NORNICKEL

ANNUAL REPORT

ENABLING THE TRANSITION TO A GREENER WORLD

2020

NORNICKEL

MMC NORILSK NICKEL

REPORTING PERIOD
FROM 1 JANUARY 2020
TO 31 DECEMBER 2020

The 2020 annual report of PJSC "MMC "Norilsk Nickel" incorporates the results of MMC Norilsk Nickel and other operations of the Norilsk Nickel Group (MMC Norilsk Nickel, Nornickel, the Company, Group).

ACCURACY OF INFORMATION CONFIRMED

by the Audit Commission of MMC Norilsk Nickel
Opinion of 5 April 2021.

APPROVED

by the Board of Directors of MMC Norilsk Nickel
Minutes No. GMK/9-pr-bd of 9 April 2021.

APPROVED

by the Annual General Meeting of Shareholders
of MMC Norilsk Nickel
Minutes No. 1 of 19 May 2021

Vladimir Potanin

President,
Chairman of the Management Board
MMC NORILSK NICKEL

Sergey Malyshev

Senior Vice President —
Chief Financial Officer
MMC NORILSK NICKEL

Dear shareholders and investors!

We are pleased to present to you the 2020 Annual Report of MMC Norilsk Nickel. The key theme of this report is Sustainable Development Strategy. This strategy unveils the management's long-term vision for the development of Nornickel's unique resource base and operational efficiency improvements, both of which will be backed by the rollout of our ambitious comprehensive environmental programme.

This "ecological growth" strategy not only lays out long-term ore production and capital investment targets but also sets out concrete action plans aiming at the reduction of the Company's environmental footprint in the regions of its operations.

Furthermore, the Company believes firmly that it is well positioned to be the key facilitator in meeting some of the world's major challenges such as transport electrification and reduction of pollution.

This Annual Report has been prepared by the Company's Investor Relations Department in line with best practices in information disclosure and in accordance with the requirements of Bank of Russia's Regulation No. 454-P from 30 December 2014.

Vladimir Zhukov

Vice President for Investor Relations
MMC NORILSK NICKEL

2020 ANNUAL REPORT

CONTENT

#1 COMPANY OVERVIEW

#2 STRATEGIC REPORT

IMPORTANT SOLUTIONS

#3 COMMODITY MARKETS

STABLE POSITION

#4 BUSINESS OVERVIEW

TECHNOLOGY BREAKTHROUGH

#5 SUSTAINABLE DEVELOPMENT

ECOLOGICAL AGENDA

#6 CORPORATE GOVERNANCE

CHANGES IN MANAGEMENT

#7 CONTROL SYSTEM AND RISK MANAGEMENT

#8 SHAREHOLDER INFORMATION

#9 IFRS FINANCIAL STATEMENTS

#10 APPENDIX

Public reporting system of Nornickel includes the Annual Report and the Sustainability Report Considering the events of 2020, we also released a White paper on the spill fuel in the Norilsk Industrial Distirct.

INTERACTIVE ANNUAL REPORT

SUSTAINABILITY REPORT

WHITE PAPER
leak of diesel fuel in the Norilsk Industrial District

NO. 1 COMPANY OVERVIEW

COMPANY PROFILE

OLDERFEREY HOLDINGS LTD[1]
34.6%

EN+ GROUP IPJSC[1]
27.8%

OTHER
37.6%

SHAREHOLDING STRUCTURE AS OF 31 DECEMBER 2020 (%)

NORNICKEL IS RUSSIA'S LEADING METALS AND MINING COMPANY, THE LARGEST PALLADIUM AND HIGH-GRADE NICKEL PRODUCER IN THE WORLD, AND A MAJOR PRODUCER OF PLATINUM AND COPPER.

Nornickel also produces cobalt, rhodium, silver, gold, iridium, ruthenium, selenium, tellurium, and sulphur. Nornickel's shares are listed on the Moscow Exchange and are included in its Blue Chip Index. Its American Depositary Receipts (ADRs) are traded on the US OTC market, as well as on the OTC markets of the London, Berlin, and Frankfurt stock exchanges. As of the end of 2019, Nornickel's weight in theleading emerging market stock indices such as MSCI Emerging Markets was 0.5% and 8.2% in the MSCI Russia.

[1] Indirect ownership via controlled entities.

THE GROUP'S ASSETS

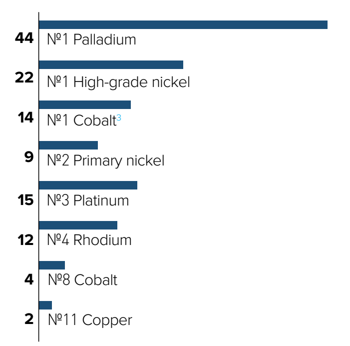
The Group's production assets are located in three countries – Russia, Finland and South Africa. The Group's core businesses are represented by vertically integrated metals and mining operations. They include Norilsk Division (located on the Taimyr Peninsula), Kola Division including Kola MMC (located on the Kola Peninsula), and Norilsk Nickel Harjavalta Oy (located in Finland), and also Zabaykalsky Division (Bystrinsky GOK, 50.01% stake).

In South Africa, the Group owns 50% of Nkomati, which operates a nickel mine of the same name. In 2019, the Group and its operating partner, African Rainbow Minerals, reached an agreement to scale down production at Nkomati Nickel Mine. The operations of the mine are planned to cease in 1H2021 whereafter the mine is to be placed on limited care and maintenance pending the finalisation and submission of a closure plan.

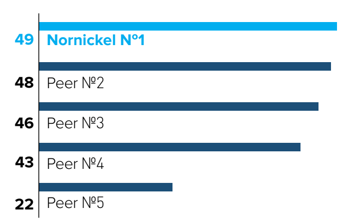
In addition to the production facilities, the Group operates captive global sales network and owns a wide range of R&D facilities, fuel and energy assets, river fleet, river and sea port terminals, and a unique Arctic cargo sea fleet.

The Nornickel core operations include exploration, mining and processing of minerals, and the sales of base and precious metals.

NORNICKEL'S SHARE OF THE GLOBAL METALS MARKET (%)[2]



GLOBAL INDUSTRY LEADERSHIP BY 2020 EBITDA MARGIN (%)[4]



COMPETITIVE ADVANTAGES

Nornickel boasts a world-class resource base, unique for the amount of valuable minerals, their high content, and extensive reserve life. The key metals are nickel, copper, palladium, platinum and other platinum group metals (PGMs).

9 mines

Proven and probable reserves

742.8 mln t

Ni — 6.5 mln t

Cu — 11.6 mln t

PGMs — 118 moz

Measured and indicated resources

2,018.6 mln t

Ni — 13.8 mln t

Cu — 23.0 mln t

PGMs — 258 moz

Over 75 years

resources at the current production rate

[2] Based on refined metal (including tolling) output for palladium, nickel, platinum, and rhodium and based on contained metal production for copper and cobalt.

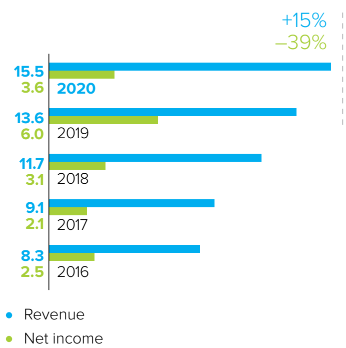
[3] Excluding supply from the Democratic Republic of the Congo.

[4] The peer group includes Anglo American, BHP, Rio Tinto, and Vale.

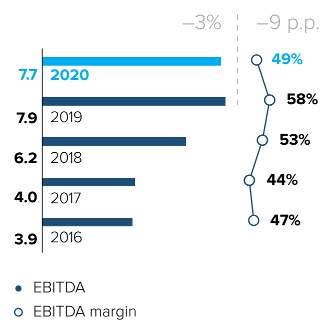
PERFORMANCE HIGHLIGHTS

FINANCIAL HIGHLIGHTS

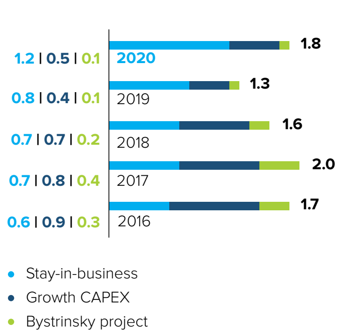
KEY FINANCIAL HIGHLIGHTS (USD BN)



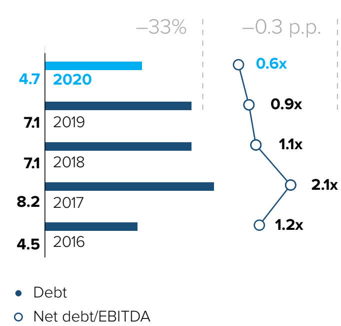
EBITDA & EBITDA MARGIN (USD BN)



CAPITAL INVESTMENTS (USD BN)

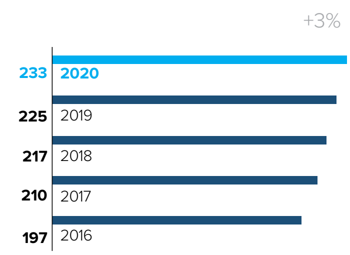


DEBT (USD BN)

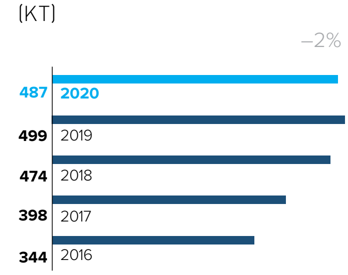


OPERATING HIGHLIGHTS

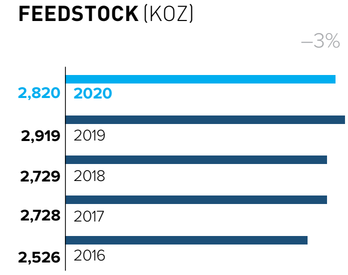
NICKEL FROM OWN FEEDSTOCK (KT)



