(114)
Other finance costs	(2)	(26)
	(1,016)	**(1,148)**

9. Earnings per share

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders for the years ended 31 December 2020 and 31 December 2019.

	Year ended 31 December	
	2020	2019
Issued ordinary shares at beginning of the year	638,848,896	571,428,572
Issuance of shares (note 16(a)(i))	—	67,420,324
Acquisition of own shares (note 1(a))	(136,511,122)	—
Weighted average number of shares	518,002,985	634,231,066
Profit for the year attributable to the shareholders of the Parent Company, USD million	684	860
Basic and diluted earnings per share, USD	**1.320**	**1.356**

Acquisition of own shares (note 1(a)) was accounted for in the weighted average numbers of shares calculation for the year ended 31 December 2020 only.

There were no outstanding dilutive instruments during the years ended 31 December 2020 and 31 December 2019.

10. Income tax expense

Income tax expense comprises current and deferred tax. Income tax expense is recognised in the statement of profit or loss and other comprehensive income except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of goodwill, the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit, and differences relating to investments in subsidiaries to the extent that they probably will not reverse in the foreseeable future. New information may become available that causes the Group to change its judgement regarding the adequacy of existing tax liabilities. Such changes to tax liabilities will impact tax expenses in the period that such a determination is made. Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same taxation authority and the Group has both the right and the intention to settle its current tax assets and liabilities on a net or simultaneous basis.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which temporary differences can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Additional income taxes that arise from the distribution of dividends are recognised at the same time as the liability to pay the related dividends is recognised.

(a) Income tax expense

	Year ended 31 December	
	2020 USD million	**2019 USD million**
Current tax expense		
Current tax for the year	(223)	(369)
Deferred tax expense		
Origination and reversal of temporary differences	114	93
	(109)	**(276)**

On 9 July 2019, the Parent Company redomiciled to Russia's SAR (special administrative region) and became a Russian tax resident. Companies which register in the SAR as part of the continuance out of a foreign jurisdiction (such as the Parent Company) may have a number of tax benefits, subject to certain conditions. Before redomiciliation, the Parent Company was a tax resident of Cyprus.

The Parent Company and subsidiaries pay income taxes in accordance with the legislative requirements of their respective tax jurisdictions. For companies domiciled in Russia the applicable tax rate is 20%; in Ukraine of 18%; Guinea of 0%; China of 25%; Kazakhstan of 20%; Australia of 30%; Jamaica of 25%; Ireland of 12.5%, Sweden of 21.4% and Italy of 27.9%. For the Group's subsidiaries domiciled in Switzerland the applicable tax rate for the year is the corporate income tax rate in the Canton of Zug, Switzerland, which differs depending on the company's tax status. The rate consists of a federal income tax and a cantonal/communal income and capital taxes. The latter includes a base rate and a multiplier, which may change from year to year. Applicable income tax rate is 11.91% for Swiss subsidiaries. For the UC RUSAL's significant trading companies, the applicable tax rate is 0%. The applicable tax rates for the year ended 31 December 2019 were the same as for the year ended 31 December 2020 except for tax rates for subsidiaries domiciled in Switzerland which amounted to 9.55% and 14.35% accordingly.

Reconciliation of effective tax rate

	Year ended 31 December			
	2020		2019	
	USD wion	%	USD million	%
Profit before taxation	**1,125**	**(100)**	**1,580**	**(100)**
Income tax at tax rate applicable for the Parent Company	(225)	20	(316)	20
Other non-deductible/taxable items, net	115	(10)	(27)	2
Effect of changes in investment in Norilsk Nickel	186	(17)	154	(10)
Change in unrecognised deferred tax assets	(243)	22	(49)	3
Effect of reversal/(accrual) of impairment	30	(3)	(79)	5
Income tax related to prior periods, including provision			(2)	—
Effect of different income tax rates	28	(2)	43	(3)
Income tax	**(109)**	**10**	**(276)**	**17**

(b) Recognised deferred tax assets and liabilities

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

	Assets		Liabilities		Net	
	31 December		31 December		31 December	
USD million	2020	2019	2020	2019	2020	2019
Property, plant and equipment	72	84	(1,287)	(1,391)	(1,215)	(1,307)
Inventories	65	100	(15)	(13)	50	87
Trade and other receivables	40	34	(24)	(19)	16	15
Financial instruments	8	7	(6)	(8)	2	(1)
Tax loss carry-forward	187	78	—	—	187	78
Others	498	368	(433)	(318)	65	50
Tax assets/(liabilities)	870	671	(1,765)	(1,749)	(895)	(1,078)
Set off of tax	(626)	(506)	626	506	—	—
Net deferred tax assets/(liabilities)	**244**	**165**	**(1,139)**	**(1,243)**	**(895)**	**(1,078)**

(c) Movement in temporary differences during the year

USD million	1 January 2020	Recognised in profit or loss	Recognised in equity	Currency translation	31 December 2020
Property, plant and equipment	(1,307)	12	(46)	126	(1,215)
Inventories	87	(37)	—	—	50
Trade and other receivables	15	2	—	(1)	16
Financial instruments	(1)	3	—	—	2
Tax loss carry-forwards	78	113	—	(4)	187
Others	50	21	—	(6)	65
	(1,078)	**114**	**(46)**	**115**	**(895)**

USD million	1 January 2019	Recognised in profit or loss	Currency translation	31 December 2019
Property, plant and equipment	(1,254)	30	(83)	(1,307)
Inventories	43	44	—	87
Trade and other receivables	13	1	1	15
Financial instruments	(2)	1	—	(1)
Tax loss carry-forwards	52	25	1	78
Others	54	(8)	4	50
	(1,094)	**93**	**(77)**	**(1,078)**

Recognised tax losses expire in the following years:

Year of expiry	31 December 2020 USD million	31 December 2019 USD million
Without expiry	187	78
	187	**78**

(d) Unrecognised deferred tax assets

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

	31 December 2020 USD million	31 December 2019 USD million
Deductible temporary differences	976	855
Tax loss carry-forwards	444	337
	1,420	**1,192**

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 2020 USD million	31 December 2019 USD million
Without expiry	443	335
From 2 to 5 years	—	2
Up to 1 year	1	—
	444	**337**

(e) Unrecognised deferred tax liabilities

The Group's subsidiaries have retained earnings where dividend distributions are subject to taxation, for which deferred taxation has not been provided because remittance of the earnings has been indefinitely postponed through reinvestment and, as a result, such amounts are considered to be permanently invested. It was not practicable to determine the amount of temporary differences relating to investments in subsidiaries where the Group is able to control the timing of reversal of the difference. Reversal is not expected in the foreseeable future.

(f) Current taxation in the consolidated statement of financial position represents:

	31 December 2020 USD million	31 December 2019 USD million
Net income tax payable/ (receivable) at the beginning of the year	10	116
Income tax for the year	223	369
Income tax paid	(226)	(424)
Dividend withholding tax	—	(57)
Translation difference	—	6
	7	**10**
Represented by:		
Income tax payable (note 15(c))	28	38
Income tax receivable (note 15(b))	(21)	(28)
Net income tax payable/(receivable)	**7**	**10**

11. Property, plant and equipment

(a) Accounting policy

(i) Recognition and measurement

Until 1 January 2016, all items of property, plant and equipment were measured at cost less accumulated depreciation and impairment losses. The cost of property, plant and equipment at 1 January 2004, the date of transition to IFRSs, was determined by reference to its fair value at that date.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of 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 profit or loss.

Most of the hydro assets have long useful lives (up to 100 years) and their performance does not deteriorate significantly. Considering recent changes in the regulation of the Russian power sector (100% liberalisation) and the fact that hydropower is one of the most efficient sectors of the electric power industry, management believes that hydropower assets were significantly undervalued prior to 1 January 2016.

On 1 January 2016, the Group identified a separate class of assets – hydro assets – and changed its accounting policy for this class from the cost to the revaluation model to provide users with more relevant information on the Group's financial position.

Hydro assets are a class of property, plant and equipment with unique nature and use in their hydropower plants. Since 1 January 2016, hydro assets are measured at a revalued amount, being their fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Revaluations are made based on periodic valuation by an external independent valuer.

A class of assets may be revalued on a rolling basis provided that revaluations of the class of assets are completed within a short period and provided the revaluations are kept up to date.

After an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount of the asset.

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

(ii) Subsequent costs

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

(iii) Exploration and evaluation assets

Exploration and evaluation activities involve the search for mineral resources, the determination of technical feasibility and the assessment of commercial viability of an identified resource. Exploration and evaluation activities include:
- researching and analysing historical exploration data;
- gathering exploration data through topographical, geochemical and geophysical studies;
- exploratory drilling, trenching and sampling;
- determining and examining the volume and grade of the resource;
- surveying transportation and infrastructure requirements; and
- conducting market and finance studies.

Administration costs that are not directly attributable to a specific exploration area are charged to profit or loss. License costs paid in connection with a right to explore in an existing exploration area are capitalised and amortised over the term of the permit.

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

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

(iv) Stripping costs

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

(v) Mining assets

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

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

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

(vi) Depreciation

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

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

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

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

(b) Disclosure

USD million	Land and buildings	Machinery and equipment	Electrolysers	Hydro assets	Mining assets	Construction in progress	Other	Total
Cost/Deemed cost								
1 January 2019	4,506	7,522	2,544	3,578	590	2,072	358	21,170
Additions	25	56	131	—	13	964	2	1,191
Acquired through business combinations	4	—	—	—	—	2	—	6
Disposals	(24)	(312)	(8)	—	(2)	(28)	(56)	(430)
Transfers	171	331	42	10	4	(575)	17	—
Change in estimate of site restoration provision	—	—	—	—	14	—	—	14
Translation difference	164	182	4	438	54	83	20	945
At 31 December 2019	**4,846**	**7,779**	**2,713**	**4,026**	**673**	**2,518**	**341**	**22,896**
Additions	67	4	120	—	31	1,020	—	1,242
Acquired through business combinations	10	8	—	—	—	2	1	21
Disposals	(14)	(97)	—	—	(10)	(18)	(6)	(145)
Transfers	137	360	43	4	1	(684)	139	—
Revaluation of hydro assets as at 31 December 2020	—	—	—	65	—	—	—	65
Change in estimate of site restoration provision	—	—	—	—	(2)	—	—	(2)
Translation difference	(256)	(262)	(8)	(652)	(77)	(145)	(42)	(1,442)
At 31 December 2020	**4,790**	**7,792**	**2,868**	**3,443**	**616**	**2,693**	**433**	**22,635**
Depreciation and impairment losses								
1 January 2019	(2,360)	(5,213)	(2,210)	—	(473)	(1,276)	(266)	(11,798)
Depreciation charge	(152)	(384)	(144)	(95)	(10)	—	(17)	(802)
(Impairment losses)/ reversal of impairment	(106)	(76)	(32)	—	(39)	(11)	5	(259)
Disposals	4	106	5	—	1	—	7	123
Transfers	5	8	—	—	—	—	—	13
Translation difference	(83)	(106)	(4)	(4)	(46)	(36)	(11)	(290)
At 31 December 2019	**(2,692)**	**(5,665)**	**(2,385)**	**(99)**	**(567)**	**(1,323)**	**(282)**	**(13,013)**
Depreciation charge	(148)	(361)	(156)	(83)	(8)	—	(24)	(780)
(Impairment losses)/ reversal of impairment	26	(30)	(3)	—	(21)	17	3	(8)
Disposals	6	86	—	—	3	—	4	99
Transfers	1	1	—	(1)	—	—	—	1
Revaluation of hydro assets as at 31 December 2020	—	—	—	165	—	—	—	165
Translation difference	133	169	8	18	65	60	25	478
At 31 December 2020	**(2,674)**	**(5,800)**	**(2,536)**	**—**	**(528)**	**(1,246)**	**(274)**	**(13,058)**
Net book value								
At 1 January 2019	2,146	2,309	334	3,578	117	796	92	9,372
At 31 December 2019	**2,154**	**2,114**	**328**	**3,927**	**106**	**1,195**	**59**	**9,883**
At 31 December 2020	**2,116**	**1,992**	**332**	**3,443**	**88**	**1,447**	**159**	**9,577**

Depreciation expense of USD 738 million (2019: USD 775 million) has been charged to cost of goods sold, USD 6 million (2019: USD 10 million) to distribution expenses and USD 27 million (2019: USD 17 million) to administrative expenses.

Interest capitalised for the years ended 31 December 2020 and 31 December 2019 was USD 12 million and USD 28 million, respectively.

Included in construction in progress at 31 December 2020 and 31 December 2019 are advances to suppliers of property, plant and equipment of USD 145 million and USD 102 million, respectively.

Disposals of property, plant and equipment with net book value of USD 153 million represent cancellation of lease agreements in 2019.

(c) Impairment

Management reviewed the carrying amount of the Group's non-financial assets at the reporting date to determine whether there were any indicators of impairment or reversal of impairment.

Management identified several factors that indicated that for a number of the Group's CGUs previously recognised impairment losses may require reversal and for a number of CGUs impairment losses may need to be recognised. These include a significant decrease of aluminium and alumina prices during the year as a result of LME depreciation and overall market instability, fluctuations of coal sale prices and additional volumes of electricity transmission set in further periods as well as separation of new CHPs CGU (refer below). Despite LME recovery during last quarter of 2020, market forecasts demonstrate slightly depressed level of prices compared to the spot prices as at reporting date. In aluminium production, the Group benefited from decreases in cash costs due to depreciation of the Russian rouble against the USD as almost all aluminium plants of the Group are located in Russia. For alumina cash generating units, the major influences were a decrease in alumina prices and favourable dynamics in energy prices being a significant part of cash cost. For bauxite cash generating units, bauxite sales prices were generally stable. For Irkutsk GridCo cash generating unit the regulated tariffs were set for additional volumes of electricity transmission from 2021.

For the purposes of impairment testing, value in use of each cash generating unit was determined by discounting expected future net cash flows of the cash generating unit. 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 risk factors related to future COVID-19 uncertainties have been incorporated into the discount rates applied.

METALS

At 31 December 2020 and 31 December 2019, management identified several indicators that a number of the Group's CGUs may be impaired or that previously recognised impairment losses may need to be reversed.

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 USD 158 million.

Based on results of impairment testing as at 31 December 2019, management concluded that a reversal of previously recognised impairment losses relating to property, plant and equipment should be recognised in respect of Aughinish and Cobad cash generating units in the amount of USD 363 million. Additionally, management concluded that impairment losses in respect of KAZ, VgAZ, BAZ and UAZ, Kubal, Kremny and Windalco cash generating units, in the amount of USD 545 million should be recognised.

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	
	2020	2019
Taishet aluminium smelter	11.8%	10.7%
Mykolaiv alumina refinery	18.7%	16.0%
Kubikenborg Aluminium (Kubal)	19.8%	11.1%
Windalco	27.0%	18.6%
BAZ and UAZ (Bogoslovsk and Ural aluminium smelters)	15.0%	12.5%
KAZ (Kandalaksha aluminium smelter)	15.5%	12.5%
VgAZ (Volgograd aluminium smelter)	14.8%	12.0%
Compagnie de Bauxites de Dian-Dian (Cobad)	20.0%	20.0%
Aughinish Alumina	11.9%	12.0%

The results are particularly sensitive to the following key assumptions:
- A 5% reduction in the projected aluminium price level would have resulted in the decrease in the recoverable amount of aluminium plants of UC RUSAL and would lead to the impairment in the total amount of up to 5% of carrying amount of property, plant and equipment of UC RUSAL;
- A 5% reduction in the projected aluminium sales volumes would have resulted in the decrease in the recoverable amount of aluminium plants of UC RUSAL and would lead to the impairment in the total amount of up to 3% of carrying amount of property, plant and equipment of UC RUSAL;
- A 5% increase in the projected level of electricity costs in the aluminium production would have resulted in the decrease in the recoverable amount of aluminium plants of UC RUSAL but would not lead to an impairment of property plant and equipment of UC RUSAL;
- A 5% increase in the projected level of alumina prices would have resulted in the decrease in the recoverable amount of aluminium plants of UC RUSAL, would have resulted in the increase in the recoverable amount of alumina plants of UC RUSAL and would not lead to an impairment of carrying amount of property plant and equipment of UC RUSAL;
- A 1% increase in each of the discount rates applied would have resulted in the decrease in the recoverable amount of all cash generating units by 11% but would not lead to an impairment of property, plant and equipment of UC RUSAL;
- A 10% appreciation of the Russian rouble would have resulted in the decrease in the recoverable amount of all Russian–based plants of UC RUSAL by 26% but would not lead to an impairment of property, plant and equipment of UC RUSAL.

Additionally, management identified specific items of property, plant and equipment that are no longer in use and therefore are not considered to be recoverable amounting to USD 117 million at 31 December 2020 (2019: USD 49 million). These assets have been impaired in full. No further impairment of property, plant and equipment or reversal of previously recorded impairment was identified.

POWER

The Irkutsk region coal-fired heat business (note 4(a)) was spin-off during the year thus creating two CGUs from Irkutskenergo CGU, CHPs and Angara HPPs, requiring separate analysis and impairment testing. The main assumptions used to determine the recoverable amount of the Angara HPPs CGU are disclosed in note 12(d).

At 31 December 2020 and 2019, management identified several indicators that property, plant and equipment of the Coal, Irkutsk GridCo and CHPs cash-generating units (CGUs) may be impaired or that previously recognised impairment losses may need to be reversed.

Based on results of impairment testing as at 31 December 2020 and 31 December 2019, management concluded that no impairment losses or reversal of previously recognised impairment losses should be recognised.

The following key assumptions were used to determine the recoverable amount of the Coal CGU:

	Year ended 31 December	
	2020	2019
Sales volumes of coal in 2021/2020	12,885 ths tonnes	14,825 ths tonnes
Expected growth of sales volumes of coal till 2030/2029	12%	2%
Weighted average price for coal in 2021/2020	USD 12 (RUB 890)	USD 14 (RUB 929)
Weighted average price growth after 2021/2020	4%	4%
Post-tax discount rate	12.5%	13%

The recoverable amount of the Coal CGU is particularly sensitive to changes in forecast of sales volumes, coal prices and applicable discount rates. A 1% increase of the discount rate applied would have resulted in the decrease in the recoverable amount of Coal CGU but would not lead to an impairment.

The following key assumptions were used to determine the recoverable amount of the Irkutsk GridCo CGU:

	Year ended 31 December	
	2020	2019
Sales volumes of electricity transmission in 2021/2020	50 mln MWh	46 mln MWh
Expected growth of sales volumes till 2030/2029	10.0%	15,7%
Tariffs for electricity transmission in 2021/2020	USD 6 -9 (RUB 400-629)	USD 6 -10 (RUB 393-628)
Tariffs growth till 2030/2029	42%	40%
Post-tax discount rate	12.0%	12.3%

The anticipated price/tariffs growth included in the cash flow projections for the years from 2022 to 2030 has been based on the publicly available forecasts of Ministry of Economic Development of the Russian Federation.

The recoverable amounts estimated at 31 December 2020 and 31 December 2019 includes cash flows from sales of electricity transmission to Taishet aluminium smelter starting from 2021. If the Taishet aluminium smelter is not commissioned, a significant impairment of property, plant and equipment may need to be recognised.

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

The following key assumptions were used to determine the recoverable amount of the CHPs CGU:

	Year ended 31 December 2020
Electricity sales volumes in 2021	27 million MWh
Electricity sales volumes growth till 2030	5%
Electricity sales prices in 2021	USD 8-26 (RUB 568-1,916)
Electricity sales prices growth till 2030	40%-42%
Sales volumes of heat in 2021-2030	20 million Gcal
Heat tariffs in 2021	USD 16 (RUB 1,186)
Tariffs growth till 2030	67%
Post-tax discount rate	13.0%

The recoverable amount of CHP CGU is particularly sensitive to changes in forecast electricity sales prices as well as applicable discount rates.

Additionally, management identified specific items of property, plant and equipment that are not considered to be recoverable amounting to USD 49 million (2019: USD 30 million). No further impairment of property, plant and equipment or reversal of previously recorded impairments was identified.

(d) Security

The carrying value of property, plant and equipment which is subject to lien under loan agreements was USD 1,086 million at 31 December 2020 (31 December 2019: USD 1,262 million) (note 17).

(e) Hydro assets

As disclosed in note 11(a)(i), the Group regularly performs an independent valuation of its hydro assets. As at 31 December 2020, the independent appraiser estimated the fair value of hydro assets at USD 3,443 million with an equity effect of USD 230 million and revaluation loss of USD nil million recognised in profit or loss.

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

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

In addition, cash flow testing was conducted to identify if there is any economic obsolescence of the hydro assets. Forecasts of net cash flows were determined based on the actual results for the preceding years and approved budgets. Based on the analysis results, there was no economic obsolescence as at 31 December 2020 or 2019. The fair value measurement for hydro assets have been categorised as Level 3 fair values based on the inputs to the valuation techniques used.

As at 31 December 2019, a valuation by external independent appraiser was not performed because based on management's analysis, the fair value of hydro assets approximated their carrying amount at that date.

Net book value as at 31 December 2020 according to the cost model amounted to USD 333 million (31 December 2019: USD 404 million).

(f) 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 USD 68 million during the year ended 31 December 2020 (31 December 2019: USD 9 million). The carrying amounts of right-of-use assets are presented below.

	Property, plant and equipment		
USD Million	**Land and buildings**	**Machinery and equipment**	**Total**
Balance at 1 January 2020	34	7	41
Balance at 31 December 2020	67	4	71

Total depreciation charges related to the right-of-use assets for the year ended 31 December 2020 amount to USD 20 million (31 December 2019: USD 11 million).

USD 2 million of right-of-use assets have been impaired during the year ended 31 December 2020 (31 December 2019: USD 8 million). The Group's total cash outflow for leases was in the amount of USD 29 million for the year ended 31 December 2020 (31 December 2019: USD 15 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 USD 173 million as at 31 December 2020 (31 December 2019: USD 145 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 2020 amounted to USD 57 million (31 December 2019: USD 33 million).

Total interest costs on leases recognised for the year ended 31 December 2020 amount to USD 9 million (31 December 2019: USD 6 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 USD 18 million is included in cost of sales or administrative expenses depending on type of underlying asset for the year ended 31 December 2020 (31 December 2019: USD 34 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.

12. Goodwill and intangible assets

(a) Accounting policy

(i) Goodwill

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

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.

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

When the fair value of the Group's share of identifiable net assets acquired exceeds the cost of acquisition, the difference is recognised immediately in profit or loss.

(ii) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in profit or loss when incurred.

Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditure is capitalised only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable and the Group intends to and has sufficient resources to complete development and to use or sell the asset. The expenditure capitalised includes the cost of materials, direct labour and overhead costs that are directly attributable to preparing the asset for its intended use and capitalised borrowing costs. Other development expenditure is recognised in profit or loss when incurred.

Capitalised development expenditure is measured at cost less accumulated amortisation and accumulated impairment losses (refer to note 11(c)).

(iii) Other intangible assets

Other intangible assets that are acquired by the Group, which have finite useful lives, are measured at cost less accumulated amortisation and accumulated impairment losses (refer to note 11(c)).

(iv) Subsequent expenditure

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

(v) Amortisation

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

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

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

(b) Disclosure

USD million	Goodwill	Other intangible assets	Total
Cost			
Balance at 1 January 2019	**2,528**	**612**	**3,140**
Additions	—	43	43
Disposals	—	(22)	(22)
Foreign currency translation	158	12	170
Balance at 31 December 2019	**2,686**	**645**	**3,331**
Additions	33	27	60
Disposals	—	(48)	(48)
Foreign currency translation	(234)	(19)	(253)
Balance at 31 December 2020	**2,485**	**605**	**3,090**
Amortisation and impairment losses			
Balance at 1 January 2019	**(450)**	**(495)**	**(945)**
Amortisation charge	—	(4)	(4)
Foreign currency translation	—	(6)	(6)
Balance at 31 December 2019	**(450)**	**(505)**	**(955)**
Amortisation charge	—	(10)	(10)
Disposals		48	48
Foreign currency translation	—	8	8
Balance at 31 December 2020	**(450)**	**(459)**	**(909)**
Net book value			
At 1 January 2019	2,078	117	2,195
At 31 December 2019	2,236	140	2,376
At 31 December 2020	**2,035**	**146**	**2,181**

Goodwill additions for the year ended 31 December 2020 relate to acquisition of PGLZ LLC (note 15(e)) and was determined as the difference between the consideration paid and the fair value of acquired assets and liabilities.

(c) Amortisation charge

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

(d) Impairment testing of goodwill and other intangible assets

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

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

USD million	Allocated goodwill 2020	Accumulated impairment loss 2020	Allocated goodwill 2019	Accumulated impairment loss 2019
UC RUSAL	2,273	(449)	2,429	(449)
Angara HPPs (Irkutskenergo)	211	—	256	—
Strikeforce Mining and Resources Limited (“SMR”)	1	(1)	1	(1)
	2,485	**(450)**	**2,686**	**(450)**

METALS

For the purposes of impairment testing, the entire amount of goodwill is allocated to the aluminium segment of UC RUSAL’s operations, except for goodwill arisen from PGLZ LLC acquisition (note 15(e)). The aluminium segment represents the lowest level within UC RUSAL at which 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 UC RUSAL’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 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;
- Aluminium sales prices were based on the long-term aluminium price outlook derived from available industry and market sources at USD 1,919 per tonne for primary aluminium in 2021, USD 1,906 in 2022, USD 1,927 in 2023, USD 1,955 in 2024, USD 2,003 in 2025. Alumina prices were derived from the same sources as aluminium prices at USD 295 per tonne for alumina in 2021, USD 304 in 2022, USD 307 in 2023, USD 318 in 2024, USD 335 in 2025. Operating costs were projected based on the historical performance adjusted for inflation;
- Nominal foreign currency exchange rates applied to convert operating costs of the Group denominated in RUB into USD were RUB 73.2 for one USD in 2021, RUB 71.9 in 2022, RUB 71.2 in 2023, RUB 72.5 in 2024, RUB 74.1 in 2025. Inflation of 3.8%–4.1% in RUB and 1.5%–2.2% in USD was assumed in determining recoverable amounts;
- The pre-tax discount rate was estimated in nominal terms based on the weighted average cost of capital basis and was 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 as at 31 December 2020.

At 31 December 2019, management analysed changes in the economic environment and developments in the aluminium industry and the Group's operations since 31 December 2018 and performed an impairment test for goodwill at 31 December 2019 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 8.2 million metric tonnes of alumina and of 15.4 million metric tonnes of bauxite. Bauxite and alumina are primarily used internally for the production of primary aluminium;
- Sales prices were based on the long-term aluminium price outlook derived from available industry and market sources at USD 1,802 per tonne for primary aluminium in 2020, USD 1,860 in 2021, USD 1,952 in 2022, USD 2,028 in 2023, USD 2,099 in 2024. Alumina prices were derived from the same sources as aluminium prices at USD 301 per tonne for alumina in 2020, USD 311 in 2021, USD 322 in 2022, USD 341 in 2023, USD 349 in 2024. Operating costs were projected based on the historical performance adjusted for inflation;
- Nominal foreign currency exchange rates applied to convert operating costs of the Group denominated in RUB into USD were RUB 65.8 in 2020, RUB 65.4 in 2021, RUB 63.9 in 2022, RUB 63.0 in 2023, RUB 63.6 in 2024. Inflation of 4.0%–4.6% in RUB and 1.7%–2.1% in USD was assumed in determining recoverable amounts;
- The pre-tax discount rate was estimated in nominal terms based on the weighted average cost of capital basis and was 11.3%;
- A terminal value was derived following the forecast period assuming a 1.7% annual growth rate.

Values assigned to key assumptions and estimates used to measure the 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 44% and would lead to an impairment in the amount of USD 1,241 million;
- A 5% increase in the projected level of electricity and alumina costs in the aluminium production would have resulted in a 21% 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 as at 31 December 2019.

POWER

Goodwill primarily resulted from the acquisition of Irkutskenergo's HPPs. For the purposes of impairment testing, goodwill is allocated to the Angara HPPs CGU. In 2019 goodwill was allocated to Irkutskenergo CGU (see note 11(c)). It represents the lowest level within the Group at which goodwill is monitored for internal management purposes.

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

The recoverable amount of Angara HPPs in 2020 and Irkutskenergo in 2019 was determined by reference to its value in use derived by discounting of the future cash flows generated from continuing use of production facilities.

The following key assumptions were used to determine the recoverable amount of the Angara HPPs cash-generating unit at 31 December 2020:
- The sales volumes in 2020 were projected based on the approved budgets for 2021. In particular, the sales volumes of electricity in 2021 and 2022 were planned at the level of 48 million MWh with an insignificant decline by 1% till 2030.
- Sales prices were based on the long-term price outlook derived from the available industry and market sources. The prices for electricity were estimated at the levels of USD 0.5–11.5 (RUB 39–846) per MWh depending on market segment in 2021 and increased by 19–40% respectively till 2030. Operating costs were projected based on the historical performance and the anticipated increase during the projected period was in line with inflation.
- The post-tax discount rate was estimated in nominal terms based on the weighted average cost of capital amounted to 12.9%;
- A terminal value was derived following the forecast period assuming a 4% annual growth rate.

The following key assumptions were used to determine the recoverable amount of the Irkutskenergo cash-generating unit at 31 December 2019:

- The sales volumes in 2020 were projected based on the approved budgets for 2020. In particular, the sales volumes of electricity in 2020 and 2021 were planned at the level of 70 million MWh. The expected growth till 2029 was estimated as 1.1% as compared to 2020. The sales volumes of heat in 2020 were planned at the level of 20 million Gcal and no growth till 2029 is expected.
- Sales prices were based on the long-term price outlook derived from the available industry and market sources. The prices for electricity were estimated at the levels of USD 0.5–27.2 (RUB 34–1,759) per MWh depending on market segment in 2020 and increased by 17–51% respectively till 2029. The tariffs for heat were estimated as USD 17.5 (RUB 1,133) per Gcal in 2020 and grew by 52% till 2029. Operating costs were projected based on the historical performance of Irkutskenergo and the anticipated increase during the projected period was in line with inflation.
- The post-tax discount rate was estimated in nominal terms based on the weighted average cost of capital amounted to 13.0%;
- A terminal value was derived following the forecast period assuming a 4% annual growth rate.