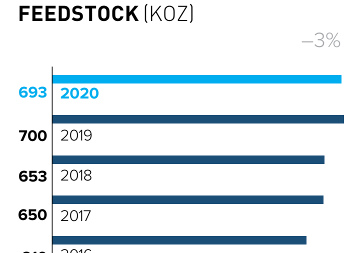
COPPER FROM OWN FEEDSTOCK (KT)



PALLADIUM FROM OWN FEEDSTOCK (KOZ)

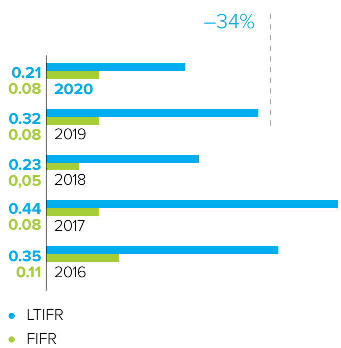


PLATINUM FROM OWN FEEDSTOCK (KOZ)

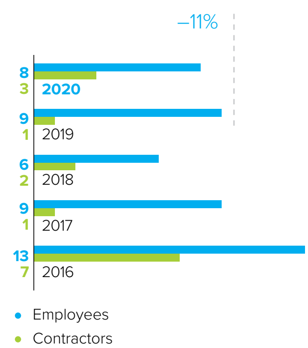


SUSTAINABILITY HIGHLIGHTS

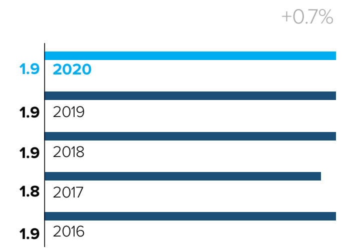
INJURY RATES
(PER MILLION HOURS WORKED)



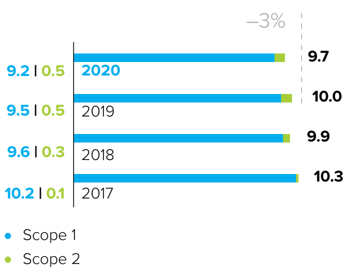
WORK-RELATED FATALITIES



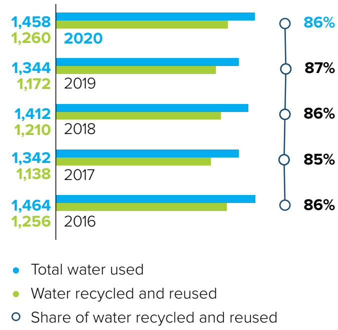
SO_2 EMISSIONS (MLN T)



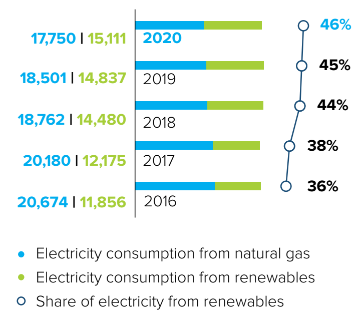
GHG EMISSIONS (MLN T)



WATER USE (MLN M³)



ELECTRICITY CONSUMPTION (TJ)



ESG PERFORMANCE

The company joined the UNGD in 2016 and every year confirms its commitment to the principles of sustainable development

FTSE4Good

Inclusion in the index constituent is reiterated: score at 4.0 (out of 5)

ISS CORPORATE SOLUTIONS

Environmental score and social score – 3, governance score – 4 (where 1 is low risk, and 10 is high risk), ESG rating – "C" medium

Sustainalytics

ESG score – 61 (out of 100) Average Performer (vs 63 in 2029). ESG risk score – 38.3 (out of 100)

S&P Global

Score – 44 (out of 100)
(vs 33 in 2019)

MSCI

ESG rating – "B", score – 3.3 (out of 10)

CDP

Disclosure to CDP launched in 2020
Climate change score – "D",
Water Security score – "C"

CURRENT STATUS/RATING

Target — maintains investment grade credit ratings.

Baa2
negative
Moody's

BBB–
stable
S&P Global

BBB–
stable
FitchRatings

ruAAA
stable
Expert РЕЙТИНГОВОЕ АГЕНТСТВО

THE COMPANY'S HISTORY

1935–1959

CREATION AND EVOLUTION OF NORILSK PLANT

In 1935, the USSR Council of People's Commissars resolved to build Norilsk Plant. The first batch of converter matte was produced in 1942, with Norilsk Plant opening a Nickel Tankhouse in 1943. In 1953, Norilsk was granted the status of a town, with Norilsk Plant producing 35% of nickel, 12% of copper, 30% of cobalt and 90% of platinum group metals (PGM) of the Soviet Union's total output. The company's history

1960–1992

NEW DEPOSITS DEVELOPED AND NEW FACILITIES PUT ONLINE

The Talnakhskoye deposit, the world's largest deposit of copper-nickel ores, was discovered in 1960, giving a new lease on life to Norilsk Plant. The construction of mines and the town of Talnakh started on the Taimyr Peninsula. The Oktyabrskoye deposit of copper-nickel ores was discovered in 1965. Nadezhda Metallurgical Plant and the 1st Stage of Talnakh Concentrator were put on stream in 1981.

1993–2012

TRANSFORMATION IN A MARKET ECONOMY

In 1993, the Russian President signed an Executive Order to transform the Norilsk Nickel State Concern for the Production of Precious and Non-Ferrous Metals into Russian Joint Stock Company (RJSC) Norilsk Nickel for the Production of Precious and Non-Ferrous Metals. In 2001, the Company was restructured, with shareholders of RJSC Norilsk Nickel exchanging 96.9% of their stock to shares in MMC Norilsk Nickel. The Company shares were listed on the RTS and MICEX stock exchanges, while the Company started the issuance of Level-1 American Depositary Receipts (ADRs) with MMC Norilsk Nickel shares as the underlying asset.

2013–2020

IMPLEMENTING A NEW STRATEGY

Vladimir Potanin's team changed the management structure of Nornickel. The Board of Directors adopted a new development strategy. The Company decided to focus on the Tier-1 assets of the Polar Division and Kola MMC. Bystrinsky GOK, the largest greenfield project in the Russian metals industry, was constructed from scratch.

Steps were taken to improve the environmental situation in our operating regions, including the shuttering of Nickel Plant in Norilsk, the launch of the Sulphur Programme to drastically improve the environment in the Norilsk Industrial District, and multiple obsolete production facilities in the Murmansk Region slated for closure.

2020–2030

ENABLING THE TRANSITION TO A GREENER WORLD

To implement its growth strategy and environmental projects, Nornickel has updated its long-term CAPEX plan and announced that its investment cycle would enter an active phase in 2021.

Total investments for the next ten years are scheduled to exceed USD 27 billion, including approximately USD 5.5 billion earmarked for projects with a positive environmental impact. Ramping up investments in the comprehensive development of its mining and processing capacities will boost the Company's metal output by over 30% by 2030.

The global transition to a "green economy" offers a unique opportunity for the Company to become a key player in metals markets, essential for building a carbon-neutral economy in general and clean transport in particular.

HIGHLIGHTS OF THE YEAR

EXPANDING PARTNERSHIPS IN THE BATTERY RECYCLING

Nornickel has been supporting the creation of a battery recycling cluster in Harjavalta, Finland on the premises of its own nickel refinery and Nornickel will continue to support actively the recycling value chain in Europe. Re-using critical metals present in used batteries would enable a successful “closed loop” cycle offering a significant CO_2 reduction in the production of battery materials for electric vehicles. Additional CO_2 reduction can be achieved by using electricity from renewable sources in Finland for the recycling process.

COVID-19 RESPONSE

Nornickel spent about RUB 12 billion (USD 157 million) to fight COVID-19, directing the funds towards supporting to safeguard the health and safety of its employees and purchasing personal protection equipment, COVID-19 tests, medicines and medical equipment across its footprint. The Company provided benefits and subsidies to SMEs operating in Norilsk.

ENVIRONMENTAL INCIDENTS AND LESSONS LEARNED

On 29 May 2020, as a result of depressurisation of an emergency fuel storage tank at CHPP-3 in the city of Norilsk, around 21 thousand tonnes of diesel fuel were spilled into the environment. The Company immediately initiated a response to the fuel spill. Already in 2020, more than 90% of the spilled fuel was collected, and the water/fuel mixture was transported and separated. The Company is committed to do all that is necessary to fully eliminate the consequences of the incident and prevent any such incidents in the future.

The Company made significant changes to its corporate governance structure, in particular: set up the Risk Committee led by the President of the Company, introduced the position of Senior Vice President for Sustainable Development and established the Ecology Department. The Industrial Safety Department was spun off from the Operations unit; the Ecology Monitoring Centre was set up within the risk management and internal control function. The Company transitioned to a division-based structure, with the heads of regional divisions (Norilsk, Kola) taking over support functions, and increased investment limits.

Nornickel initiated the Great Norilsk Expedition, which included studies by researchers from 14 institutes of the Siberian Branch of the Russian Academy of Sciences to identify the causes and implications of the incident at CHPP-3, but also to launch an ambitious and comprehensive programme to research ecosystems on the Taimyr Peninsula and climate changes over the last decades

To assess the impact of the incident on local communities, a special ethnogeographic expedition was carried out, which focused on studies of indigenous peoples of the North living on the Taimyr Peninsula. As part of the expedition, 100 representatives of local communities were interviewed, and the results formed the basis of a new five-year agreement between Nornickel and associations representing over 90% of indigenous peoples of the North, which includes over 40 specific projects and initiatives aimed at improving their quality of life, supporting indigenous crafts, and promoting socio-cultural development.

At the request of the Board of Directors, a leading global industrial safety consultancy, Environmental Resources Management (ERM), prepared an independent assessment of the causes of the fuel spill incident.

The Company reinvented its approaches to environmental safety, with USD 5.5 billion out of the USD 27 billion allocated for Nornickel’s investment programme up to 2030 to be directed towards the environmental programme and another USD 1.3 billion towards improving the industrial safety of infrastructure.