Reasonable possible changes in key assumptions will not lead to an impairment.

13. Interests in associates and joint ventures

An associate is an entity in which the Group or Company has significant influence, but not control or joint control, over its management, including participation in the financial and operating policy decisions.

A joint venture is an arrangement whereby the Group or Company and other parties contractually agree to share control of the arrangement and have rights to the net assets of the arrangement.

An investment in an associate or a joint venture is accounted for in the consolidated financial statements under the equity method, unless it is classified as held for sale (or included in a disposal group that is classified as held for sale). Under the equity method, the investment is initially recorded at cost, adjusted for any excess of the Group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment (if any). Thereafter, the investment is adjusted for the post acquisition change in the Group's share of the investee's net assets and any impairment losses relating to the investment. Any acquisition-date excess over cost, the Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated statement of profit or loss and other comprehensive income, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of other comprehensive income.

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

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

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

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

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

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

	31 December	
	2020 USD million	2019 USD million
Balance at the beginning of the year	**4,248**	**3,701**
Group's share of profits, impairment and reversal of impairment	971	1,669
Acquisition and contribution to investments	9	78
Return of prepayment for shares	(11)	(41)
Dividends	(718)	(1,609)
Foreign currency translation	(667)	450
Balance at the end of the year	**3,832**	**4,248**
Goodwill included in interests in associates	**2,034**	**2,428**

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

			Proportion of ownership interest		
Name of associate/ joint venture	Place of incorporation and operation	Particulars of issued and paid up capital	Group's effective interest	Group's nominal interest	Principal activity
PJSC MMC Norilsk Nickel	Russian Federation	158,245,476 shares, RUB 1 par value	15.82%	27.82%	Nickel and other metals production
Queensland Alumina Limited	Australia	2,212,000 shares, AUD 2 par value	11.38%	20%	Production of alumina under a tolling agreement
BEMO project	Cyprus, Russian Federation	BOGES Limited and BALP Limited – 10,000 shares EUR 1.71 each	28.44%	50%	Energy/ Aluminium production

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 associates and joint ventures	
	Group share USD million	100% USD million	Group share USD million	100% USD million	Group share USD million	100% USD million	Group share USD million	100% USD million
Non-current assets	5,206	12,147	199	777	1,420	2,680	248	428
Current assets	2,381	8,559	35	181	132	255	70	169
Non-current liabilities	(2,959)	(10,619)	(92)	(359)	(945)	(1,890)	(101)	(201)
Current liabilities	(1,506)	(5,412)	(142)	(478)	(67)	(134)	(47)	(117)
Net assets	**3,122**	**4,675**	**—**	**121**	**540**	**911**	**170**	**279**

	PJSC MMC Norilsk Nickel		Queensland Alumina Limited		BEMO project		Other associates and joint ventures	
	Group share USD million	100% USD million	Group share USD million	100% USD million	Group share USD million	100% USD million	Group share USD million	100% USD million
Revenue	4,325	15,545	123	617	364	728	258	748
Profit/(loss) and impairment from continuing operations	930	3,634	—	(20)	51	52	(10)	61
Other comprehensive income/(loss)	(562)	(699)	—	1	(95)	(189)	(10)	(20)
Total comprehensive income/(loss)	**368**	**2,935**	**—**	**(19)**	**(44)**	**(137)**	**(20)**	**41**

The summary of the consolidated financial statements of associates and joint ventures for the year ended 31 December 2019 is presented below:

	PJSC MMC Norilsk Nickel		Queensland Alumina Limited		BEMO project		Other associates and joint ventures	
	Group share USD million	100% USD million	Group share USD million	100% USD million	Group share USD million	100% USD million	Group share USD million	100% USD million
Non-current assets	5,868	12,899	163	535	1,528	2,942	260	488
Current assets	1,829	6,575	33	169	151	302	65	162
Non-current liabilities	(2,726)	(9,765)	(64)	(202)	(1,012)	(2,024)	(70)	(142)
Current liabilities	(1,509)	(5,422)	(132)	(373)	(83)	(166)	(53)	(136)
Net assets	**3,462**	**4,287**	**—**	**129**	**584**	**1,054**	**202**	**372**

	PJSC MMC Norilsk Nickel		Queensland Alumina Limited		BEMO project		Other associates and joint ventures	
	Group share USD million	100% USD million	Group share USD million	100% USD million	Group share USD million	100% USD million	Group share USD million	100% USD million
Revenue	3,774	13,563	124	620	365	729	306	879
Profit/(loss) and impairment from continuing operations	1,587	5,966	—	4	49	(128)	33	69
Other comprehensive income/(loss)	383	484	—	(1)	61	123	6	2
Total comprehensive income/(loss)	**1,970**	**6,450**	**—**	**3**	**110**	**(5)**	**39**	**71**

(a) PJSC MMC Norilsk Nickel

The Group's investment in Norilsk Nickel is accounted for using equity method and the carrying value as at 31 December 2020 and 31 December 2019 amounted USD 3,122 million and USD 3,462 million, respectively. The market values amounted USD 14,123 million and USD 13,586 million as at 31 December 2020 and 31 December 2019, respectively, determined by multiplying the quoted bid price per share on the Moscow Exchange on the year-end date by the number of shares held by the Group.

(b) Queensland Alumina Limited

The carrying value of the Group's investment in Queensland Alumina Limited as at both 31 December 2020 and 31 December 2019 amounted to USD nil million. At 31 December 2020 management did not identify any impairment reversal indicators relating to the Group's investment in QAL and as a result no detailed impairment testing was performed in relation to this investment.

(c) BEMO project

The carrying values of the Group's investment in BEMO project as at 31 December 2020 and 31 December 2019 amounted USD 540 million and USD 584 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 Hydropower Plant ("BoGES"). The recoverable amount was determined by discounting the expected future net cash flows of each cash generating unit.

At 31 December 2020, management did not identify any impairment indicators relating to the Group's investment in BoGES nor 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 2020, accumulated losses of USD 443 million (2019: USD 651 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.

Additional financial information of the Group's effective interest in BEMO project for the year ended 31 December 2020 and 31 December 2019 is presented below (all in USD million):

	31 December	
	2020 USD million	2019 USD million
Cash and cash equivalents	30	60
Current financial liabilities	(43)	(41)
Non-current financial liabilities	(859)	(929)
Depreciation and amortisation	(17)	(17)
Interest income	1	3
Interest expense	(15)	(18)
Income tax expense	(13)	(12)

14. Inventories

Inventories are measured at the lower of cost or net realisable value.

The cost of inventories is determined under the weighted average cost method, and includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity.

Net realisable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and selling expenses.

Production costs include mining and concentrating costs, smelting, treatment and refining costs, other cash costs and depreciation and amortisation of operating assets.

	31 December	
	2020 USD million	2019 USD million
Raw materials and consumables	1,127	1,247
Work in progress	591	669
Finished goods and goods for resale	778	789
	2,496	2,705
Provision for inventory obsolescence	(157)	(163)
	2,339	**2,542**

Inventories at 31 December 2020 and 31 December 2019 are stated at cost.

Inventories with a carrying value of USD 738 million and USD 383 million were pledged as collateral for secured bank loans at 31 December 2020 and 31 December 2019, respectively (note 17).

15. Non-derivative financial instruments

Non-derivative financial instruments comprise investments in securities, trade and other receivables (excluding prepayments and tax assets), cash and cash equivalents, loans and borrowings and trade and other payables (excluding advances received and tax liabilities).

Non-derivative financial instruments 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 specifies 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 the business model in which a financial asset is managed and its contractual cash flow characteristics. 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 and cash flow hedges accounted through other comprehensive income (note 19) and other investments measured at fair value through profit or loss (note 15(e)). The same applies to the Group's financial liabilities.

(a) Impairment of trade receivables

Under IFRS 9, loss allowances (expected credit losses – ECL) 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.

METALS

The following table provides information about determined ECLs rates for trade receivables both as at 1 January 2020 and 31 December 2020.

	Weighted-average loss rate		
	1 January 2020	31 December 2020	Credit-impaired
Current (not past due)	1%	1%	No
1–30 days past due	4%	4%	No
31–60 days past due	11%	10%	No
61–90 days past due	80%	71%	No
More than 90 days past due	92%	86%	Yes

POWER

The following table provides information about determined ECLs rates for trade receivables both as at 1 January 2020 and 31 December 2020.

	Weighted-average loss rate		
	1 January 2020	31 December 2020	Credit-impaired
Current (not past due)	1%	1%	No
1–90 days past due	1%	1%	No
90–180 days past due	30%	30%	No
More than 180 days past due	100%	100%	Yes

Fluctuations reflect differences between economic conditions during the period over which the historical data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

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.

(b) Trade and other receivables

	31 December 2020 USD million	31 December 2019 USD million
Trade receivables from third parties	**610**	**715**
Trade receivables from related parties, including	**63**	**115**
Related parties — companies capable of exerting significant influence	50	82
Related parties — other	2	2
Related parties — associates and joint ventures	11	31
VAT recoverable	**364**	**447**
Advances paid to third parties	**120**	**135**
Advances paid to related parties, including	**67**	**46**
Related parties — companies capable of exerting significant influence	1	—
Related parties — associates and joint ventures	66	46
Other receivables from third parties	**224**	**218**
Other taxes receivable	**30**	**26**
Income tax receivable	**21**	**28**
Dividends receivable from related parties	**—**	**430**
Related parties — associates and joint ventures	—	430
Other current assets	**8**	**7**
	1,507	**2,167**
Allowance for doubtful debts	(76)	(85)
Total short-term receivables	**1,431**	**2,082**

(i) Ageing analysis

Included in trade and other receivables are trade receivables (net of allowance for doubtful debts) with the following ageing analysis as of the statement of financial position dates:

METALS

	31 December 2020 USD million	31 December 2019 USD million
Current	372	448
Past due 0–30 days	77	99
Past due 31–60 days	2	30
Past due 61–90 days	1	—
Past due over 90 days	11	4
Amounts past due	91	133
	463	**581**

POWER

	31 December 2020 USD million	2019 USD million
Current	146	165
Past due 0–30 days	14	18
Past due 31–60 days	6	9
Past due 61–90 days	6	6
Past due 91–180 days	6	8
Past due over 180 days	1	—
Amounts past due	33	41
	179	**206**

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. The Group has concluded that there is no material impact of COVID-19 related matters described in note 1(e) on the expected credit losses assessment as at 31 December 2020.

Further details of the Group's credit policy are set out in note 20(e).

(c) Trade and other payables

	31 December 2020 USD million	2019 USD million
Accounts payable to third parties	**687**	**630**
Accounts payable to related parties, including	**52**	**49**
Related parties — companies capable of exerting significant influence	3	3
Related parties — associates and joint ventures	49	46
Advances received from third parties	**903**	**562**
Advances received from related parties, including	**—**	**392**
Related parties — companies capable of exerting significant influence	—	392
Other payables and accrued liabilities	**224**	**224**
Income tax payable	**28**	**38**
Other taxes payable	**262**	**257**
	2,156	**2,152**

All of the trade and other payables are expected to be settled or recognised as income within one year or are repayable on demand.

(c) Cash and cash equivalents

	31 December 2020 USD million	2019 USD million
Bank balances, USD	1,027	1,310
Bank balances, RUB	701	329
Bank balances, EUR	109	118
Bank balances, other currencies	33	21
Short-term bank deposits	679	476
Other cash equivalents	—	11
Cash and cash equivalents in the consolidated statement of cash flows	**2,549**	**2,265**
Restricted cash	13	13
Cash and cash equivalents in the consolidated statement of financial position	**2,562**	**2,278**

As at 31 December 2020 and 31 December 2019 included in cash and cash equivalents was restricted cash of USD 13 million and USD 13 million, respectively, pledged under a Swiss Law Pledged Agreement with BNP Paribas (Suisse) SA.

(e) Other non-current assets

	31 December	
	2020 USD million	2019 USD million
Long-term deposits	111	—
Investments in equity securities measured at fair value through profit and loss	75	1
Prepayment for subsidiary acquisition	—	71
Other non-current assets	22	36
	208	**108**

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 USD 71 million and was paid in cash as at 1 January 2020. Fair value of acquired assets and liabilities amounted to USD 24 million from which USD 21 million related to property, plant and equipment (note 11).

16. Equity

(a) Share capital, additional paid-in capital and transactions with shareholders

As at 31 December 2020, the Parent Company's share capital is divided into 638,848,896 ordinary shares with a nominal value of USD 0.00007 each. The Parent Company may also issue 75,436,818.286 ordinary shares.

As at 31 December 2020 and 31 December 2019, all issued ordinary shares were fully paid.

(i) Glencore deal

On 26 January 2019, the Parent Company issued 67,420,324 shares with a par value of USD 0.00007 each with a subsequent issue of GDRs on these shares, to Glencore Group Funding Limited pursuant to a securities exchange agreement in exchange for 8.75% shares in UC RUSAL ("Glencore deal").

Due to certain regulatory requirements, under the securities exchange agreement, Glencore has agreed to transfer its stake in UC RUSAL to the Parent Company in two stages. The first stage was settled on 31 January 2019 and 1.97% of RUSAL's shares was transferred to the Parent Company following the removal of the Parent Company and UC RUSAL from the SDN list (see note 1(d)), the remaining 6.78% of UC RUSAL's shares were transferred on 3 February 2020.

Under the Group's accounting policy, the Glencore deal was accounted for under the anticipated-acquisition method, as if the remaining 6.78% of UC RUSAL's shares had already been transferred. Fair value of the consideration transferred was determined with reference to market quotations on the London Stock Exchange.

As a result of the Glencore deal, non-controlling interests decreased by USD 435 million with respective increases of share premium of USD 543 million and other reserves of USD 251 million, and decreases of foreign currency translation reserve and accumulated losses by USD 836 million and USD 477 million, respectively.

(ii) Acquisition of non-controlling interests

In 2019, the Group acquired 0.4% of Irkutskenergo shares for USD 5 million, respectively. As a result the Group's shareholding as at 31 December 2019 in Irkutskenergo increased to 93.2%.

(b) Treasury share reserve

When shares recognised as equity are repurchased, the amount of the consideration paid, which includes directly attributable costs, net of any tax effects, is recognised as a deduction from equity. Repurchased shares are classified as treasury shares and are presented in the treasury share reserve. When treasury shares are sold or reissued subsequently, the amount received is recognised as an increase in equity, and the resulting surplus or deficit on the transaction is presented in additional paid-in capital.

The reserve for the Group's treasury shares comprises the cost of the Parent Company's shares held by the Group (note 1(a)). At the reporting date the Group held 136,511,122 (31 December 2019: nil) of its own shares.

(c) Currency translation reserve

The currency translation reserve comprises all foreign exchange differences arising from the translation of the consolidated financial statements of foreign operations. The reserve is dealt with in accordance with the a ccounting policies set out in note 3(b).

(d) Other reserves

Other reserves include the cumulative unrealised actuarial gains and losses on the Group's defined post-retirement benefit plans, the effective portion of the accumulative net change in fair value of cash flow hedges, the Group's share of other comprehensive income of associates and cumulative unrealised gains and losses on Group's financial assets which have been recognised directly in other comprehensive income.

(e) Dividends

During the years ended 31 December 2020 and 31 December 2019, the Group did not declare and pay dividends.

Following redomiciliation in July 2019, the Parent 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.

(f) Revaluation reserve

The revaluation reserve comprises the cumulative net change in the fair value of hydro assets at the reporting date and is dealt with in accordance with the accounting policies set out in note 11(a)(i).

An independent valuation analysis of hydro assets was carried out as at 31 December 2020, the fair value of hydro assets was estimated at USD 3,443 million (note 11(e)).

As a result of this fair value valuation, the Group recognised an additional revaluation reserve in the amount of USD 184 million net of tax (including USD 180 million attributable to shareholders of the Parent Company).

(g) Non-controlling interests

The following table summarises the information relating to each of the Group`s subsidiaries that has material non-controlling interest:

31 December 2020

	UC RUSAL	Irkutskenergo Group*	OJSC Irkutsk Electric Grid Company	Total
NCI percentage	**43.1%**	**6.8%**	**47.6%**	
Assets	16,894	5,176	517	
Liabilities	(10,835)	(3,200)	(165)	
Net assets	**6,059**	**1,976**	**352**	
Carrying amount of NCI	2,613	129	167	2,909
Revenue	8,566	1,598	309	
Profit	759	24	8	
Other comprehensive income	(963)	104	—	
Total comprehensive income	**(204)**	**128**	**8**	
Profit attributable to NCI	327	2	3	332
Other comprehensive income attributable to NCI	(415)	(18)	(32)	(465)
				(133)
Cash flows generated from operating activities	1,091	178	60	
Cash flows generated from/(used in) investing activities	128	(1,688)	(64)	
Cash flows (used in)/generated from financing activities	(694)	1,539	4	
Net increase in cash and cash equivalents	**525**	**29**	**—**	

* Net assets of Irkutskenergo Group were adjusted for the effect of Irkutskenergo investments in Irkutsk GridCo, Krasnoyarsk HPP and LLC KRAMZ.

31 December 2019

	UC RUSAL	Irkutskenergo Group*	OJSC Irkutsk Electric Grid Company	Total
NCI percentage	**43.1%**	**6.8%**	**47.6%**	
Assets	17,330	4,265	590	
Liabilities	(11,067)	(2,064)	(177)	
Net assets	**6,263**	**2,201**	**413**	
Carrying amount of NCI	2,701	145	196	3,042
Revenue	9,711	1,811	342	
Profit	960	172	19	
Other comprehensive income	578	(4)	—	
Total comprehensive income	**1,538**	168	**19**	
Profit attributable to NCI	418	19	7	444
Other comprehensive income attributable to NCI	267	7	21	295
				739
Cash flows generated from operating activities	1,652	213	91	
Cash flows generated from/(used in) investing activities	246	(10)	(84)	
Cash flows used in financing activities	(949)	(176)	(16)	
Net increase/(decrease) in cash and cash equivalents	**949**	**27**	**(9)**	

* Net assets of Irkutskenergo Group were adjusted for the effect of Irkutskenergo investments in Irkutsk GridCo, Krasnoyarsk HPP and LLC KRAMZ.

17. 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 20(c)(ii) and 20(c)(iii), respectively.

	31 December	
	2020 USD million	2019 USD million
Non-current liabilities		
Secured bank loans	7,756	7,626
Unsecured bank loans	22	1,086
Bonds	2,437	2,546
	10,215	**11,258**

	31 December	
	2020 USD million	2019 USD million
Current liabilities		
Current portion of secured bank loans	462	376
Current portion of unsecured bank loans	3	2
	465	**378**
Secured bank loans	260	210
Unsecured bank loans	1,387	509
Accrued interest	60	72
Bonds	1	55
	1,708	**846**
	2,173	**1,224**

(a) Loans and borrowings

	31 December 2020 USD million	31 December 2019 USD million
Non—current liabilities		
Secured bank loans		
Variable		
USD — 3M Libor + 2.10–2.25%	1,073	1,070
USD — 3M Libor + 3.00–3.75%	2,097	2,089
USD — 1M Libor + 3.60%	—	54
EUR — 6M Euribor + 1.75%	—	1
RUB — CBR + 1.50%–2.00%	4,585	2,581
Fixed		
RUB — fixed at 8.75%–9.15%	—	1,792
RUB — fixed at 10.00%–10.50%	1	39
	7,756	**7,626**
Unsecured bank loans		
Variable		
RUB — CBR + 1.00%	—	696
RUB — other	13	—
USD — 1M Libor + 2.40%	—	200
EUR — 6M Euribor + 0.67%	9	—
Fixed		
RUB — fixed at 5.00%–7.25%	—	190
	22	**1,086**
Bonds	2,437	2,546
	10,215	**11,258**
Current liabilities		
Current portion of secured bank loans		
Variable		
USD — 1M Libor + 3.60%	54	—
EUR — 6M Euribor + 1.75%–1.95%	—	2
RUB — CBR + 1.5%–2.00%	367	321
Fixed		
RUB — fixed at 8.75%–11.5%	41	53
	462	**376**
Current portion of unsecured bank loans		
Variable		
EUR — 6M Euribor + 0.67%	1	—
RUB — other	2	—
Fixed		
RUB — fixed at 5%–8.75%	—	2
	3	**2**

	31 December 2020 USD million	31 December 2019 USD million
Secured bank loans		
Variable		
USD — 3M Libor + 1.35%–1.65%	260	210
	260	**210**
Unsecured bank loans		
Variable		
USD — 1M Libor + 2.40%	200	–
RUB — CBR + 0.85%–1.00%	570	230
RUB — CBR + 1.20%–2.00%	397	14
Fixed		
USD — fixed at 2.97%–3.60%	200	200
RUB — fixed at 5.75%–8.06%	20	65
	1,387	**509**
Accrued interest	60	72
Bonds	1	55
	1,708	**846**
	2,173	**1,224**

The bank loans are secured as at 31 December 2020 and 31 December 2019 by the following:

- rights, including all monies and claims, arising out of certain sales contracts between the Group's trading subsidiaries and its ultimate customers, were assigned to secure the syndicated Pre-Export Finance Term Facility Agreement (PXF) dated 25 October 2019;
- properties, plant and equipment – refer to note 11(d);
- inventories – refer to note 14;
- shares of the Group companies as described below.

METALS

As at 31 December 2020, UC RUSAL through its subsidiaries had outstanding REPO loans backed by 1,123,968 Norilsk Nickel shares amounting to USD 260 million and maturing in June 2021.

As at 31 December 2019, UC RUSAL through its subsidiaries had outstanding REPO loans backed by 1,017,000 Norilsk Nickel shares amounting to USD 210 million and maturing in June 2020.

On 25 October 2019, UC RUSAL entered into new five-year sustainability-linked pre-export finance facility for USD 1,085,000,000. The interest rate is subject to a sustainability discount or premium depending on UC RUSAL's fulfilment of the sustainability key performance indicators (KPI). The proceeds were partly used to refinance the principal outstanding under the existing pre-export finance facility of up to USD 2 billion.

During the year ended 31 December 2019, UC RUSAL made a principal repayment of USD 1,700 million and RUB 32,769 million (USD 512 million) under the syndicated Pre-Export Finance Term Facility Agreement (PXF) and credit facilities with Sberbank and Gazprombank, respectively.

The nominal value of UC RUSAL's loans and borrowings was USD 5,329 million at 31 December 2020 (31 December 2019: USD 5,612 million).

As at 31 December 2020 and 31 December 2019, the secured bank loans are secured by certain pledges of shares of a number of UC RUSAL's subsidiaries and 25% +1 share of Norilsk Nickel (Group's associate).

POWER

In February 2020, the Group entered into 2 loan agreements with Sberbank:

Loan 1 – 3-year RUB 100.8 billion loan agreement to finance the acquisition of a 21.37% stake in the Parent Company for USD 1.6 billion from VTB (note 1(a)).

Loan 2 – loan agreement allowing the extension of the final maturity of the Loan 1 by another 4 years during 2022. In December 2019, EuroSibEnergo entered into a 7-year RUB 99.5 billion (USD 1.6 billion) loan agreement with Sberbank to fully refinance its existing obligations on more favorable commercial terms.

The nominal value of Power loans and borrowings was USD 4,610 million at 31 December 2020 (31 December 2019: USD 4,243 million).

As at 31 December 2020 and 31 December 2019, the secured bank loans are secured by certain pledges of shares of a number of Parent Company's subsidiaries, including LLC ESE–Hydrogeneration – 100% (2019: 100%), JSC Krasnoyarsk Hydro-Power Plant – 100% (2019: 50%+1 share), PJCS Irkutskenergo – 77.43% (2019: 67.70%) and JSC EuroSibEnergo – 50%+1 share (2019: nill). In December 2020, 21.37% shares of the Parent Company were pledged under RUB 100.8 billion loan agreement described above.

The fair value of the Group's liabilities measured at amortised cost approximate their carrying values as at 31 December 2020 and 31 December 2019.

(b) Bonds

On 20 March 2020, UC RUSAL repaid Panda bonds issuance (the first tranche) and redeemed bonds with notional value CNY 320 million (USD 46 million).

On 9 June 2020, placement of the exchange-traded rouble bonds of PJSC RUSAL Bratsk series BO-002P-01 in the amount of RUB 10 billion with a coupon rate 6.5% was completed and the exchange-traded rouble bonds commenced trading on the Moscow Exchange. Maturity of the bonds is ten years subject to a bondholders' put option exercisable in June 2023. In addition to the placement, UC RUSAL entered into cross-currency interest rate swaps, which resulted in the exchange-traded rouble bonds exposure of RUB 10 billion being translated into an US-dollar exposure with a maturity of 3 years and an interest rate of 2.90%. As at 31 December 2020, cross-currency interest rate swaps in respect of rouble bonds issued during the year ended 31 December 2019 and the year ended December 2020 were in force which resulted in the exchange-traded rouble bonds exposure being translated in full into an US-dollar exposure with a maturity of 3-3.5 years and an interest rate of 2.90%–4.69%. Total foreign exchange gains on bonds for the year ended 31 December 2020 are accounted for in other comprehensive income as part of the cash flow hedge result and amounted to USD 167 million.

As at 31 December 2020, 27,751 series 08 bonds, 37,817 series BO-01 bonds, 15,000,000 series BO-001P-01 bonds, 15,000,000 series BO-001P-02 bonds, 15,000,000 series BO-001P-03 bonds, 15,000,000 series BO-001P-04 bonds, 10,000,000 series BO-002P-01 bonds were outstanding (traded in the market).

The closing market price at 31 December 2020 was RUB 988, RUB 980, RUB 1,033, RUB 1,037, RUB 1,029 and RUB 1,020, RUB 999 per bond for the seven tranches, respectively.

In July 2020, UC RUSAL launched the tender offer and purchased from investors and redeemed Eurobonds for the total amount of USD 88.5 million.

On 4 September 2020, the Group repaid and redeemed the second tranche of Panda Bonds with notional value CNY 20 million (USD 3 million).

18. Provisions

(a) Accounting policy

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as finance costs.

(i) Site restoration

The mining, refining and smelting activities of the Group can give rise to obligations for site restoration and rehabilitation. Restoration and rehabilitation works can include facility decommissioning and dismantling, removal or treatment of waste materials, land rehabilitation, and site restoration. The extent of work required and the associated costs are dependent on the requirements of law and the interpretations of the relevant authorities.

Provisions for the cost of each restoration and rehabilitation program are recognised at the time that environmental disturbance occurs. When the extent of disturbance increases over the life of an operation, the provision is increased accordingly. Costs included in the provision encompass obligated and reasonably estimable restoration and rehabilitation activities expected to occur progressively over the life of the operation and at the time of closure in connection with disturbances at the reporting date.

Routine operating costs that may impact the ultimate restoration and rehabilitation activities, such as waste material handling conducted as an integral part of a mining or production process, are not included in the provision. Costs arising from unforeseen circumstances, such as the contamination caused by unplanned discharges, are recognised as an expense and liability when the event gives rise to an obligation which is probable and capable of reliable estimation.

Restoration and rehabilitation provisions are measured at the expected value of future cash flows, discounted to their present value and determined according to the probability of alternative estimates of cash flows occurring for each operation. Discount rates used are specific to the country in which the operation is located. Significant judgements and estimates are involved in forming expectations of future activities and the amount and timing of the associated cash flows. Those expectations are formed based on existing environmental and regulatory requirements.

When provisions for restoration and rehabilitation are initially recognised, the corresponding cost is capitalised as an asset, representing part of the cost of acquiring the future economic benefits of the operation. The capitalised cost of restoration and rehabilitation activities is amortised over the estimated economic life of the operation on a units of production or straight-line basis. The value of the provision is progressively increased over time as the effect of discounting unwinds, creating an expense recognised as part of finance expenses.

Restoration and rehabilitation provisions are also adjusted for changes in estimates. Those adjustments are accounted for as a change in the corresponding capitalised cost, except where a reduction in the provision is greater than the unamortised capitalised cost, in which case the capitalised cost is reduced to nil and the remaining adjustment is recognised in profit or loss. Changes to the capitalised cost result in an adjustment to future amortisation charges. Adjustments to the estimated amount and timing of future restoration and rehabilitation cash flows are a normal occurrence in light of the significant judgements and estimates involved. Factors influencing those changes include revisions to estimated reserves, resources and lives of operations; developments in technology; regulatory requirements and environmental management strategies; changes in the estimated costs of anticipated activities, including the effects of inflation and movements in foreign exchange rates; and movements in general interest rates affecting the discount rate applied.

(ii) Legal claim

In the normal course of business, the Group may be involved in legal proceedings. Where management considers that it is more likely than not that proceedings will result in the Group compensating third parties, a provision is recognised for the best estimate of the amount expected to be paid. Where management considers that it is more likely than not that proceedings will not result in the Group compensating third parties or where, in rare circumstances, it is not considered possible to provide a sufficiently reliable estimate of the amount expected to be paid, no provision is made for any potential liability under the litigation but the circumstances and uncertainties involved are disclosed as contingent liabilities. The assessment of the likely outcome of legal proceedings and the amount of any potential liability involves significant judgement. As law and regulations in many of the countries in which the Group operates are continuing to evolve, particularly in the areas of taxation, sub-soil rights and protection of the environment, uncertainties regarding litigation and regulation are greater than those typically found in countries with more developed legal and regulatory frameworks.

(b) Disclosure

USD million	Pension liabilities	Site restoration	Provisions for legal claims	Tax provisions	Total
Balance at 1 January 2019	**89**	**411**	**10**	**20**	**530**
Non-current	82	377	—	—	459
Current	7	34	10	20	71
Provisions made during the year	13	47	24	—	84
Provisions reversed during the year	(10)	(25)	—	—	(35)
Actuarial losses	17	—	—	—	17
Provisions used during the year	(8)	(2)	—	(20)	(30)
Change in estimates	—	14	—	—	14
Translation difference	10	14	3	—	27
Balance at 31 December 2019	**111**	**459**	**37**	**—**	**607**
Non-current	104	432	—	—	536
Current	7	27	37	—	71
Provisions made during the year	13	59	10	—	82
Provisions reversed during the year	(1)	(23)	—	—	(24)
Actuarial gains	(3)	—	—	—	(3)
Provisions used during the year	(7)	(3)	(9)	—	(19)
Change in estimates	—	(1)	—	—	(1)
Translation difference	(14)	(15)	(6)	—	(35)
Balance at 31 December 2020	**99**	**476**	**32**	**—**	**607**
Non-current	91	427	—	—	518
Current	8	49	32	—	89
	99	**476**	**32**	**—**	**607**

(c) Pension liabilities

As at 31 December 2020, the pension liability is represented by UC RUSAL USD 55 million (31 December 2019: USD 60 million) and Power USD 43 million (31 December 2019: USD 51 million).