ADOPTION OF A DIVISION-BASED ORGANISATIONAL STRUCTURE

The Group’s core operations have been grouped into three divisions – Norilsk, Kola and Trans-Baikal. In addition to major production assets, the divisions comprise support enterprises. Division-level investment limits not requiring the approval of the corporate centre were increased. The new division-based system will accelerate decision-making and improve accountability of production site management.

DISPOSAL OF THE HONEYMOON WELL NICKEL PROJECT IN AUSTRALIA

Nornickel sold its Honeymoon Well Nickel Project in Western Australia to BHP Billiton Nickel West Pty Ltd. The deal also included Albion Downs North and Jericho Joint Ventures, both being exploration projects where BHP already owned the remaining 50% stake.

EUROBONDS

In September, Nornickel successfully placed its 5-year USD 500 million Eurobond with an annual coupon rate of 2.55%.

ENVIRONMENTAL PROJECTS IN THE MURMANSK REGION

A smelting shop in Nikel, located in the cross-border area with Norway, was shut down in December 2020 as part of the implementation of the comprehensive Sulphur Programme, Nornickel’s largest environmental initiative aimed at significantly reducing sulphur dioxide emissions in Norilsk and on the Kola Peninsula

As a result, already in 2020, sulphur dioxide emissions were reduced by 71% from a 2015 baseline in Nikel and Zapolyarny and by 58% in the Russia–Norway border area.

TRADING GOING DIGITAL

In December 2020, Nornickel’s Global Palladium Fund issued the first tokens to digitise some of the contracts with major industrial partners, Traxys SA and Umicore SA, taking the first meaningful step towards shifting to digital trading tools to ensure efficiency and transparency throughout the supply chain. The Global Palladium Fund issued tokens via Atomyze, a digital platform backed by a number of international investors. Nornickel expects to use tokens for up to 20% of its sales to industrial consumers in 2021.

Nornickel expects to use tokens for up to

20% of its sales

of its sales to industrial consumers in 2021

BUSINESS MODEL

RESOURCES

Mineral resource base

743 mln t
Proven and probable reserves

2,019 mln t
Measured and indicated resources

>75 years
of resources at the current production rate

Personnel

~72 thousand employees

Mining and metallurgical assets

9 mines

4 concentrators

3 metallurgical plants

Auxiliary assets

- **Transport enterprises**
- **Energy enterprises**
- **Global sales network** *operating in Russia, China, Hong Kong, USA and Switzerland*
- **R&D** – *Gipronickel Institute*

PRODUCTION

Core products
Ni: *cathode, carbonyl, briquettes, salts, pellets, powders, solutions, semi-products*
Cu: *cathode, cake, semi-products*
Precious metal concentrates: *Pt, Pd, Rh, Au, Ag, Ru, Te, Ir*
Co: *cathode, sulphate*
S: *technical*
Se: *commercial*
H_2SO_4
Fe: *concentrate*

Ni	Cu
235 kt	487 kt

Pd	Pt
2,826 koz	695 koz

MINING

The Company mines copper-nickel sulphide ores on the Taimyr and Kola Peninsulas and gold-iron-copper ores in the Zabaykalsky Region.

Norilsk Division:
produced
18.8 mln t of ore

Ni	Cu	PGMs
1.3%	2.3%	6.9 g/t

Kola Division:
produced
7.7 mln t of ore

Ni	Cu	PGMs
0.5%	0.2%	0.1 g/t

Trans-Baikal Division:
produced
16 mln t of ore

Cu
0.6%

Natural gas, gas condensate
produced
2,728 Mcm
114 kt

VALUE CREATED FOR STAKEHOLDERS

Shareholders
USD 4.2 bn dividends paid in 2020

Employees
USD 157 mln spent on COVID response
USD 2,000 Average monthly pay
USD 500 mln Social expenses
0.21 LTIFR

Suppliers
RUB 89.4 bn Procurement in 2020, including 93% being local/domestic content

LONG-TERM INVESTMENT

USD 3.6 bn

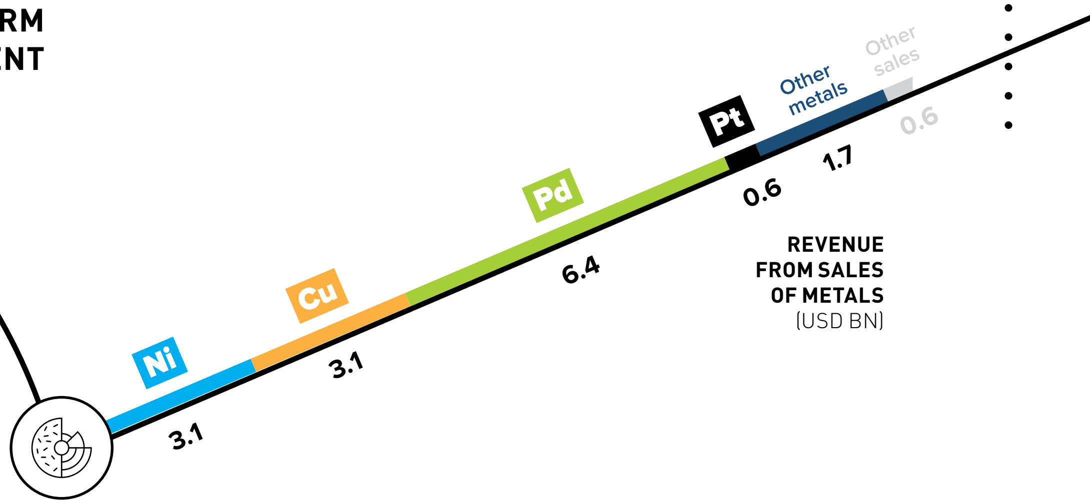
Sulphur Programme 2.0 – reduction in sulphur dioxide emissions from the Norilsk Division

>USD 4 bn

Energy infrastructure upgrades

RUB 6.5 bn

Technology Breakthrough 2.0 – embedding digital technology



FINANCIAL PERFORMANCE

15.5 USD bn

Revenue

USD 7.7 bn	49%	0.6x	USD 3.6 bn
EBITDA	EBITDA margin	Net debt/ EBITDA	Net profit

NORNICKEL –

is a global leader in the production of metals essential for clean transport and the development of a low-carbon economy. Nornickel operations focuses on the exploration, mining and processing of minerals, as well as the production and sale of base and precious metals.

Environment

9.7 mln t
GHG emissions (Scope 1+2)

2.6 mln t
GHG emissions (Scope 3)

46%
electricity generated from renewable sources

99%
of the Company's industrial waste is non-hazardous

86%
Percentage of reused and recycled water

Customers

The Company's products are supplied to **37 countries worldwide**

Government

Tax and non-tax payments:

RUB 34.2 bn
Federal

RUB 115.7 bn
Regional

GEOGRAPHY

Global asset map

KOLA DIVISION

Kola Peninsula

Share in total production

Ni	Cu	PGM
73%	14%	57%

KOLA DIVISION

Finland

Share in total production

Ni	Cu	PGM
27%	1%	1%

NKOMATI

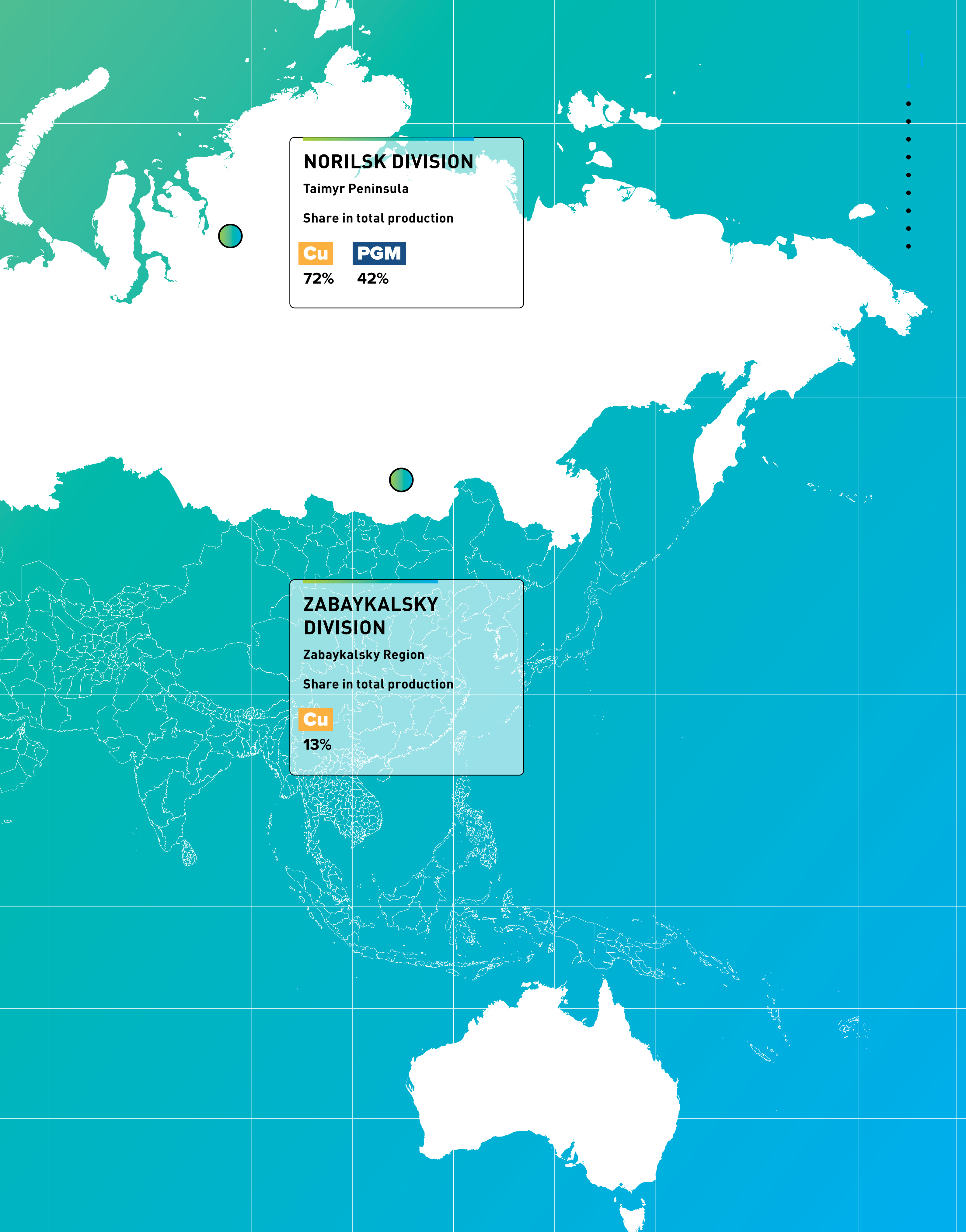
South Africa

The Group owns

50%

of Nkomati, which operates a nickel mine of the same name.