The provision for pensions mainly comprises lump sum payments at retirement by aluminium plants located in Russia and Ukraine, and by electricity generating companies. The Group also provides pension benefits to eligible participants at facilities located outside of the Russian Federation and Ukraine.

METALS

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 2020 and 2019 was 48,548 and 46,581, respectively. The number of pensioners in all jurisdictions as at 31 December 2020 and 2019 was 43,422 and 41,699, respectively.

The Group expects to pay under the defined benefit retirement plans an amount of USD 4 million during the 12 month period beginning on 1 January 2021.

Actuarial valuation of pension liabilities

The actuarial valuations of UC RUSAL and the portion of UC RUSAL's funds specifically designated for the UC RUSAL's employees were completed by a qualified actuary, Robert van Leeuwen AAG, as at 31 December 2020, 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 2020 % per annum	31 December 2019 % per annum
Discount rate	5.7	6.4
Expected return on plan assets	N/A	N/A
Future salary increases	7.1	8.4
Future pension increases	3.6	5.1
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 2020 and 31 December 2019, the Group's obligations were fully uncovered as the Group has only wholly unfunded plans.

POWER

The principal assumptions used in determining pension obligations for the pension plans are shown below:

	31 December 2020	31 December 2019
Discount rate	6.0%	6.3%
Future salary increases	5.5%	5.6%
Pension and inflation rate increases	4.0%	4.1%

(d) Site restoration and environmental provisions

The Group provides for site restoration obligations when there is a specific legal or constructive obligation for mine reclamation, landfill closure (primarily comprising red mud basin disposal sites) or specific lease restoration requirements. The Group does not record any obligations with respect to decommissioning of its refining or smelting facilities and restoration and rehabilitation of the surrounding areas unless there is a specific plan to discontinue operations at a facility. This is because any significant costs in connection with decommissioning of refining or smelting facilities and restoration and rehabilitation of the surrounding areas would be incurred no earlier than when the facility is closed and the facilities are currently expected to operate over a term in excess of 50-100 years due to the perpetual nature of the refineries and smelters and continuous maintenance and upgrade programs resulting in the fair values of any such liabilities being negligible.

The site restoration provision relates primarily to mine reclamation and red mud basin disposal sites at alumina refineries and ash dumps removal at coal burning electricity and heat generation stations.

The principal assumptions used in determining site restoration provision are:

	31 December 2020	31 December 2019
Timing of cash outflows	2021: USD 49 million 2022-2026: USD 33 million 2027-2037: USD 131 million after 2037: USD 374 million	2020: USD 26 million 2021-2025: USD 223 million 2026-2036: USD 125 million after 2036: USD 240 million
Years required to fill the ash dumps	18.1	16.7
Discount rate for Irkutskenergo and Coal segment assets after adjusting for inflation	2.8%	2.6%
Risk free discount rate for UC RUSAL after adjusting for inflation	0.73%	1.96%

The risk free rate for the year 2019-2020 represents an effective rate, which comprises rates differentiated by years of obligation settlement and by currencies in which the provisions were calculated.

At each reporting date the Directors have assessed the provisions for site restoration and concluded that the provisions and disclosures are adequate.

(e) Provisions for legal claims

The Group's subsidiaries are subject to a variety of lawsuits and claims in the ordinary course of its business. As at 31 December 2020, there were several claims filed against the Group's subsidiaries contesting breaches of contract terms and non-payment of existing obligations. Management has reviewed the circumstances and estimated that the amount of probable outflow related to these claims should not exceed USD 32 million (31 December 2019: USD 37 million).

At each reporting date management has assessed the provisions for litigation and claims and concluded that the provisions and disclosures are adequate.

(f) Tax provisions

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 each reporting date management has assessed the provisions for taxation and concluded that the provisions and disclosures are adequate.

19. Derivative financial assets and liabilities

Accounting policies

The Group enters, from time to time, into various derivative financial instruments to manage its exposure to commodity price risk, foreign currency risk and interest rate risk.

Embedded derivatives are separated from the host contract and accounted for separately if the economic characteristics and risks of the host contract and the embedded derivative are not closely related, a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative and the combined instrument is not measured at fair value through profit or loss.

On initial designation of the derivative as a hedging instrument, the Group formally documents the relationship between the hedging instrument and hedged item, including the risk management objectives and strategy in undertaking the hedge transaction and the hedged risk, together with the methods that will be used to assess the effectiveness of the hedging relationship. The Group makes an assessment, both at the inception of the hedge relationship as well as on an ongoing basis, of whether the hedging instruments are expected to be highly effective in offsetting the changes in the fair value or cash flows of the respective hedged items attributable to the hedged risk, and whether the actual results of each hedge are within a range of 80%–125%. For a cash flow hedge of a forecast transaction, the transaction should be highly probable to occur and should present an exposure to variation in cash flows that ultimately could affect reported profit or loss.

Derivatives are recognised initially at fair value; attributable transaction costs are recognised in profit or loss when incurred. Subsequent to initial recognition, derivatives are measured at fair value.

The measurement of fair value of derivative financial instruments, including embedded derivatives, is based on quoted market prices. Where no price information is available from a quoted market source, alternative market mechanisms or recent comparable transactions, fair value is estimated based on the Group's views on relevant future prices, net of valuation allowances to accommodate liquidity, modelling and other risks implicit in such estimates. Changes in the fair value therein are accounted for as described below.

When a derivative is designated as the hedging instrument in a hedge of the variability in cash flows attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction that could affect profit or loss, the effective portion of changes in the fair value of the derivative is recognised in other comprehensive income and presented in the hedging reserve in equity. Any ineffective portion of changes in the fair value of a derivative is recognised in profit or loss.

When the hedged item is a non-financial asset, the amount accumulated in equity is included in the carrying amount of the asset when the asset is recognised. In other cases, the amount accumulated in equity is reclassified to profit or loss in the same period that the hedged item affects profit or loss. If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated or exercised, or the designation is revoked, then hedge accounting is discontinued prospectively. If the forecast transaction is no longer expected to occur, then the balance in equity is reclassified to profit or loss.

Changes in the fair value of separated embedded derivatives and derivative financial instruments not designated for hedge accounting are recognised immediately in profit or loss.

Disclosures

	31 December 2020		31 December 2019	
	USD million		USD million	
	Derivative assets	Derivative liabilities	Derivative assets	Derivative liabilities
Petroleum coke supply contracts and other raw materials	31	43	39	36
Forward contracts for aluminium and other instruments	19	9	21	18
Cross currency swap (note 17(b))	—	133	48	—
Total	**50**	**185**	**108**	**54**
Non-current	**20**	**28**	**33**	**27**
Current	**30**	**157**	**75**	**27**

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:

	2021	2022	2023	2024	2025
LME Al Cash, USD per tonne	1,991	2,029	2,077	2,122	2,164
Platt's FOB Brent, USD per barrel	51	50	50	49	-

The movement in the balance of Level 3 fair value measurements of derivatives is as follows:

	31 December	
	2020 USD million	2019 USD million
Balance at the beginning of the year	54	11
Unrealised changes in fair value recognised in statement of profit or loss (finance (expense)/income) during the year	(226)	(21)
Unrealised changes in fair value recognised in other comprehensive income (cash flow hedge) during the year	(53)	34
Realised portion of electricity, coke and raw material contracts and cross currency swap	90	30
Balance at the end of the year	**(135)**	**54**

During the year 2020, 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.

UC RUSAL 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, LME aluminium price and average monthly aluminium quotations. UC RUSAL also sells products to various third parties at prices that are influenced by changes in London Metal Exchange aluminium prices. From time to time UC RUSAL 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 2020, the Group recognised a total net loss of USD 226 million in relation to the above contracts (31 December 2019: loss of USD 21 million). Unrealised changes in fair value recognised in other comprehensive income (cash flow hedge) during the period are fully attributable to cross currency swaps (note 17(b)).

20. Financial risk management and fair values

(a) Fair values

Management believes that the fair values of financial assets and liabilities approximate their carrying amounts.

The methods used to estimate the fair values of the financial instruments are as follows:

Trade and other receivables, short-term investments, cash and cash equivalents, current loans and borrowings and trade and other payables: the carrying amounts approximate fair value because of the short maturity period of the instruments.

Long-term loans and borrowings, other non-current liabilities: the fair values of other non-current liabilities are based on the present value of the anticipated cash flows and approximate carrying value, other than Eurobonds and RUSAL Bratsk bonds issued.

Derivatives: the fair value of derivative financial instruments, including embedded derivatives, is based on quoted market prices. Where no price information is available from a quoted market source, alternative market mechanisms or recent comparable transactions, fair value is estimated based on the Group's views on relevant future prices, net of valuation allowances to accommodate liquidity, modelling and other risks implicit in such estimates. Option-based derivatives are valued using Black-Scholes models and Monte-Carlo simulations. The derivative financial instruments are recorded at their fair value at each reporting date.

The following table presents the fair value of Group's financial instruments measured at the end of the reporting period on a recurring basis, categorised into the three-level fair value hierarchy as defined by IFRS 13, Fair value measurement. The level into which a fair value measurement is classified is determined with reference to the observability and significance of the inputs used in the valuation technique as follows:
- Level 1 valuations: Fair value measured using only Level 1 inputs i.e. unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date.
- Level 2 valuations: Fair value measured using Level 2 inputs i.e. observable inputs which fail to meet Level 1, and not using significant unobservable inputs. Unobservable inputs are inputs for which market data are not available.
- Level 3 valuations: Fair value measured using significant unobservable inputs.

As at 31 December 2020

		Carrying amount				Fair value			
	Note	Designated at fair value USD million	Financial assets at amortised cost 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	19	31	—	—	31	—	—	31	31
Forward contracts for aluminium and other instruments	19	19	—	—	19	—	—	19	19
Other non-current assets	15(e)	—	—	75	75	75	—	—	75
		50	**—**	**75**	**125**	**75**	**—**	**50**	**125**
Financial assets not measured at fair value*									
Trade and other receivables	15(b)	—	1,247	—	1,247	—	1,247	—	1,247
Short-term investments		—	237	—	237	—	237	—	237
Cash and cash equivalents	15(d)	—	2,562	—	2,562	—	2,562	—	2,562
		—	**4,046**	**—**	**4,046**	**—**	**4,046**	**—**	**4,046**
Financial liabilities measured at fair value									
Cross currency swaps	19	(133)	—	—	(133)	—	—	(133)	(133)
Petroleum coke supply contracts and other raw materials	19	(43)	—	—	(43)	—	—	(43)	(43)
Forward contracts for aluminium and other instruments	19	(9)	—	—	(9)	—	—	(9)	(9)
		(185)	**—**	**—**	**(185)**	**—**	**—**	**(185)**	**(185)**
Financial liabilities not measured at fair value*									
Loans and borrowings	17(a)	—	—	(9,950)	(9,950)	—	(9,788)	—	(9,788)
Unsecured bond issue	17(b)	—	—	(2,438)	(2,438)	(972)	(1,574)	—	(2,546)
Trade and other payables	15(c)	—	—	(1,253)	(1,253)	—	(1,253)	—	(1,253)
		—	**—**	**(13,641)**	**(13,641)**	**(972)**	**(12,615)**	**—**	**(13,587)**

* The Group considers that the carrying amounts of short-term trade receivables and payables are a reasonable approximation of fair values.

As at 31 December 2019

	Note	Carrying amount				Fair value			
		Designated at fair value USD million	Financial assets at amortised cost 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	19	39	—	—	39	—	—	39	39
Forward contracts for aluminium and other instruments	19	21	—	—	21	—	—	21	21
Cross currency swaps	19	48	—	—	48	—	—	48	48
		108	**—**	**—**	**108**	**—**	**—**	**108**	**108**
Financial assets not measured at fair value*									
Trade and other receivables	15(b)	—	1,901	—	1,901	—	1,901	—	1,901
Short-term investments		—	241	—	241	—	241	—	241
Cash and cash equivalents	15(d)	—	2,278	—	2,278	—	2,278	—	2,278
		—	**4,420**	**—**	**4,420**	**—**	**4,420**	**—**	**4,420**
Financial liabilities measured at fair value									
Petroleum coke supply contracts and other raw materials	19	(36)	—	—	(36)	—	—	(36)	(36)
Forward contracts for aluminium and other instruments	19	(18)	—	—	(18)	—	—	(18)	(18)
		(54)	**—**	**—**	**(54)**	**—**	**—**	**(54)**	**(54)**
Financial liabilities not measured at fair value*									
Loans and borrowings	17(a)	—	—	(9,881)	(9,881)	—	(10,038)	—	(10.038)
Unsecured bond issue	17(b)	—	—	(2,601)	(2,601)	(1,002)	(1,700)	—	(2,702)
Trade and other payables	15(c)	—	—	(1,198)	(1,198)	—	(1,198)	—	(1,198)
		—	**—**	**(13,680)**	**(13,680)**	**(1,002)**	**(12,936)**	**—**	**(13,938)**

* 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 and trade payables. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various financial assets such as trade receivables and cash and short-term deposits, which arise directly from its operations.

The main risks arising from the Group's financial instruments are cash flow interest rate risk, liquidity risk, foreign currency risk and credit risk. Management reviews and agrees policies for managing each of these risks which are summarised below.

The Board of Directors has overall responsibility for the establishment and oversight of the Group's risk management framework.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

(c) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising returns.

(i) Tariffs and commodity price risk

During the years ended 31 December 2020 and 31 December 2019, the Group has entered into certain commodity derivatives contracts in order to manage its exposure of commodity price risks.

The tariffs for electricity, heat and transmission services applied by the Group's significant subsidiaries are currently partially determined by government bodies. The Group cannot directly influence or mitigate the risks in relation to the change in tariffs.

A significant portion of the Group's generation activities is based on coal burning stations. A change in coal prices may have a significant impact on the Group's operations. To mitigate the risk of fluctuations in coal prices, the Group has historically increased its internal coal production through acquisition of coal mines and licences in the Eastern Siberia region.

(ii) Interest rate risk

The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term debt obligations with floating interest rates (note 17). The Group's policy is to manage its interest costs by monitoring changes in interest rates with respect to its borrowings.

The following table details the interest rate profile of the Group's and the Company's borrowings at the reporting date.

	31 December 2020		31 December 2019	
	Effective interest rate %	USD million	Effective interest rate %	USD million
Fixed rate loans and borrowings				
Loans and borrowings (note 17(a))	0.01%-10.5%	2,700	0.01%-11.5%	4,942
		2,700		4,942
Variable rate loans and borrowings				
Loans and borrowings (note 17(a))	0.67%-6.25%	9,628	1.75%-8.25%	7,468
		9,628		7,468
		12,328		12,410

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 USD million
As at 31 December 2020			
Basis percentage points	+100	(96)	(77)
Basis percentage points	-100	96	77
As at 31 December 2019			
Basis percentage points	+100	(75)	(60)
Basis percentage points	-100	75	60

(iii) Foreign currency risk

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of group entities, primarily USD but also the Russian Rouble, Ukrainian Hryvna and Euros. The currencies in which these transactions primarily are denominated are RUB, USD and EUR.