In 2019, the Group and its operating partner, African Rainbow Minerals, reached an agreement to scale down production at Nkomati. The operations of the mine are planned to cease in 1H2021 whereafter the mine is to be placed on limited care and maintenance pending the finalisation and submission of a closure plan.


NORILSK DIVISION
Taimyr Peninsula
Share in total production
Cu
72%
PGM
42%
ZABAYKALSKY DIVISION
Zabaykalsky Region
Share in total production
Cu
13%

THE MAIN ASSETS OF THE GROUP[1]

MINING AND METALLURGICAL

Polar Division

Medvezhy Ruchey
(100%)

Kola MMC
(100%)

GRK Bystrinskoye
(50.01%)

Norilsk Nickel Harjavalta OY
(Finland, 100%)

Nkomati Nickel Mine
(South Africa, 50%)

GEOLOGICAL EXPLORATION

NN Tehnicheskie-servisy[2]
(100%)

Vostokgeologiya
(100%)

ENERGY

Norilskenergo Division

NTEK
(100%)

Norilskgazprom
(100%)

TTK
(100%)

Norilsktransgaz
(100%)

Arctic-Energo
(100%)

[1] Ownership Group in subsidiaries is indicated from the authorised capital (direct) as of December 31, 2020. (GRK Bystrinskoye is shown effective share).

[2] Resolution No. 12 dated 7 December 2020 adopted a new revision of the Articles of Association changing the company's name from Norilskgeologiya to Nornickel Technical Services. The record on the approval of a new revision of the Articles of Association with the new company name was made to the Unified State Register of Legal Entities on 26 February 2021.

TRANSPORT

Polar Transport Division

Murmansk Transport Division

Arkhangelsk Transport Division

Krasnoyarsk Transport Division

Bystrinsky Transport Division

Yenisey River Shipping Company
(81.99%)

Krasnoyarsk River Port
(89.3%)

Lesosibirsk Port
(51%)

Norilsk Airport
(100%)

NordStar Airlines
(100%)

Norilsk Avia
(100%)

RESEARCH

Gipronickel Institute
(100%)

SUPPORTING BUSINESS

Norilsk Support Complex
(100%)

Polar Construction Company
(100%)

Norilsknickelremont
(100%)

Pechengastroy
(100%)

Nornickel – Shared Services Centre
(100%)

Norilskpromtransport
(100%)

SALES AND DISTRIBUTION

NORMETIMPEX
(100%)

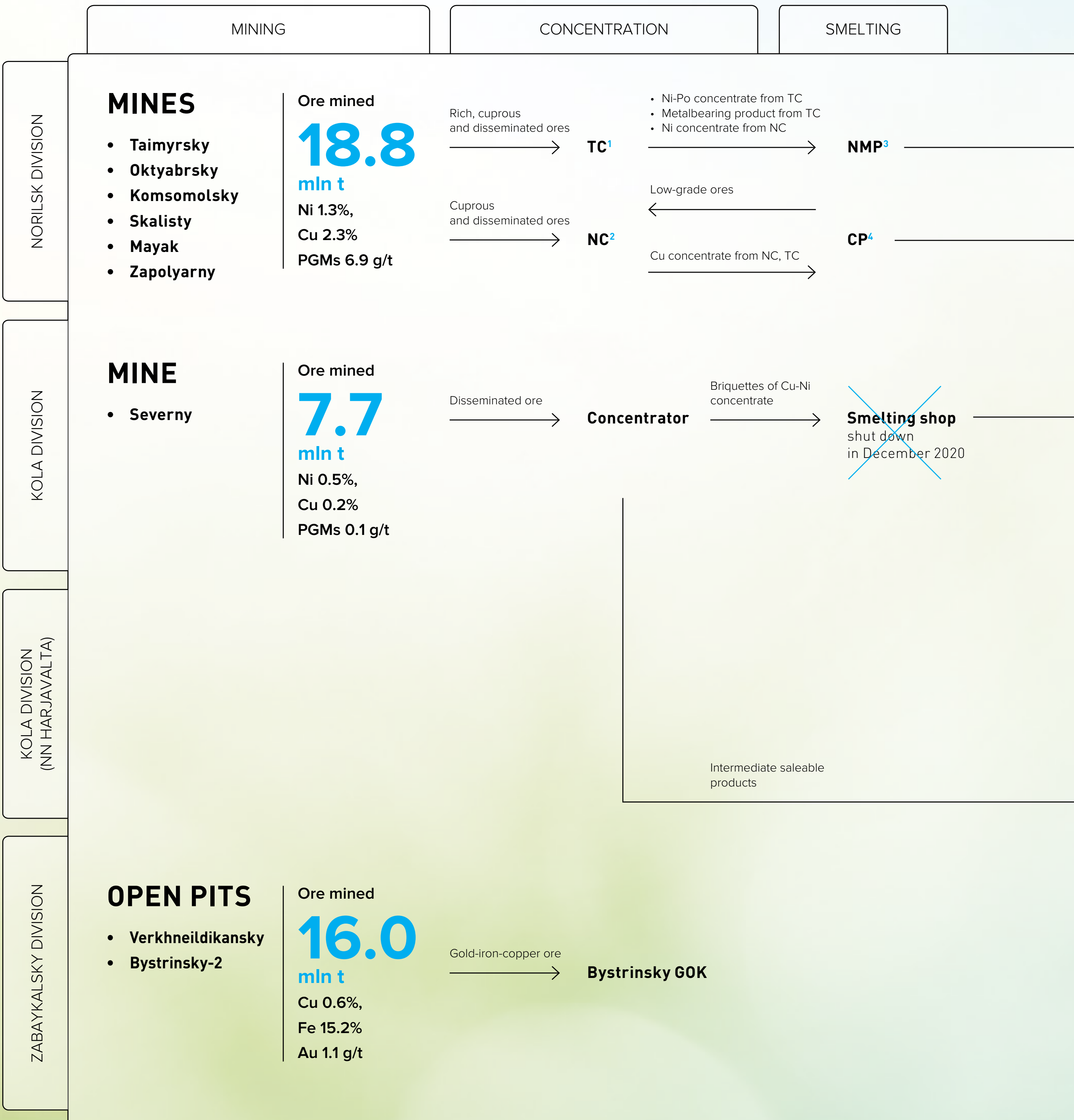
Metal Trade Overseas SA
(Switzerland, 100%)

Norilsk Nickel (Asia) Limited
(Hong Kong, 100%)

Norilsk Nickel USA Inc.
(USA, 100%)

Norilsk Nickel Metals Trading (Shanghai) Co., Ltd.
(China, 100%)

PRODUCTION FLOW



[1] TC – Talnakh Concentrator.

[2] NC – Norilsk Concentrator.

[3] NMP – Nadezhda Metallurgical Plant.

[4] CP – Copper Plant.

REFINING		PGM REFINING[5]	PRODUCTS

- Copper Sludge from Copper Plant tankhouse and Kola MMC
- Copper cake from NN Harjavalta

Copper Plant's smelting shop

Blister copper

Copper Plant

Precious metal concentrates under tolling agreement

Krastsvetmet

URALINTECH

Prioksky Plant of Non-Ferrous Metals

- **Cu:** cathodes
- **S:** technical
- **H_2SO_4:** for Company's needs
- **Precious metal** concentrates
- **Se:** technical
- **Te:** billots

Converter matte from Smelting shop and Norilsk Division

~~**Smelting shop** shut down in March 2021~~

Refining shop (Tankhouses 1 and 2)

Chemical-and-metallurgical shop

Precious metal concentrates under tolling agreement

- **Ni:** cathodes, carbonyl, intermediate products
- **Cu:** cathodes, intermediate products
- **Co:** electrolytic, saleable concentrate
- **Precious metal** concentrates
- **H_2SO_4**

- Ni matte and crushed converter matte from Kola MMC
- From 3d parties feed

Nickel refinery

- **Ni:** cathodes, briquettes, salts, solutions
- **Co:** sulphate, solutions
- **Cu:** saleable cake

- **Cu, Fe:** saleable concentrates
- **Au:** concentrate to be processed at Nornickel's facilities

[5] The precious metals are refined under tolling agreements.

WAY TO "GREEN ECONOMY"

//photo: Automatic equipment control center

FOR MORE DETAIL
SEE ON THE WEB-SITE

//NORNICKEL.COM

“

The Company makes it a point to go beyond just meeting today’s standards – its strategic goal is to make products that support the future green economy, while making sure it manufactures environmentally friendly products in a sustainable way.

Vladimir Potanin
President, Chairman of the Management Board MMC Norilsk Nickel

IMPORTANT SOLUTIONS

Introduction

SMELTING SHOP SHUTDOWN

In December 2020, Nornickel shut down it oldest production facility – smelting shop in Nikel, Murmansk Region. The decision was driven by the Company's green economy policy.

The smelting shop in Nikel was built back in 1942 in an area that was once part of Finland. After World War II, the Soviet Union restored the metallurgical facilities in this area. By 1991, the Nikel smelting shop was one of the largest in the industry. The shop was repeatedly upgraded with the latest production equipment over the period. Upgrades also continued after it became part of Kola MMC in 1998: automated furnace charging, improved iD fan control and other innovations were implemented to reduce harmful emissions.