Borrowings are primarily denominated in currencies that match the cash flows generated by the underlying operations of the Group, primarily USD but also RUB and EUR. This provides an economic hedge.

In respect of other monetary assets and liabilities denominated in foreign currencies, the Group ensures that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances or entering into currency swap arrangements.

The Group's exposure at the reporting date to foreign currency risk arising from recognised assets and liabilities denominated in a currency other than the functional currency of the entity to which they relate is set out in the table below. Differences resulting from the translation of the financial statements of foreign operations into the Group's presentation currency are ignored.

	USD-denominated vs. RUB functional currency 31 December		RUB-denominated vs. USD functional currency 31 December		EUR-denominated vs. USD functional currency 31 December		Denominated in other currencies vs. USD functional currency 31 December	
USD million	2020	2019	2020	2019	2020	2019	2020	2019
Non-current assets	—	—	—	3	1	—	—	8
Derivative financial assets	—	—	31	40	—	—	—	—
Trade and other receivables	1	1	582	662	64	55	31	43
Cash and cash equivalents	1	26	508	85	104	125	25	35
Loans and borrowings	(314)	(54)	(1,433)	(1,980)	—	—	—	—
Provisions	—	—	(78)	(66)	(27)	(26)	(12)	(14)
Derivative financial liabilities	—	—	(32)	(11)	(6)	—	—	—
Income tax	—	—	(2)	(2)	—	—	(6)	(8)
Non-current liabilities	—	—	(1)	(1)	(6)	(6)	—	—
Short-term bonds	—	—	(1)	(7)	—	—	—	(49)
Trade and other payables	—	—	(404)	(351)	(49)	(42)	(88)	(74)
Net exposure arising from recognised assets and liabilities	**(312)**	**(27)**	**(830)**	**(1,628)**	**81**	**106**	**(50)**	**(59)**

Foreign currency sensitivity analysis

The following tables indicate the 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 2020		
	Change in exchange rates	Effect on profit before taxation for the year USD million	Effect on equity for the year USD million
Depreciation of USD vs. RUB	15%	(78)	(79)
Depreciation of USD vs. EUR	10%	8	8
Depreciation of USD vs. other currencies	5%	(3)	(3)

	Year ended 31 December 2019		
	Change in exchange rates	Effect on profit before taxation for the year USD million	Effect on equity for the year USD million
Depreciation of USD vs. RUB	15%	(240)	(240)
Depreciation of USD vs. EUR	10%	11	11
Depreciation of USD vs. other currencies	5%	(3)	(3)

Results of the analysis as presented in the above tables represent an aggregation of the 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's policy is to maintain sufficient cash and cash equivalents or have available funding through an adequate amount of committed credit facilities to meet its operating and financial commitments.

The following tables show the remaining contractual maturities at the reporting date of the Group's non-derivative financial liabilities, which are based on contractual undiscounted cash flows (including interest payment computed using contractual rates, or if floating, based on rates current at the reporting date) and the earliest the Group can be required to pay, except loans presented as payable on demand due to breach of covenant:

	31 December 2020 Contractual undiscounted cash outflow					
	Within 1 year or on demand USD million	More than 1 year but less than 2 years USD million	More than 2 years but less than 5 years USD million	More than 5 years USD million	TOTAL USD million	Carrying amount USD million
Trade and other payables to third parties	1,201	—	—	—	1,201	1,201
Trade and other payables to related parties	52	—	—	—	52	52
Bonds, including interest payable	153	1,251	1,356	—	2,760	2,438
Loans and borrowings, including interest payable	2,541	2,433	3,282	3,260	11,516	9,950
	3,947	3,684	4,638	3,260	15,529	13,641
Financial guarantees issued: Maximum amount guaranteed	69	45	—	—	114	—

	31 December 2019 Contractual undiscounted cash outflow					
	Within 1 year or on demand USD million	More than 1 year but less than 2 years USD million	More than 2 years but less than 5 years USD million	More than 5 years USD million	TOTAL USD million	Carrying amount USD million
Trade and other payables to third parties	1,149	—	—	—	1,149	1,149
Trade and other payables to related parties	49	—	—	—	49	49
Bonds, including interest payable	219	161	2,720	—	3,100	2,601
Loans and borrowings, including interest payable	1,763	2,528	6,825	1,005	12,121	9,881
	3,180	2,689	9,545	1,005	16,419	13,680
Financial guarantees issued: Maximum amount guaranteed	69	67	—	—	136	—

At 31 December 2020 and 31 December 2019, UC RUSAL's contractual undertaking to provide loans under the loan agreement between UC RUSAL, PJSC RusHydro and BoAZ is included at maximum exposure for the Group in the liquidity risk disclosure above (note 22(d)).

(e) Credit risk

The Group trades only with recognised, creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. The majority of the Group's third party trade receivables represent balances with the world's leading international corporations operating in the metals industry. In addition, receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is not significant. Goods are normally sold subject to retention of title clauses, so that in the event of 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 15. Cash balances are held with high credit quality financial institutions. The extent of the Group's credit exposure is represented by the aggregate balance of financial assets and financial guarantees and loan commitments given.

At 31 December 2020 and 31 December 2019, the Group has no concentration of credit risk within any single largest customer but 5.2% and 14.6% of the total trade receivables were due from the Group's five largest customers.

(f) Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group manages its capital structure and makes adjustments to it, in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

The Board's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board of Directors monitors the return on capital, which the Group defines as net operating income divided by total shareholders' equity, excluding non-controlling interests. The Board of Directors also monitors the level of dividends to ordinary shareholders.

The Board seeks to maintain a balance between higher returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position.

There were no changes in the Group's approach to capital management during the year.

The Company and its subsidiaries were subject to externally imposed capital requirements in the both years presented in these consolidated financial statements.

(g) Master netting or similar agreements

The Group may enter into sales and purchase agreements with the same counterparty in the normal course of business. The related amount receivable and payable do not always meet the criteria for offsetting in the statement of financial position.

The following table sets out the carrying amounts of recognised financial instruments that are subject to the above agreements.

	Year ended 31 December 2020	
	Trade receivables USD million	Trade payables USD million
Gross amounts	71	(61)
Net amounts presented in the statement of financial position	71	(61)
Amounts related to recognised financial instruments that do not meet some or all of the offsetting criteria	(23)	23
Net amount	48	(38)

	Year ended 31 December 2019	
	Trade receivables USD million	Trade payables USD million
Gross amounts	99	(77)
Net amounts presented in the statement of financial position	99	(77)
Amounts related to recognised financial instruments that do not meet some or all of the offsetting criteria	(33)	33
Net amount	66	(44)

21. Commitments

(a) Capital commitments

METALS

UC RUSAL has entered into contracts that result in contractual obligations primarily relating to various construction and capital repair works. The commitments at 31 December 2020 and 31 December 2019 approximated USD 490 million and USD 298 million, respectively. These commitments are due over a number of years.

POWER

The Power segment had outstanding capital commitments which had been contracted for at 31 December 2020 and 31 December 2019 in the amount of USD 269 million and USD 326 million, respectively. These commitments are due over a number of years.

(b) Purchase commitments

Commitments with third parties for purchases of alumina, bauxite, other raw materials and other purchases in 2021-2034 under supply agreements are estimated from USD 3,256 million to USD 4,644 million at 31 December 2020 (31 December 2019: USD 3,257 million to USD 4,135) depending on the actual purchase volumes and applicable prices.

Commitments with related parties for purchases of primary aluminium, alloys and other purchases in 2021-2030 under supply agreements are estimated from USD 4,741 million to USD 6,964 million at 31 December 2020 (31 December 2019: USD 5,134 million to USD 8,636 million) depending on the actual purchase volumes and applicable prices.

(c) Sale commitments

Commitments with third parties for sales of alumina and other raw materials in 2021-2034 are estimated from USD 865 million to USD 1,375 million at 31 December 2020 (31 December 2019: from USD 962 million to USD 1,292 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 2020. Commitments with related parties for sales of alumina in 2020-2024 approximated from USD 413 million to USD 771 million at 31 December 2019.

Commitments with related parties for sales of primary aluminium and alloys in 2021 are estimated from USD 224 million to USD 269 million at 31 December 2020 (31 December 2019: from USD 375 million to USD 563 million). Commitments with third parties for sales of primary aluminium and alloys in 2021-2025 are estimated to range from USD 7,738 million to USD 11,602 million at 31 December 2020 (31 December 2019: from USD 1,720 million to USD 2,559 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.

22. 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 from the authorities' previous interpretations or practices. Recent events within the Russian Federation suggest that the tax authorities are taking
a more assertive and substance-based position in their interpretation and enforcement of tax legislation.

The Russian taxation system is continually evolving and is subject to frequent changes, starting from 1 January 2015, changes aimed at regulating tax consequences of transactions with foreign companies and their activities were introduced, such as the concept of beneficial ownership of income, taxation of controlled foreign companies, tax residency rules, country-by-country reporting etc. This legislation and practice of its application is still evolving and the impact of legislative changes should be considered based on the actual circumstances.

All these circumstances may create tax risks in the Russian Federation that are substantially more significant than in other countries. Management believes that it has provided adequately for tax liabilities based on its interpretations of applicable Russian tax legislation, official pronouncements and court decisions. However, the interpretations of the tax authorities and courts, especially due to reform of the supreme courts that are resolving tax disputes, could differ and the effect on these consolidated financial statements, if the authorities were successful in enforcing their interpretations, could be significant.

In addition to the amounts of income tax the Group has provided, there are certain 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. The Group's best estimate of the aggregate maximum of additional amounts that it is reasonably possible may become payable if these tax positions were not sustained at 31 December 2020 is USD 36 million (31 December 2019: USD 34 million).

(b) Environmental contingencies

The Group and its predecessor entities have operated in the Russian Federation, Ukraine, Jamaica, Guyana, the Republic of Guinea and the European Union for many years and certain environmental problems have developed. Governmental authorities are continually considering environmental regulations and their enforcement and the Group periodically evaluates its obligations related thereto. As obligations are determined, they are recognised immediately. The outcome of environmental liabilities under proposed or any future legislation, or as a result of stricter enforcement of existing legislation, cannot reasonably be estimated. Under current levels of enforcement of existing legislation, management believes there are no possible liabilities, which will have a material adverse effect on the financial position or the operating results of the Group. However, the Group anticipates undertaking significant capital projects to improve its future environmental performance.

(c) Legal contingencies

The Group's business activities expose it to a variety of lawsuits and claims which are monitored, assessed and contested on an ongoing basis. Where management believes that a lawsuit or another claim would result in the outflow of the economic benefits for the Group, a best estimate of such outflow is included in provisions in the consolidated financial statements (note 18(e)). As at 31 December 2020, the amount of claims, where management assesses outflow as possible approximates USD 21 million (31 December 2019: USD 21 million).

(d) Other contingent liabilities

Where the Group enters into financial guarantee contracts to guarantee the indebtedness of related parties, 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.

In September 2013, UC RUSAL 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 RUB 16.8 billion (31 December 2020 and 2019 USD 227 million and USD 272 million, respectively) and is split between the Group and PJSC RusHydro in equal proportion.

23. Related party transactions

(a) Accounting policy

(a) A person, or a close member of that person's family, is related to the Group if that person:
- (i) has control or joint control over the Group;
- (ii) has significant influence over the Group; or
- (iii) is a member of the key management personnel of the Group or the Group's parent.

(b) An entity is related to the Group if any of the following conditions applies:
- (i) The entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).
- (ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).
- (iii) Both entities are joint ventures of the same third party.
- (iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.
- (iv) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.
- (vi) The entity is controlled or jointly controlled by a person identified in (a).
- (vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).
- (viii) The entity, or any member of a group of which it is a part, provides key management personnel services to the group or to the group's parent.

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

(b) Transactions with related parties

The Group transacts with related parties, the majority of which are under control of SUAL Partners Limited or its shareholders, associates and joint ventures and other related parties.

Sales to related parties for the year are disclosed in note 5, trade receivables from related parties are disclosed in note 15(b), accounts payable to related parties are disclosed in note 15(c).

Purchases of raw materials and services from related parties for the period were as follows:

	Year ended 31 December	
	2020 USD million	2019 USD million
Purchase of raw materials	(480)	(533)
Companies capable of exerting significant influence	(15)	(54)
Other related parties	—	(25)
Associates and joint ventures	(465)	(454)
Energy costs	(63)	(46)
Companies capable of exerting significant influence	(27)	(5)
Other related parties	(1)	(1)
Associates and joint ventures	(35)	(40)
Other services	(114)	(126)
Other related parties	(2)	(2)
Associates and joint ventures	(112)	(124)
	(657)	(705)

(c) Related parties balances

At 31 December 2020, included in non-current assets are balances of related parties — associates and joint ventures of USD 4 million (31 December 2019: USD 2 million). At 31 December 2020, included in non-current liabilities are balances of related parties – associates and joint ventures of USD 12 million (31 December 2019: USD 11 million).

(d) Remuneration to key management

For the year ended 31 December 2020, remuneration to key management personnel comprised short-term benefits and amounted to USD 19 million from which Board members received USD 7 million (year ended 31 December 2019: USD 22 million from which Board members received USD 10 million).

24. Events subsequent to the reporting date

On 28 January 2021, UC RUSAL entered into new three-year sustainability-linked pre-export finance facility for up to USD 200 million. The interest rate is subject to a sustainability discount or premium depending on the UC RUSAL's fulfilment of the sustainability key performance indicators (KPI). The proceeds were used to refinance the principal outstanding under the existing debt.

In December 2020, Taishet aluminium smelter signed a 15 years syndicated loan agreement for up to RUB 45 bln with VTB and Gazprombank to finance project construction, including refinancing of own expenses made in 2020. Drawdowns commenced in February 2021 and shall be made further on in accordance with the disbursement schedule.

25. Accounting estimates and judgements

The Group has identified the following critical accounting policies under which significant judgements, estimates and assumptions are made and where actual results may differ from these estimates under different assumptions and conditions and may materially affect financial results of the financial position reported in future periods.

Property, plant and equipment – recoverable amount

In accordance with the Group's accounting policy, each asset or cash generating unit is evaluated every reporting period to determine whether there are any indications of impairment. If any such indication exists, a formal estimate of recoverable amount is performed and an impairment loss is recognised to the extent that carrying amount exceeds recoverable amount. The recoverable amount of an asset or cash generating group of assets is measured at the higher of fair value less costs to sell and value in use.

Fair value is determined as the amount that would be obtained from the sale of the asset in an arm's length transaction between knowledgeable and willing parties, and is generally determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset, including any expansion prospects, and its eventual disposal.