However, local improvements are no longer enough to ensure compliance with environmental standards.

> *In November 2019, the Company decided to shut down the shop.*

Halving emissions

The Nikel smelting shop shutdown completely eliminated sulphur dioxide emissions in the Russia–Norway border area.

Large quantities of sulphur dioxide are found in industrial waste, including metallurgical waste. Sulphur dioxide in emissions reacts to form sulphuric acid aerosol, resulting in acid rains. People with respiratory illnesses and ecosystems are particularly vulnerable to this pollution. Sulphur dioxide concentrations are particularly high in the Northern Hemisphere, including Russia and Europe.

After the Nikel shop shutdown, total sulphur dioxide emissions from Kola MMC's operations decreased by more than 50% by the end of 2020 (from a 2015 baseline). Emission reduction is expected to reach 85% in 2021.

People above all

Care for our people has always been a top priority for us. Employee interests are always considered when any changes are made to the production chain.

Affected employees are offered jobs in other units of the Company or contract termination on comfortable terms, retraining programmes, pension plan, and social guarantees. The Company offers affected employees jobs elsewhere or, if the person does not want to move and wishes, for example, to start their own business, the Company helps them to get started.

This approach helps foster highly skilled talent, maintain long-term relations with top talent and ensure succession across all operations of the Company.

Out of the 660 employees of the closed smelting shop, 72% opted to continue working with Nornickel elsewhere. Most of them have already been provided with jobs, with others to be given jobs in the near future. The Company will spend over RUB 900 million on support and social programmes for the smelting shop employees before the end of 2022.

Next step

Being one of the largest employers and tax payers in Russia, Nornickel makes social commitments to develop its operating regions. The Company supports the construction of transport infrastructure, sports facilities and advanced communication facilities, participates in philanthropic and volunteer programmes, addressed current issues and works for the future.

Nornickel honours its commitments even after an operation shutdown. Thus, the Company contributed to designing the strategy for the development of the Pechengsky District, which includes Nikel, in the Murmansk Region. Nornickel undertook to attract new businesses and social entrepreneurs to this area. As early as in 2020, the Company held a competition to provide RUB 185 million in interest-free loans to 11 winners for their business projects. New businesses are expected to launch in the Pechengsky District in 2021, creating new jobs for local people.

A comprehensive post-closure territory development is another important objective for the Company. The smelting shop building, which are being mothballed now, should remain a functional part of the town, rather than another abandoned piece of property. Nornickel helped to hold a contest for the best project to redevelop the site. The environmentally friendly transformation of the industrial zone with new green production facilities and jobs were among the most important conditions for entries in the contest. The contest was won by a project to create a small-scale metallurgical plant producing grinding balls and long products. Nornickel will help the winner with consultations and discounts for material and equipment procurement and will undertake to purchase a certain share of products.

CHAIRMAN'S LETTER

"The year 2020 has been a difficult year for the global economy as well as for Nornickel. We have learned our lessons from it, and are determined to retain our top place in the global mining industry, whilst focusing on sustainable growth.

Gareth Peter Penny
Chairman of the Board of Directors,
MMC Norilsk Nickel

Fellow Shareholders

As the Chairman of the Board, we would like to highlight that we are specifically focused, for obvious reasons, on ESG issues. The incident at one of our fuel farms in the middle of last year, made a huge impact on our risk assessment system and organisational structure, as we needed to take every step possible to identify root causes of the diesel spill and to promote changes within the Company to ensure that such accidents do not occur again.

At Board level we established an entirely independent Environmental Task Team to review the clean-up operations and a wider range of other environmental matters. The team meets on a regular basis to help management identify the drawbacks in our current corporate culture and internal procedures in order to make the necessary changes in the Company's leadership and to move from a compliance-based to a risk-based organisation.

The conclusion we made during this work is helping us to develop an holistic ESG programme that includes such matters as climate change, water stewardship, support of local communities and indigenous people. What is important is that we are now setting specific targets for this programme with committed budgets.

In order to make the ESG priorities an essential part of the Company's everyday life, we will embed industrial safety and environmental objectives into the management KPI's, starting from 2021.

Our total investment programme through 2030 is estimated at more than USD 27 billion. A significant part of this amount will be used to improve safety and reliability of operations, as well as our environmental footprint. Our Company is investing more than USD 5.5 billion in its environmental program, of which USD 3.6 billion will go into the desulphurisation of the Polar division.

Over USD 4 billion will be invested in the modernisation of the Company's infrastructure aimed at total renewal of over 60% of all energy assets in the next five years. This investment will allow us to progress in three main dimensions: safety, energy efficiency and the reduction of carbon emission. Nornickel is already positioned in the lowest quartile of the carbon intensity curve and is committed to maintain this leadership among metals and mining businesses in the future.

As we look into the future, we clearly see that our metal basket is uniquely geared towards a carbon-neutral world, and the positive impact that we can make is extremely important. Thus, large investments will go into growth projects. As a result, we are going to almost double ore output in the Norilsk region and increase metal production by roughly 30% by 2030.

From myself as the Chairman, through the entire Board and the senior management, everyone is focused on the sustainable development of the Company and we are absolutely determined to get it right. We look forward to delivering on our ambitious plans and to assure a continuity in value creation for our shareholders.

PRESIDENT'S LETTER

"

The concerted work of our seventy-thousand-strong team successfully brought us through all the hardships to achieve robust operational and financial performance for the year.

Vladimir Potanin
President,
Chairman of the Management Board
MMC Norilsk Nickel

Dear shareholders

In 2020, we faced a number of unprecedented challenges, and to overcome them, we needed the utmost effort of all our employees

COVID-19 response

The COVID-19 pandemic did not only lead to an unprecedented global economic downturn and, consequently, a significant drop in demand for our products, but it also put a huge strain on our operating model, our employees, their families and all local communities within Nornickel’s footprint.

To protect our employees and ensure business continuity, special task forces were set up that supported the uninterrupted operation of our production, transport and sales assets.

In addition, we provided all-encompassing support to local authorities, healthcare authorities, SMEs and vulnerable groups, providing a much-needed lifeline to our local communities at the height of the pandemic.

Our total 2020 COVID response spending was USD 157 million, and this year we will certainly continue to support our people and local communities until we get to the other side of the pandemic.

A strategic focus on sustainability

In the end of May 2020, we experienced a major environmental incident related to the leak of diesel fuel in the Norilsk Industrial District. The Company immediately launched a comprehensive cleanup operation, with its main phase completed by the end of 2020. We are currently looking into the most effective approaches to restore the damaged ecosystem in close cooperation with all stakeholders. With our support, the Russian Academy of Sciences organised the Great Norilsk Expedition, whose primary goal is to find effective solutions for restoring the area after the incident, as well as to develop recommendations for minimising the overall impact of industry on the Arctic environment. We plan to use the expedition’s findings in our programme to restore the damaged environment.

The Company has drawn an important lesson from this incident and dramatically reviewed its approach to environmental risk management. We have decided to combine isolated environmental initiatives into a comprehensive, group-wide environmental strategy, covering improvements to air quality, water stewardship, biodiversity restoration, climate change, tailings management and the remediation of historically polluted areas. Most importantly, we have also set specific targets and earmarked a budget for each of these areas. We plan to invest around USD 5.5 billion over the next ten years to implement this strategy, which is a record-high amount for the Russian mining and metals industry.

I would also like to emphasise that in December 2020 we discontinued smelting operations in Nikel in the Kola Peninsula, as part of a comprehensive environmental programme to achieve zero emissions in the Russia–Norway border area. Along with other initiatives, this will enable an 85% reduction of sulphur dioxide emissions in the Murmansk Region by the end of 2021.

CONTINUED

PRESIDENT'S LETTER

Financial highlights

We delivered strong financial results in 2020. Our revenue increased 15% to USD 15.5 billion, driven by higher prices of palladium and rhodium, and the ramp up of the Bystrinsky project. EBITDA was down 3% to USD 7.7 billion, primarily due to a large environmental provision related to the damage caused by the fuel spill, COVID-related expenses and the temporary build-up of metal inventories.

Capital expenditures increased by 33% year-on-year to USD 1.8 billion, driven by the Talnakh ore cluster, the development of the South Cluster project, more widespread energy infrastructure overhauls, investments in industrial safety, as well as the start of the active construction phase of the Sulphur Programme.

Free cash flow increased 36% to USD 6.6 billion, an all-time high for the Company.

Our net debt decreased more than 30%, with the net debt/EBITDA ratio falling to 0.6x. We maintained a sharp focus on refinancing our debt portfolio, which enabled us to significantly reduce the average cost of debt servicing by changing in conditions increasing the limit under the USD 4.150 billion syndicated loan, and by issuing USD 500 million in Eurobonds on terms that are extremely attractive for the Company. The Company's stable financial position is confirmed by investment-grade ratings from the Big Three credit rating agencies.

Transition to the active phase of the investment cycle

To implement our growth strategy and new environmental projects, our team has updated the Company's long-term CAPEX plan. Total investments for the next 10 years are scheduled to exceed USD 27 billion. In addition to our comprehensive environmental programme, investing in the development of our mining capacities will become a key element of our strategy. For example, we plan to increase ore production in the Norilsk Industrial District from the current 17–18 mtpa to 30–32 mtpa by developing the South Cluster and Talnakh mines. Ramping up ore output will require an expansion of processing capacities and, therefore, we have also started investing in the development of the Talnakh Concentrator, as well as in the construction of a third furnace at Nadezhda Metallurgical Plant and a new copper refining facility at Kola MMC. Over the next five years, CAPEX in fuel and energy assets, including health and safety initiatives, will amount to more than USD 4 billion, which should allow for an upgrade of over 60% of all Nornickel's energy infrastructure by 2030.

In order to efficiently execute on its ambitious strategy for upgrading and increasing the reliability of its assets, Nornickel has transitioned to a division-based governance structure, whereby production assets gain greater investment flexibility, without compromising the strategic and expert functions of the corporate centre. In addition, the Company is developing additional infrastructure for contractors and expanding the pool of construction companies that can operate in the region to address the shortage of contractors.

Social responsibility

In line with our strategic priority for sustainability, we significantly stepped up social spending in 2020.

Apart from helping to control the spread of COVID-19 among our employees and local communities, we have implemented a number of equally important social initiatives, which I would like to discuss separately.

Upon discontinuing the smelting operations in Nikel, we provided a comprehensive outplacement programme for the shop's personnel, making it easy for employees to transfer to other operations of the Company, as well as setting up a retraining programme and a pension plan. In addition, in partnership with the authorities of the Murmansk Region, the Company has committed to attracting new businesses and social entrepreneurs to the area, as part of its development after the shop's shutdown.

Last September, we signed an agreement with organisations representing the interests of the indigenous peoples of the North to implement a RUB 2 billion comprehensive plan to support the development of these communities. The programme will run until 2024 and includes support for traditional activities, protection of the indigenous habitat, as well as financing of housing, healthcare, infrastructure, tourism and socio-cultural projects. The list of projects was drafted up with the direct input of local communities, which should provide a framework for effective cooperation between indigenous peoples, local authorities and industrial companies on the development of the region.

In early 2021, Nornickel signed a quadripartite agreement on the social and economic development of Norilsk, which envisages the renovation of housing, the upgrade and overhaul of local utilities and engineering infrastructure, the creation of a comfortable and safe urban environment and the relocation of Norilsk and Dudinka residents to other regions with a milder climate.

In conclusion, I would like to thank all colleagues, contractors and customers who helped us overcome the challenges of 2020. I am confident that together we will deliver on all our long-term goals.

STRATEGY 2030 PRIORITIES

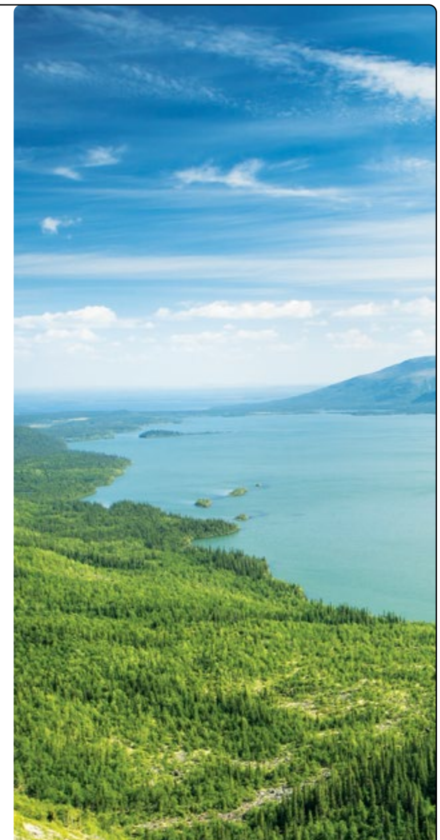
Investment over the last five years totalled over RUB 500 bn while the Company's investment programme is expected to more than double over the next five years.

> Our goal is to transform into an environmentally advanced business that offers sought-after jobs and premium investment opportunities. The upgrade of smelting operations in Monchegorsk will reduce emissions sevenfold in 2021 from a 2015 baseline. Along with the programme in Norilsk, which will require us to spend huge amounts running into hundreds of billions of roubles, we will cut emissions by 90% in the Norilsk region as well. As a result, we will be able to position ourselves as a business that goes beyond offering products for the green economy such as palladium and platinum used in catalysts to reduce emissions from vehicles as well as nickel, cobalt and other products that are used to manufacture batteries for the transition to hybrid and electric vehicles.

Vladimir Potanin
President of the Company

SAFETY AND ENVIRONMENT

- **Zero tolerance for fatalities, annual reduction in work-related injuries by 15%**
- **Long-term climate-based physical risk reduction programme:**
  - Implementing an action plan to improve industrial safety, including additional investment of RUB 100 bn in upgrading the energy infrastructure of the Taimyr Peninsula
  - Deploying an integrated system for monitoring permafrost behavior
- **Sulphur Programme 2.0 (ongoing). Targets:**
  - Reduce sulphur dioxide emissions in Norilsk tenfold by 2025
  - Achieve zero emissions in the Russia–Norway border area by discontinuing local smelting operations (completed in 2020)
  - Reduce emissions at Kola MMC sevenfold in 2021
- **The Holistic Environmental Strategy to expand the environmental agenda and set new targets for greenhouse gas emissions, water, soil, tailings, waste and biodiversity:**
  - Maintain absolute greenhouse gas emissions (Scope 1 and 2) from production enterprises not higher than 10 mln t of CO_2 equivalent
  - Maintain GHG emissions (Scope 1 and 2) per tonne of Ni equivalent in the bottom quartile on the global GHG intensity curve for the mining and metals industry



INCREASE ORE AND METALS OUTPUT

- **Boost ore production in the Norilsk Industrial District by ~1.8 times by 2030**
- **Boost metals output by 20–30% for nickel and copper and by 40–50% for PGMs by 2030**

UPGRADE AND EXPAND DOWNSTREAM AND ENERGY ASSETS

- **Expansion of Talnakh Concentrator (3rd Phase of Talnakh Concentrator Upgrade) to ramp up ore throughput from 10 Mtpa to 18 Mtpa**
- **New Norilsk Concentrator**
- **Expansion of Nadezhda Metallurgical Plant (3rd furnace at the smelting shop)**
- **A new cutting-edge copper refining facility at Kola MMC**
- **Upgrade of Tankhouse 2 (project completed in 2020)**
- **Energy infrastructure upgrades**

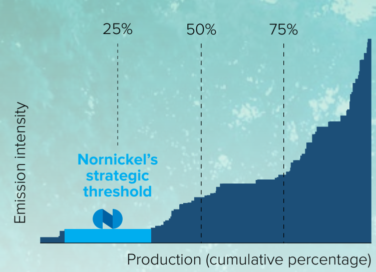
NEW STRATEGIC CONCEPT

MORE GREEN METALS FOR A GREENER FUTURE

STRATEGIC AMBITIONS OF THE INVESTMENT PROGRAMME[1]

Climate change

EMISSION INTENSITY CURVE FOR NICKEL, T OF CO_2 EQUIVALENT/T OF NI EQUIVALENT



Source: Wood Mackenzie, Nornickel's estimates

Sulphur Programme 2.0

Reducing emissions by 45% by 2023 and 90% by 2025

[1] Guidance confirmed with the projected investment growth expected to be offset by the rouble depreciation.

» For more details, see p. 38

ORE PRODUCTION IN THE NORILSK INDUSTRIAL DISTRICT (MTPA)[2]

30–32	2030+
24–26	2025
17	2017

Growth
up to 1.8x

Increase in mining

The resource base potential has been confirmed, with production growth targets for 2030 moderately increased to 20–30% for non-ferrous metals and 40–50% for PGMs[4]

STRATEGIC AMBITIONS FOR 2030+ METAL PRODUCTION[3]