Value in use is also generally determined as the present value of the estimated future cash flows, but only those expected to arise from the continued use of the asset in its present form and its eventual disposal. Present values are determined using a risk-adjusted pre-tax discount rate appropriate to the risks inherent in the asset. Future cash flow estimates are based on expected production and sales volumes, commodity prices (considering current and historical prices, price trends and related factors), reserves (refer "Reserve estimates" below), operating costs, restoration and rehabilitation costs and future capital expenditure. This policy requires management to make these estimates and assumptions which are subject to risk and uncertainty; hence there is a possibility that changes in circumstances will alter these projections, which may impact the recoverable amount of the assets. In such circumstances, some or all of the carrying value of the assets may be impaired and the impairment would be charged against the profit or loss.

Property, plant and equipment – hydro assets – fair value

In accordance with the Group's accounting policy, hydro assets are carried at a revalued amount, being their fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Revaluations are made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period.

The valuation analysis is primarily based on the cost approach to determine depreciated replacement cost. This method considers the cost to reproduce or replace the property, plant and equipment, adjusted for physical depreciation, functional and economic obsolescence.

This policy requires management to make estimates and assumptions regarding both costs, as there is no active market for used assets of that type, and macroeconomic indicators to assess economic obsolescence which are subject to risk and uncertainty; hence there is a possibility that changes in circumstances will alter these estimates, which may impact the fair value of hydro assets. In such circumstances, the fair value of hydro assets may be lower with any consequential decrease in revaluation reserve recognised through other comprehensive income.

Inventories – net realisable value

The Group recognises write-downs of inventories based on an assessment of the net realisable value of the inventories. A write-down is applied to the inventories where events or changes in circumstances indicate that the net realisable value is less than cost. The determination of net realisable value requires the use of judgement and estimates. Where the expectation is different from the original estimates, such a difference will impact the carrying value of the inventories and the write-down of inventories charged to the profit or loss in the periods in which such estimate has been changed.

Goodwill – recoverable amount

In accordance with the Group's accounting policy, goodwill is allocated to the Group's reportable business segments as they represent the lowest level within the Group at which the goodwill is monitored for internal management purposes and is tested for impairment annually at 31 December by preparing a formal estimate of recoverable amount. Recoverable amount is estimated as the value in use of the business segment.

Similar considerations to those described above in respect of assessing the recoverable amount of property, plant and equipment apply to goodwill.

Investments in associates and joint ventures – recoverable amount

In accordance with the Group's accounting policies, each investment in an associate or joint venture is evaluated every reporting period to determine whether there are any indications of impairment after application of the equity method of accounting. If any such indication exists, a formal estimate of recoverable amount is performed and an impairment loss recognised to the extent that the carrying amount exceeds the recoverable amount. The recoverable amount of an investment in an associate or joint venture is measured at the higher of fair value less costs to sell and value in use.

Similar considerations to those described above in respect of assessing the recoverable amount of property, plant and equipment apply to investments in associates or joint ventures. In addition to the considerations described above the Group may also assess the estimated future cash flows expected to arise from dividends to be received from the investment, if such information is available and considered reliable.

Legal proceedings

In the normal course of business, the Group may be involved in legal proceedings. Where management considers that it more likely than not that proceedings will result in the Group compensating third parties a provision is recognised for the best estimate of the amount expected to be paid. Where management considers that it is more likely than not that proceedings will not result in the Group compensating third parties or where, in rare circumstances, it is not considered possible to provide a sufficiently reliable estimate of the amount expected to be paid, no provision is made for any potential liability under the litigation but the circumstances and uncertainties involved are disclosed as contingent liabilities.

The assessment of the likely outcome of legal proceedings and the amount of any potential liability involves significant judgement. As law and regulations in many of the countries in which the Group operates are continuing to evolve, particularly in the areas of taxation, sub-soil rights and protection of the environment, uncertainties regarding litigation and regulation are greater than those typically found in countries with more developed legal and regulatory frameworks.

Provision for restoration and rehabilitation

The Group's accounting policy requires the recognition of provisions for the restoration and rehabilitation of each site when a legal or constructive obligation exists to dismantle the assets and restore the site. The provision recognised represents management's best estimate of the present value of the future costs required. Significant estimates and assumptions are made in determining the amount of restoration and rehabilitation provisions. Those estimates and assumptions deal with uncertainties such as: changes to the relevant legal and regulatory framework; the magnitude of possible contamination and the timing, extent and costs of required restoration and rehabilitation activity. These uncertainties may result in future actual expenditure differing from the amounts currently provided.

The provision recognised for each site is periodically reviewed and updated based on the facts and circumstances available at the time. Changes to the estimated future costs for operating sites are recognised in the statement of financial position by adjusting both the restoration and rehabilitation asset and provision. Such changes give rise to a change in future depreciation and interest charges. For closed sites, changes to estimated costs are recognised immediately in profit or loss.

Taxation

The Group's accounting policy for taxation requires management's judgement in assessing whether deferred tax assets and certain deferred tax liabilities are recognised on the statement of financial position. Deferred tax assets, including those arising from carried forward tax losses, capital losses and temporary differences, are recognised only where it is considered more likely than not that they will be recovered, which is dependent on the generation of sufficient future taxable profits. Deferred tax liabilities arising from temporary differences in investments, caused principally by retained earnings held in foreign tax jurisdictions, are recognised unless repatriation of retained earnings can be controlled and is not expected to occur in the foreseeable future.

Assumptions about the generation of future taxable profits and repatriation of retained earnings depend on management's estimates of future cash flows. These depend on estimates of future production and sales volumes, commodity prices, reserves, operating costs, restoration and rehabilitation costs, capital expenditure, dividends and other capital management transactions. Assumptions are also required about the application of income tax legislation. These estimates and assumptions are subject to risk and uncertainty, hence there is a possibility that changes in circumstances will alter expectations, which may impact the amount of deferred tax assets and deferred tax liabilities recognised on the statement of financial position and the amount of other tax losses and temporary differences not yet recognised. In such circumstances, some or all of the carrying amount of recognised deferred tax assets and liabilities may require adjustment, resulting in a corresponding credit or charge to profit or loss.

The Group generally provides for current tax based on positions taken (or expected to be taken) in its tax returns. Where it is more likely than not that upon examination by the tax authorities of the positions taken by the Group additional tax will be payable, the Group provides for its best estimate of the amount expected to be paid (including any interest and/or penalties) as part of the tax charge.

Reserve estimates

Reserves are estimates of the amount of product that can be economically and legally extracted from the Group's properties. In order to calculate reserves, estimates and assumptions are required about a range of geological, technical and economic factors, including quantities, grades, production techniques, recovery rates, production costs, transport costs, commodity demand, commodity prices and exchange rates.

The Group determines ore reserves under the Australasian Code for Reporting of Mineral Resources and Ore Reserves September 1999, known as the JORC Code. The JORC Code requires the use of reasonable investment assumptions to calculate reserves.

Estimating the quantity and/or grade of reserves requires the size, shape and depth of ore bodies or fields to be determined by analysing geological data such as drilling samples. This process may require complex and difficult geological judgements and calculations to interpret the data.

Since economic assumptions used to estimate reserves change from period to period, and since additional geological data is generated during the course of operations, estimates of reserves may change from period to period.

Changes in reported reserves may affect the Group's financial results and financial position in a number of ways, including the following:
- Asset carrying values may be affected due to changes in estimated future cash flows.
- Depletion charged in profit or loss may change where such charges are determined by the units of production basis, or where the useful economic lives of assets change.
- Decommissioning, site restoration and environmental provisions may change where changes in estimated reserves affect expectations about the timing or cost of these activities.

Exploration and evaluation expenditure

The Group's accounting policy for exploration and evaluation expenditure results in certain items of expenditure being capitalised for an area of interest where it is considered likely to be recoverable by future exploitation or sale or where the activities have not reached a stage which permits a reasonable assessment of the existence of reserves. This policy requires management to make certain estimates and assumptions as to future events and circumstances, in particular whether an economically viable extraction operation can be established. Any such estimates and assumptions may change as new information becomes available. If, after having capitalised the expenditure under the policy, a judgement is made that recovery of the expenditure is unlikely, the relevant capitalised amount will be written off to profit or loss.

Development expenditure

Development activities commence after project sanctioning by the appropriate level of management. Judgement is applied by management in determining when a project has reached a stage at which economically recoverable reserves exist such that development may be sanctioned. In exercising this judgement, management is required to make certain estimates and assumptions similar to those described above for capitalised exploration and evaluation expenditure. Any such estimates and assumptions may change as new information becomes available. If, after having commenced the development activity, a judgement is made that a development asset is impaired, the appropriate amount will be written off to profit or loss.

Defined benefit retirement and other post retirement schemes

For defined benefit pension schemes, the cost of benefits charged to the profit or loss includes current and past service costs, interest costs on defined benefit obligations and the effect of any curtailments or settlements, net of expected returns on plan assets. An asset or liability is consequently recognised in the statement of financial position based on the present value of defined obligations, less any unrecognised past service costs and the fair value of plan assets.

The accounting policy requires management to make judgements as to the nature of benefits provided by each scheme and thereby determine the classification of each scheme. For defined benefit pension schemes, management is required to make annual estimates and assumptions about future returns on classes of scheme assets, future remuneration changes, employee attrition rates, administration costs, changes in benefits, inflation rates, exchange rates, life expectancy and expected remaining periods of service of employees. In making these estimates and assumptions, management considers advice provided by external advisers, such as actuaries. Where actual experience differs to these estimates, actuarial gains and losses are recognised directly in the statement of profit or loss and other comprehensive income.

Impairment of assets

The carrying amounts of the Group's non-financial assets, other than inventories and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists then the asset's recoverable amount is estimated. For goodwill and intangible assets that are not yet available for use, the recoverable amount is estimated at each reporting date.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. A cash-generating unit is the smallest identifiable asset group that generates cash flows that are largely independent from other asset groups. Impairment losses are recognised in profit or loss. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the units and then to reduce the carrying amount of the other assets in the unit (group of units) on a pro rata basis.

The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

An impairment loss in respect of goodwill is not reversed. In respect of other assets, impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Goodwill that forms part of the carrying amount of an investment in an associate or a joint venture is not recognised separately and, therefore, is not tested for impairment separately. Instead, the entire amount of the investment is tested for impairment as a single asset when there is objective evidence that the investment in an associate or a joint venture may be impaired.

26. Significant subsidiaries

The significant entities of the Group, included in these consolidated financial statements, are as follows:

Name	Place of incorporation and operation	Principal activities	Ownership and equity interest 31 December 2020	2019
UC RUSAL				
United Company RUSAL IPJSC (formerly United Company RUSAL Plc)	Russian Federation (formerly Jersey)	Holding company	56.9%	56.9%
Compagnie Des Bauxites De Kindia S.A.	Guinea	Bauxite mining	100.0%	100.0%
Friguia SA	Guinea	Alumina	100.0%	100.0%
JSC RUSAL Achinsk	Russian Federation	Alumina	100.0%	100.0%
Mykolaiv Alumina Refunery Company Ltd	Ukraine	Alumina	100.0%	100.0%
JSC RUSAL Boxitogorsk Alumina	Russian Federation	Alumina	100.0%	100.0%
Eurallumina SpA	Italy	Alumina	100.0%	100.0%
PJSC RUSAL Bratsk	Russian Federation	Smelting	100.0%	100.0%
JSC RUSAL Krasnoyarsk	Russian Federation	Smelting	100.0%	100.0%
JSC RUSAL Novokuznetsk	Russian Federation	Smelting	100.0%	100.0%
JSC RUSAL Sayanogorsk	Russian Federation	Smelting	100.0%	100.0%
LLC RUSAL RESAL	Russian Federation	Processing	100.0%	100.0%
JSC RUSAL SAYANAL	Russian Federation	Foil	100.0%	100.0%
CJSC RUSAL ARMENAL	Armenia	Foil	100.0%	100.0%
LLC RUS-Engineering	Russian Federation	Repairs and maintenance	100.0%	100.0%
JSC Russian Aluminium	Russian Federation	Holding company	100.0%	100.0%
RUSAL Global Management B.V.	Netherlands	Management company	100.0%	100.0%
JSC United Company RUSAL Trading House	Russian Federation	Trading	100.0%	100.0%
RUSAL America Corp.	USA	Trading	100.0%	100.0%
RS International GmbH	Switzerland	Trading	100.0%	100.0%
RUSAL Marketing GmbH	Switzerland	Trading	100.0%	100.0%
RTI Limited	Jersey	Trading	100.0%	100.0%
Alumina & Bauxite Company Limited	British Virgin Islands	Trading	100.0%	100.0%
JSC Bauxite-Timana	Russian Federation	Bauxite mining	100.0%	100.0%
JSC Severo-Uralsky Bauxite Mine	Russian Federation	Bauxite mining	100.0%	100.0%
JSC RUSAL URAL	Russian Federation	Primary aluminium and alumina production	100.0%	100.0%
LLC SUAL-PM	Russian Federation	Aluminium powders production	100.0%	100.0%
JSC Kremniy	Russian Federation	Silicon production	100.0%	100.0%

Name	Place of incorporation and operation	Principal activities	Ownership and equity interest 31 December 2020	2019
LLC RUSAL-Kremniy-Ural	Russian Federation	Silicon production	100.0%	100.0%
UC RUSAL Alumina Jamaica Limited	Jamaica	Alumina	100.0%	100.0%
Kubikenborg Aluminium AB	Sweden	Smelting	100.0%	100.0%
RFCL Limited (formerly RFCL S.ar.l)	Cyprus (formerly Luxembourg)	Finance services	100.0%	100.0%
ILLC AKTIVIUM	Russian Federation	Holding and investment company	100.0%	100.0%
Aughinish Alumina Ltd	Ireland	Alumina	100.0%	100.0%
LLC RUSAL Energo	Russian Federation	Electric power	100.0%	100.0%
Limerick Alumina Refining Ltd.	Ireland	Alumina	100.0%	100.0%
JSC RUSAL Management	Russian Federation	Management company	100.0%	100.0%
LLC RUSAL Taishet	Russian Federation	Smelting	100.0%	100.0%
LLC UC RUSAL Anode Plant	Russian Federation	Anodes	100.0%	100.0%
RUSAL Products GmbH	Switzerland	Trading	100.0%	100.0%
Casting and mechanical plant «SKAD» Ltd.	Russian Federation	Other aluminum production	80.0%	90.0%
LLC PGLZ	Russian Federation	Alumina	99.9%	0.00%
POWER				
ILLC EN+ HOLDING (formerly En+ Holding Limited)	Russian Federation (formerly Cyprus)	Holding company	100.0%	100.0%
JSC EuroSibEnergo	Russian Federation	Management company	100.0%	100.0%
JSC Krasnoyarsk Hydro-Power Plant	Russian Federation	Power generation	100.0%	100.0%
LLC MAREM +	Russian Federation	Power trading	99.95%	99.95%
PJSC Irkutskenergo	Russian Federation	Power generation	93.2%	93.2%
OJSC Irkutsk Electric Grid Company	Russian Federation	Power transmission and distribution	52.4%	52.4%
LLC EuroSibEnergo – Hydrogeneration	Russian Federation	Power generation	100.0%	100.0%
LLC Avtozavodskaya TEC	Russian Federation	Power generation	96.5%	96.5%
LLC EuroSibEnergo-engineering	Russian Federation	Engineering services	100.0%	100.0%
LLC Kompaniya VostSibUgol	Russian Federation	Coal production	93.2%	93.2%
LLC Razrez Cheremkhovugol	Russian Federation	Coal production	93.2%	93.2%
LLC KRAMZ	Russian Federation	Manufacturing of semi-finished products from primary aluminium	94.0%	94.0%

The nominal ownerships indicated in the table above are the effective holdings, except for UC RUSAL shareholdings where 56.88% is held by the Parent Company.