Ni
kt

Growth
+ 20–30%

250–270	Strategic ambition 2030
210	2017

Cu
kt

Growth
+ 20–30%

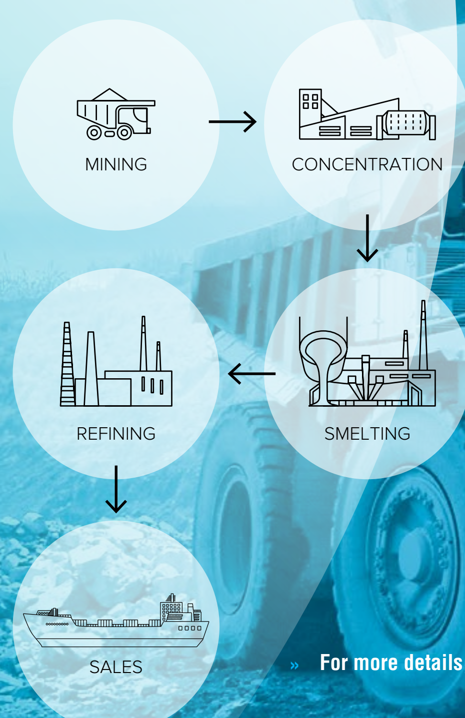
490–530	Strategic ambition 2030
kt	2017

Pt+Pd
t

Growth
+ 40–50%

150–160	Strategic ambition 2030
105	2017

Upgrade of downstream assets

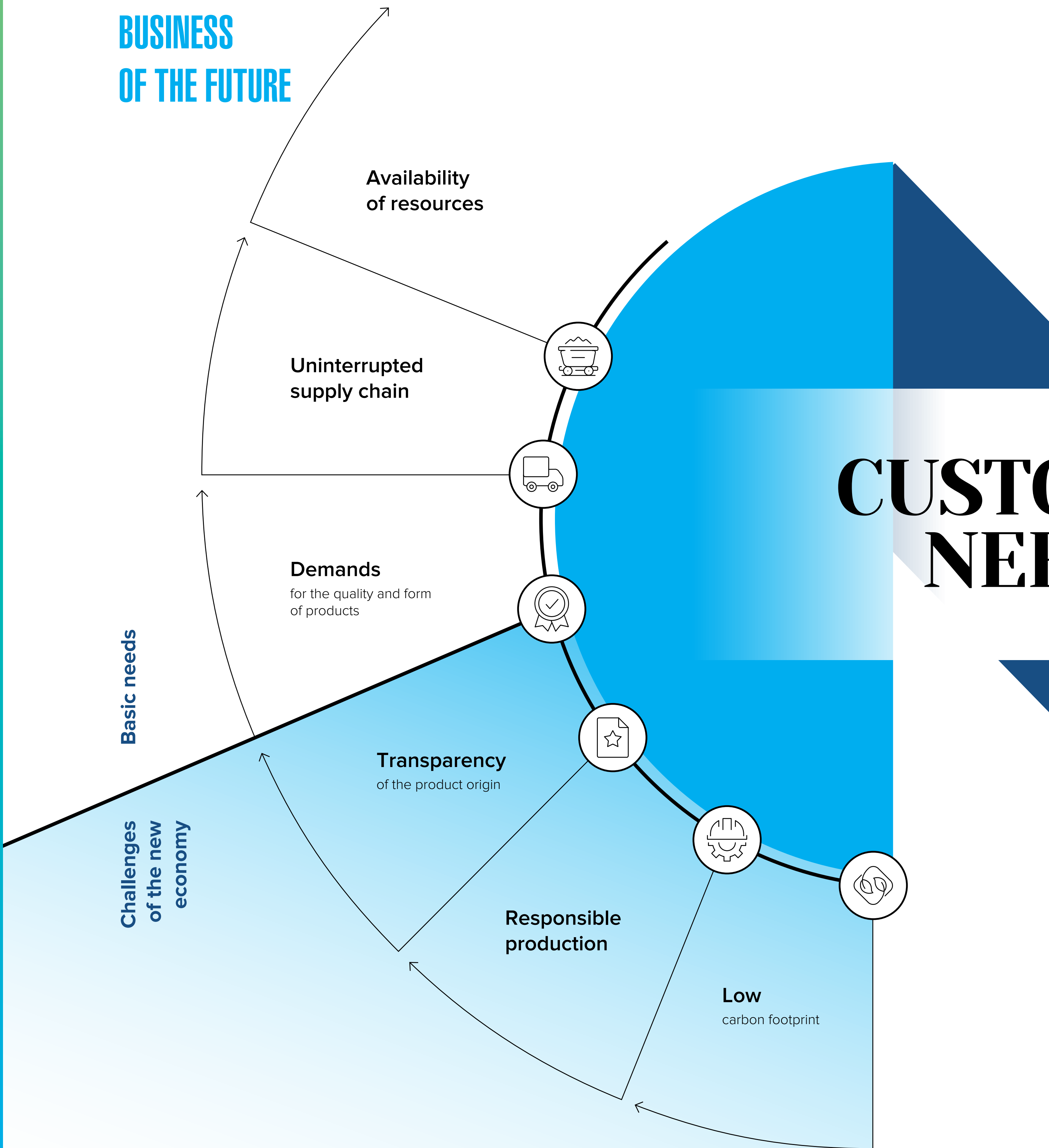


» For more details, see p. 35

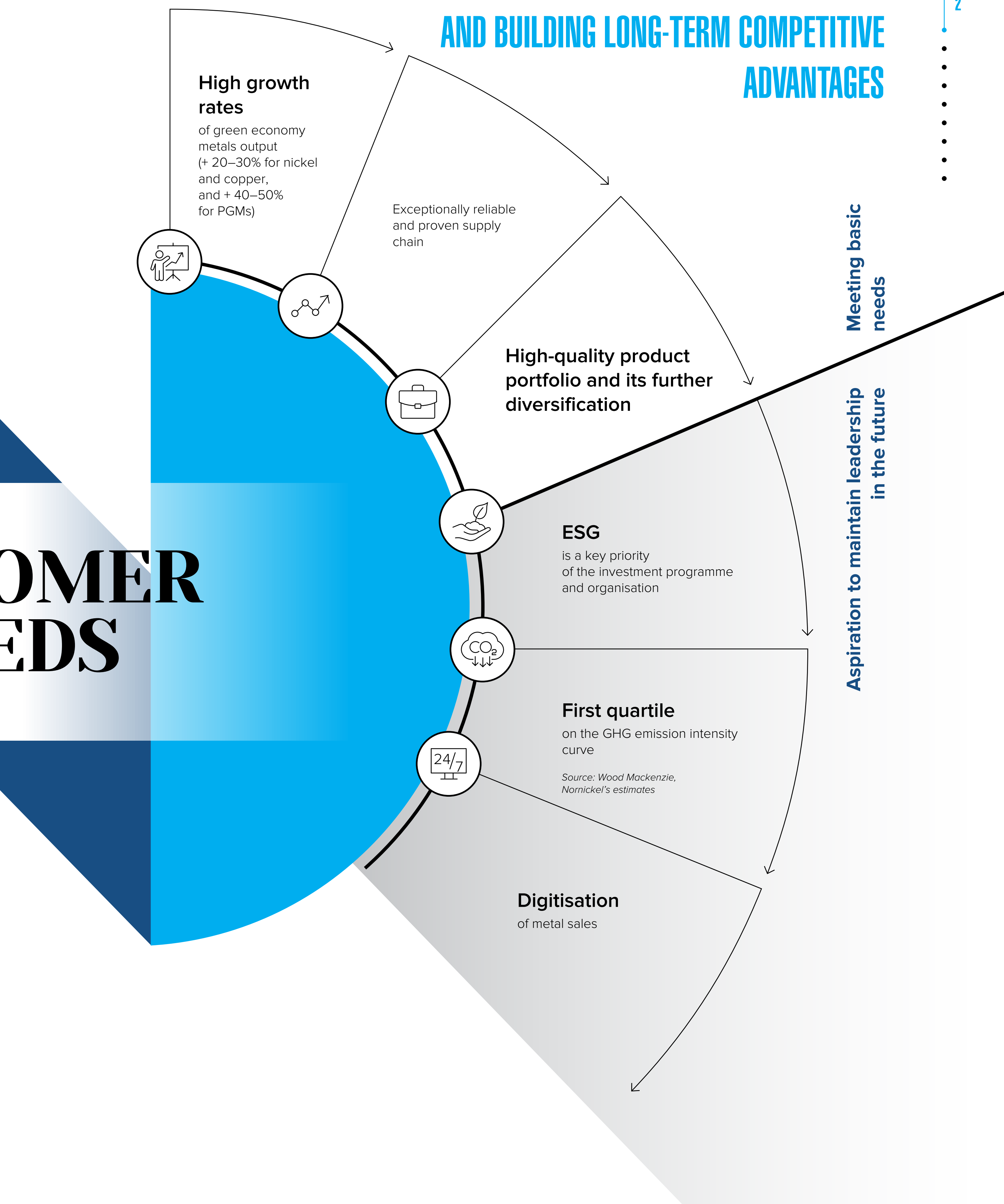
[2] Norilsk Industrial District.
[3] Metals produced from our own feedstock (including metals in semi-products for sale), excluding production at the Bystrinsky project and Nkomati.
From a 2017 baseline.

CUSTOMER FOCUS

THE COMMODITY BUSINESS OF THE FUTURE



CREATING VALUE FOR CUSTOMERS AND BUILDING LONG-TERM COMPETITIVE ADVANTAGES

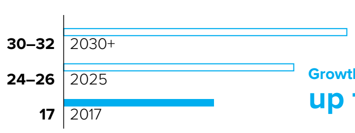


BUILDING A ROBUST CONFIGURATION OF DOWNSTREAM ASSETS

2030 TARGETS

THE RESOURCE BASE POTENTIAL AND PRODUCTION GROWTH TARGETS HAVE BEEN CONFIRMED

ORE PRODUCTION IN THE NORILSK INDUSTRIAL DISTRICT (MTPA)



Growth

up to **1.8x**

PRODUCTION (MTPA OF NI EQUIVALENT)

Growth

+30–40%

PREREQUISITES FOR PRODUCTION GROWTH

- Effective use of existing production sites
- A balanced production chain for each process phase
- Deployment of complementary technologies
- Fit with the Holistic Environmental Strategy
- Alignment with the programme for energy infrastructure upgrade and development

Nornickel's progress on SDGs in 2020

3 GOOD HEALTH AND WELL-BEING

13 thousand employees and their family members benefitted from the health improvement programme

72.8 thousand employees insured as part of the VHI programme

8 DECENT WORK AND ECONOMIC GROWTH

USD 1,827 average monthly salary of employees[1]

94% employee covered by collective bargaining agreements

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

~USD 100 mln spent on digital projects

~USD 2 mln spent on R&D and pre-feasibility studies

11 SUSTAINABLE CITIES AND COMMUNITIES

USD 219 mln spent on energy infrastructure

10-year plan for the development of Norilsk

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

86% of water reused and recycled

99% of waste is hazard class 5 (non-hazardous)

13 CLIMATE ACTION

3% reduction in GHG emissions (Scope 1 and 2) to 9.7 mln t[2]

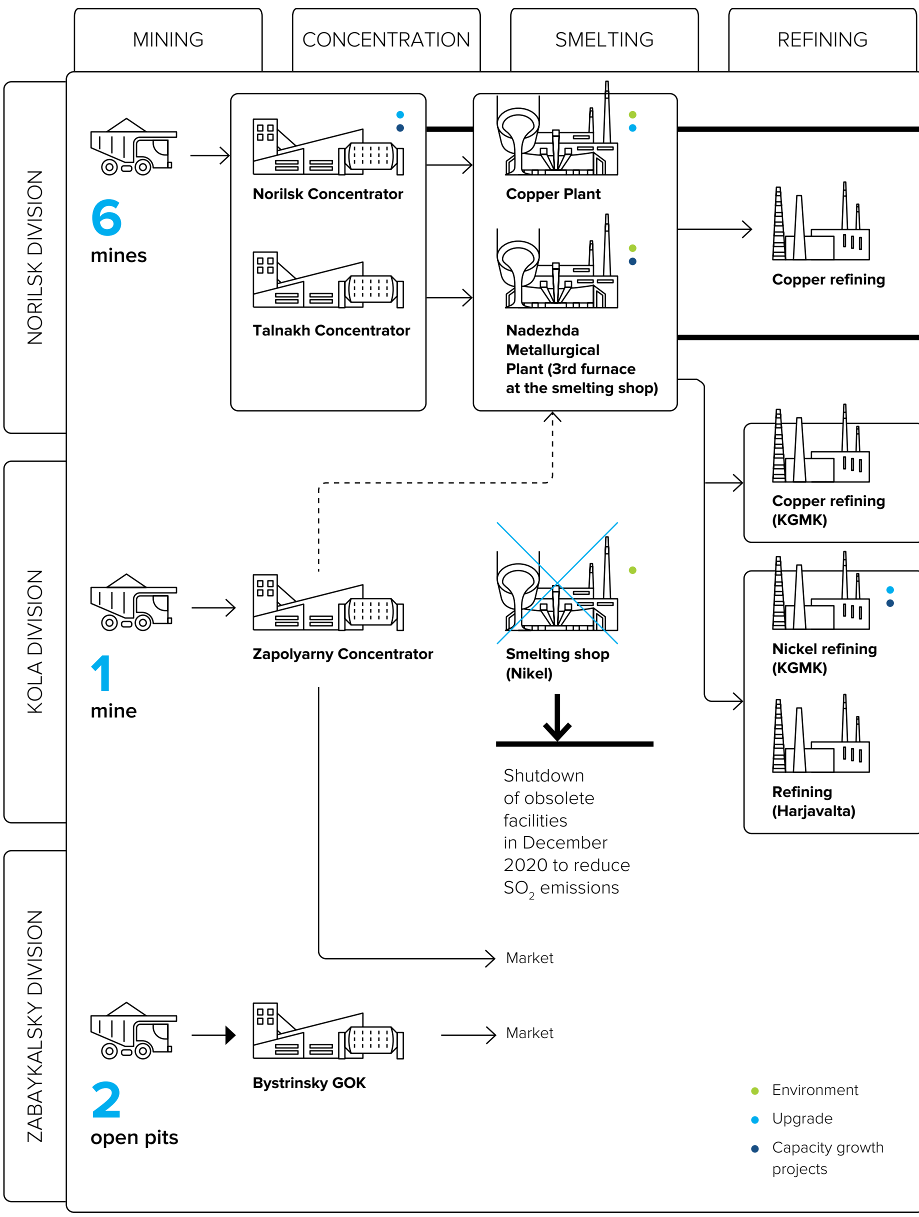
46% – the share of renewables in electricity consumption