Glossary

Units of measurement

bn	Billion
EUR	Euro
Gcal	Gigacalorie, a unit of measurement for heating energy
Gcal/h	Gigacalorie per hour, a unit of measurement for heating power capacity
GW	Gigawatt (one million kilowatts)
GWh	Gigawatt-hour (one million kilowatt-hours)
kA	Kilo-amperes
km	Kilometre
koz	thousand troy ounces
kt	Thousand metric tonnes
ktpa	Thousand tonnes per annum
kV	Kilovolt
kW	Kilowatt
kWh	Kilowatt-hour, a unit of measurement for produced electricity
mn	Million
mt	Million metric tonnes
mtpa	Million tonnes per annum
MW	Megawatt (one thousand kilowatt), a unit of measurement for electrical power capacity
MWh	Megawatt-hour (one thousand kilowatt-hours), a unit of measurement for produced electricity
pp	Percentage point
RUB	Rouble
ths	Thousand
t, tonne	One metric tonne (one thousand kilograms)
tpa	Tonnes per annum
TW	Terawatt (one billion kilowatts)
TWh	Terawatt-hour (one billion kilowatt-hours)
USD	United States dollar

Terms and abbreviations

Adjusted EBITDA	For any period represents the results from operating activities adjusted for amortisation and depreciation, impairment charges and loss on disposal of property, plant and equipment for the relevant period
Adjusted net profit	For any period is defined as the net (loss)/profit adjusted for the net effect of the Company's investment in Norilsk Nickel, the net effect of derivative financial instruments and the net effect of non-current assets impairment
ALSCON	Aluminium Smelter Company of Nigeria Ltd., a company incorporated in Nigeria and in which UC RUSAL indirectly holds an 85% interest
ARC	The Audit and Risk Committee of the Board
ATS	Joint-stock company "Administrator of the trading system of the wholesale electricity market"
Basic Element	Basic Element Limited, a company incorporated in Jersey, of which Mr. Oleg Deripaska is the ultimate beneficial owner
BEMO, BEMO project	Boguchany Energy and Metals Complex, involving the construction of the Boguchany Hydropower Plant (Boguchany HPP) and the Boguchany Aluminium Smelter (BoAZ, Boguchany AS), a joint 50/50 project of UC RUSAL and RusHydro. BoAZ project involves 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 Boguchany HPP
Board, Board of Directors	Board of Directors of the Company
BrAZ	Bratsk Aluminium Smelter or PJSC "RUSAL Bratsk", a company incorporated under the laws of the Russian Federation, which is a wholly owned subsidiary of UC RUSAL
CC	Compliance Committee of the Board
CCO	Competitive capacity outtake
CGC	The Corporate Governance Committee of the Board
CHP	Combined heat and power plant
CIS	The Commonwealth of Independent States
CO_2	Carbon dioxide
CO_2e	CO_2 equivalent
Continuance Date	9 July 2019, when: – The Company was registered as an international public joint-stock company in the Unified State Register of Legal Entities of the Russian Federation and changed its legal jurisdiction of incorporation from Jersey to Russia (the "Continuance") – The Company's name was changed from EN+ GROUP PLC to EN+ GROUP IPJSC

DAM, day-ahead market	The competitive selection of price bids of suppliers and buyers conducted by ATS a day before the actual delivery of electricity with the determination of prices and volumes of delivery for each hour of the day
DTRs	The FCA's Disclosure Guidance and Transparency Rules
En+, En+ Group, we, the Company, the Group	EN+ GROUP International public joint-stock company / EN+ GROUP IPJSC and its subsidiaries whose results are included in the consolidated financial statements prepared in accordance with the International Financial Reporting Standards (or, where relevant, in relation to the Company prior to the Continuance, EN+ GROUP PLC)
EuroSibEnergo	JSC EuroSibEnergo is a 100% subsidiary of En+ Group, managing its power assets
FCA	The UK's Financial Conduct Authority
FCF	Free Cash Flow
GDR	Global depositary receipt
GHG	Greenhouse gas emissions
GHG emissions Scope 1	Direct GHG emissions occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment. Direct CO_2 emissions from the combustion of biomass shall not be included in scope 1 but reported separately. GHG emissions not covered by the Kyoto Protocol, e.g. CFCs, NOx, etc. shall not be included in scope 1 but may be reported separately
GHG emissions Scope 2	Scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organisational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated
GSM	General shareholders meeting
HPP	Hydropower plant
HSE	Health, safety and environment
HSE Committee	The Health, Safety and Environment Committee
IAI	International Aluminium Institute
ICS	Internal Control System
IES	Integrated energy system – an aggregated production and other electricity property assets, connected via a unified production process (including production in the form of the combined generation of electrical and heat) and the supply of electrical energy under the conditions of a centralised operating and dispatch management
IFRS	The International Financial Reporting Standards
IPO	Initial public offering
Irkutskenergo	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

IrkAZ	Irkutsk Aluminium Smelter, a branch of RUSAL Bratsk in Shelekhov
ISO 9001	ISO 9001:2015 is an international standard “Quality management systems – Requirements” by International Organisation for Standardisation that sets out the criteria for a quality management system and is the only standard in the family that can be certified to
ISO 14001	ISO 14001:2015 is a standard “Environmental management systems – Requirements with guidance for use” by International Organisation for Standardisation that sets out the criteria for an environmental management system and can be certified to
ISO 45001	ISO 45001:2018 is a standard “Occupational health and safety management systems – Requirements with guidance for use” by International Organisation for Standardisation that sets out the criteria for a health and safety management systems and can be certified to
JORC	Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australasian Institute of Geoscientists & the Minerals Council of Australia
KUBAL	Kubikenborg Aluminium AB, a company incorporated in Sweden, which is a wholly owned subsidiary of UC RUSAL
LIBOR	In relation to any loan: – 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 – (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 am 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.
LME	London Metal Exchange
LME aluminium price	Represents the average daily closing official LME spot prices for each period
LR	The Listing Rules published by the UK’s Financial Conduct Authority in its capacity as competent authority under the Financial Services and Markets Act 2000 (as amended) and the FCA’s Disclosure Guidance and Transparency Rules
LSE	London Stock Exchange
LTIFR	The Lost Time Injury Frequency Rate which was calculated by the Group as a sum of fatalities and lost time injuries per million man-hours

Market Council	The non-commercial organisation formed as a result of a non-commercial partnership, which is intended to unite energy market participants 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
Metals segment	The Metals segment is comprised of UC RUSAL (56.88% owned by En+ Group). The power assets of UC RUSAL are included into the Metals segment
Mineral Resource	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. – Inferred Mineral Resource 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 – Indicated Mineral Resource 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 – Measured Mineral Resource 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
MOEX	The Moscow Exchange
N\A	Not applicable

NC	The Nominations Committee of the Board
Net debt	The sum of loans and borrowings and bonds outstanding less total cash and cash equivalents as at the end of the relevant period, in each case attributable to the Group, Power or Metals segment, as the case may be
NkAZ	Novokuznetsk Aluminium Smelter or JSC “RUSAL Novokuznetsk”, a company incorporated under the laws of the Russian Federation, which is a wholly owned subsidiary of UC RUSAL
OFAC	The Office of Foreign Assets Control (OFAC) of the US Department of the Treasury
OFAC Sanctions	The designation by OFAC of certain persons and certain companies which are controlled or deemed to be controlled by some of these persons into the Specially Designated Nationals List
OHSAS 18001	Occupational Health and Safety Assessment Series 18001:2007 is a standard, that sets out the criteria for a health and safety management systems. OHSAS 18001 has been withdrawn and replaced by ISO 45001
Ore Reserves	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. – Probable Ore Reserve 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 coraterial 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 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
pcs.	Pieces
PM Krasnoturyinsk	SUAL-PM-Krasnoturyinsk, a branch of LLC «SUAL-PM»
Power segment	The Power segment is predominantly comprised of power assets and operations, owned by En+ Group. The Power segment engages in all aspects of the power industry, including electric power generation, power trading and supply
QAL	Queensland Alumina Limited, a company incorporated in Queensland, Australia, in which UC RUSAL indirectly holds a 20% equity interest
R&D	Research and development

RemCom	The Remuneration Committee of the Board
RoW	Rest of the World ex-China
RUSAL, the Metals segment	United Company RUSAL Plc, incorporated under the laws of Jersey with limited liability (56.88% owned by En+ Group)
SDN List, Specially Designated Nationals List	List of Specially Designated Nationals and Blocked Persons, published by OFAC. US persons are generally prohibited from dealing with assets of persons designated in the SDN List which are subject to the US jurisdiction, subject to certain exemptions and exclusions set out in licenses issued by OFAC
SAZ	Sayanogorsk Aluminium Smelter or RUSAL Sayanogorsk or Sayanogorsk smelter or JSC “RUSAL Sayanogorsk”, a company incorporated under the laws of the Russian Federation, which is a wholly owned subsidiary of UC RUSAL
SPP	Solar power plant
Taskforce	En+ Climate Change Taskforce led by Chief Operating Officer Vyacheslav Solomin will be responsible for the planning and implementation of the Company’s climate change strategy. The Taskforce will report to the Executive Chairman, Lord Barker
TPP	Thermal power plant
UES	Unified Energy System
VAP	Value-added products. Includes wire rod, foundry alloys, billets, slabs, high purity and others
Wholesale electricity and capacity market	Sphere for the turnover of electric energy and capacity within the framework of Russia’s integrated energy system within the country’s unified economic space with the participation of large electricity producers and consumers that have the status of wholesale market objects, confirmed in full accordance with the Russian Federal Law “On the electric power industry” (by the Russian Government). The criteria for including large electricity producers and consumers in the category of large producers and large consumers are also established by the Russian government
y-o-y	Year-on-year

Contacts

Kalininigrad

8, Oktyabrskaya St., office 34, Kaliningrad, Kaliningrad Region, 236006, Russia
Tel: +7 401 269 7436
Fax: +7 401 269 7437

Moscow

1 Vasilisy Kozhinoy St., Moscow, 121096, Russia
Tel: +7 495 642 7937
Fax: +7 495 642 7938

London

8 Cleveland Row, London SW1A 1DH, UK
Tel: +44 20 7747 4900
Fax: +44 20 7747 4910

Website

www.enplusgroup.com

For investors

IR Department
Tel: +7 495 642 7937
Email: ir@enplus.ru

Media enquiries

PR Department
Tel: +7 495 642 7937
Email: press-center@enplus.ru

Registrar

JSC "IRC"
Tel: +7 495 234 4470
Email: info@mrz.ru
Website: www.mrz.ru

Depository Bank

Citibank N.A.
Tel: +1 212 723 5435
Email: CitiADR@Citi.com
Website: https://citiadr.factsetdigitalsolutions.com/www/drfront_page.idms

All necessary contacts can also be found on the Company's website: https://enplusgroup.com/en/

About the Report

In this annual report (the “Annual Report” or the “Report”), the terms “En+”, “En+ Group”, “we”, the “Company” and the “Group” in various forms shall mean EN+ GROUP international public joint-stock company/ EN+ GROUP IPJSC (or, where relevant, in relation to the Company prior to the Continuance (as defined in the Corporate Governance section of this Report), EN+ GROUP PLC) and its subsidiaries whose results are included in the Group’s consolidated financial statements prepared in accordance with the IFRS.

The Annual Report outlines, *inter alia*, the Company’s strategy, business model and corporate governance structure, as well as its internal control and risk management processes. The Group’s consolidated financial statements for the year ended and as at 31 December 2020, prepared in accordance with IFRS and accompanied by a report from the Group’s auditors, are included in the Report.

This Report has been prepared in accordance with the following laws and regulations:
- Federal Law No. 39-FZ On Securities Market dated 22 April 1996
- Regulations No. 454-P On Disclosure of Information by Securities Issuers dated 30 December 2014
- The Code of Corporate Governance, recommended for use by joint-stock companies by the Bank of Russia, Letter No. 06-52/2463 dated 10 April 2014 (the “Russian Corporate Governance Code”)
- The Listing Rules (the “LRs”) published by the UK’s Financial Conduct Authority (the “FCA”) in its capacity as a competent authority under the Financial Services and Markets Act 2000 (as amended) and the FCA’s Disclosure Guidance and Transparency Rules (the “DTRs”). The LRs and the DTRs are hereinafter together referred to as the “Rules”, unless otherwise specified

Unless stated otherwise, financial results included in the Annual Report 2020 are presented and calculated based on the consolidated financial statements prepared in accordance with IFRS.

Due to rounding, some totals in the tables, charts and diagrams in this Report may not correspond with the sum of the separate figures. This Report may also contain discrepancies in the calculation of shares, percentages, and total amounts as a result of the application of different rounding methods. Data provided in the Annual Report may differ marginally from previous disclosures, also as a result of rounding.

Approval of the Report

This Annual Report was preliminarily approved by the Board on 21 April 2021 (Minutes No. 34 dated 21 April 2021). This date is referred herein as the date of this Report.

This Annual Report was approved by the general shareholders meeting of the Company on 26 May 2021 (Minutes No.2 dated 26 May 2021).

Disclaimer

The information presented in this Annual Report only reflects the Company’s position during the review period from 1 January 2020 to 31 December 2020 (the “Review Period”), unless otherwise specified. Accordingly, all forward-looking statements, analyses, reviews, discussions, commentaries, and risks presented in this Annual Report (excluding this disclaimer and the Corporate Governance section, or unless otherwise specified) are based on the financial information available to the Company covering the Review Period only.

This Report may include 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”, “expects”, “intends”, “may”, “will” or “should” or, in each case, their negative or other variations or comparable terminology, or by discussions of strategy, plans, objectives, goals, future events or intentions. Forward-looking statements may, and often do, differ materially from actual results. Any forward-looking statements reflect the Company’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 or strategies. Many factors could cause the actual results of the Group to differ materially from those set forth in the forward-looking statements contained herein, including, among others, macroeconomic conditions, political events, the competitive environment in which the Group operates, the impact of the COVID-19 pandemic and any other outbreaks, epidemics or pandemics, foreign exchange fluctuations and changes in financial and equity markets, as well as many other risks specifically related to the Group and its operations. Forward-looking statements speak only as of the date they are made.

To the extent available, the industry, market and competitive position data contained in this Report comes from official or third-party sources. Third-party industry publications, studies and surveys generally state that the data contained therein has been obtained from sources believed to be reliable, but that there is no guarantee of the accuracy or completeness of such data. While the Company reasonably believes that each of these publications, studies and surveys has been prepared by a reputable party, neither the Company nor any of its respective directors, officers, employees, affiliates, advisors or agents, have independently verified the data contained therein. In addition, certain industry, market and competitive position data contained in this Report comes from the Company’s internal research and estimates based on the knowledge and experience of the Company’s management in the markets in which the Company operates. While the Company reasonably believes that such research and estimates are reasonable, they, and their underlying methodology and assumptions, have not been verified by any independent source for accuracy or completeness and are subject to change. Accordingly, reliance should not be placed on any of the industry, market or competitive position data contained in this Report.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