[1] 2.5 times higher than the average wage in the Russian market.

[2] Nornickel embraces GHG minimisation.

ROADMAP FOR DEVELOPING DOWNSTREAM ASSETS

BALANCED AND GREEN VALUE CHAIN



The new Norilsk Concentrator (under development)
The upgrade of Talnakh Concentrator is underway (ramp-up from 10 Mtpa to 18 Mtpa by 2023–2024)

Sulphur Programme 2.0 at Copper Plant and Nadezhda Metallurgical Plant (ongoing)
Expansion of Nadezhda Metallurgical Plant (3rd production line: + 850 ktpa of concentrate) – investment decision expected in 2021

Advanced 150 ktpa copper refining – investment decision expected in 2021

Completion of Tankhouse 2 upgrade

A long-term configuration solution to increase performance and streamline the product range – under development

COMPREHENSIVE ENVIRONMENTAL PROGRAMME

CLIMATE CHANGE	AIR	WATER RESOURCES
TARGETS		
MINIMISE CLIMATE CHANGE IMPACT (REDUCE CO_2 EMISSION INTENSITY) AND MITIGATE PHYSICAL RISKS RELATED TO CLIMATE CHANGE	IMPROVE AIR QUALITY (REDUCE SO_2 EMISSIONS) IN THE AREAS OF OPERATION (NORILSK INDUSTRIAL DISTRICT AND KOLA PENINSULA)	MAINTAIN RECYCLED WATER RATIO AND REDUCE POLLUTION, CONTINUE PROVIDING CLEAR WATER TO LOCAL COMMUNITIES
Next steps: *Implement initiatives to ensure energy efficiency, reduce CO_2 emissions and mitigate physical risks*	**Next steps:** *Execute on Sulphur Programme 2.0 and other air emission reduction projects*	**Next steps:** *Build and run new treatment facilities, adopt new technical solutions, remediate pollution from environmental accidents in line with recommendations resulting from the Great Norilsk Expedition*
CAPITAL EXPENDITURES		
To be updated in 2021	USD 3.6 bn	USD 1.1 bn

TARGETS

TAILINGS AND WASTE

MAINTAIN SAFE OPERATION OF TAILINGS FACILITIES AND MINIMISE ENVIRONMENTAL IMPACT OF MINERAL AND NON-MINERAL WASTE

Next steps:
Build a mass balance model for waste management and prepare for the self-assessment under the Global Tailings Standard

LAND

RESTORE DISTURBED LANDS AND UPDATE MINE AND PLANT SHUTDOWN PLANS

Next steps:
Update shutdown plans across all units, implement the Great Norilsk Expedition's recommendations on soil restoration, collect waste and remediate land in the Norilsk Region

BIODIVERSITY

BIODIVERSITY SUPPORT PROGRAMME

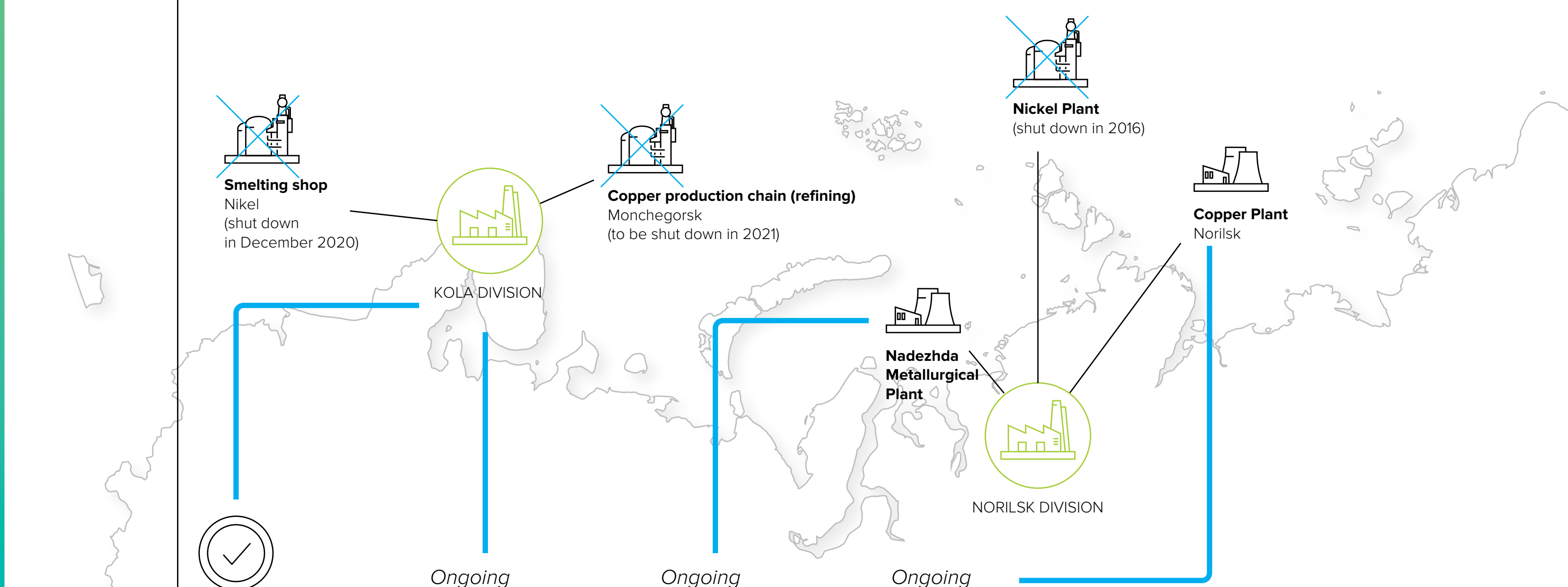
Next steps:
Restore biodiversity disturbed by recent environmental incidents, expand the monitoring programme incorporating the Great Norilsk Expedition's recommendations

CAPITAL EXPENDITURES

Tailings and waste	Land	Biodiversity
USD 0.6 bn	USD 0.3 bn	To be updated in 2021

SULPHUR PROGRAMME 2.0

ROAD MAP



2020

Streamline smelting operations in Nikel to reduce SO_2 emissions in the Russia–Norway border area

2x+

reduction in SO_2 emissions by 71% in Nikel and Zapolyarny[1]

2021

Complete the shutdown of smelting operations in Nikel and copper refining operations in the Kola Peninsula

7x

reduction in SO_2 emissions by 85%[1] at the Kola Division

2023

Launch Sulphur Programme 2.0 anchor initiative for the recovery of furnace gases at Nadezhda Metallurgical Plant

~2x

reduction in SO_2 emissions by 45%[1] at the Norilsk Division

2025

Launch Sulphur Programme 2.0 Copper Plant initiative for the recovery of furnace and converter gases

10x

reduction in SO_2 emissions by 90%[1] at the Norilsk Division

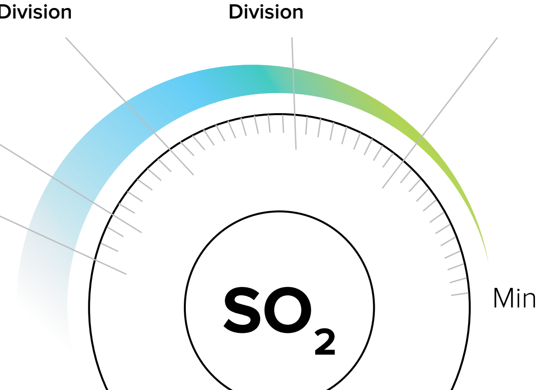
STRATEGIC ASPIRATION 2030+

Recover sulphur-poor gases (including converter gases) at Nadezhda Metallurgical Plant

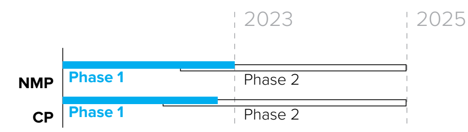
20x+

reduction in SO_2 emissions by over 95%[1] at the Norilsk Division

[1] From a 2015 baseline.



CONSTRUCTION STATUS



Nadezhda Metallurgical Plant

A flagship project for the recovery of furnace gases and construction of sulphuric acid neutralisation facilities, including related infrastructure:

- **~85%** of contracts already signed
- The project provides for the recovery of gases following the expansion of the smelting operations (3rd production line)
- Install piles and steel structures, and construct a gypsum storage facility – ongoing
- Manufacture core equipment

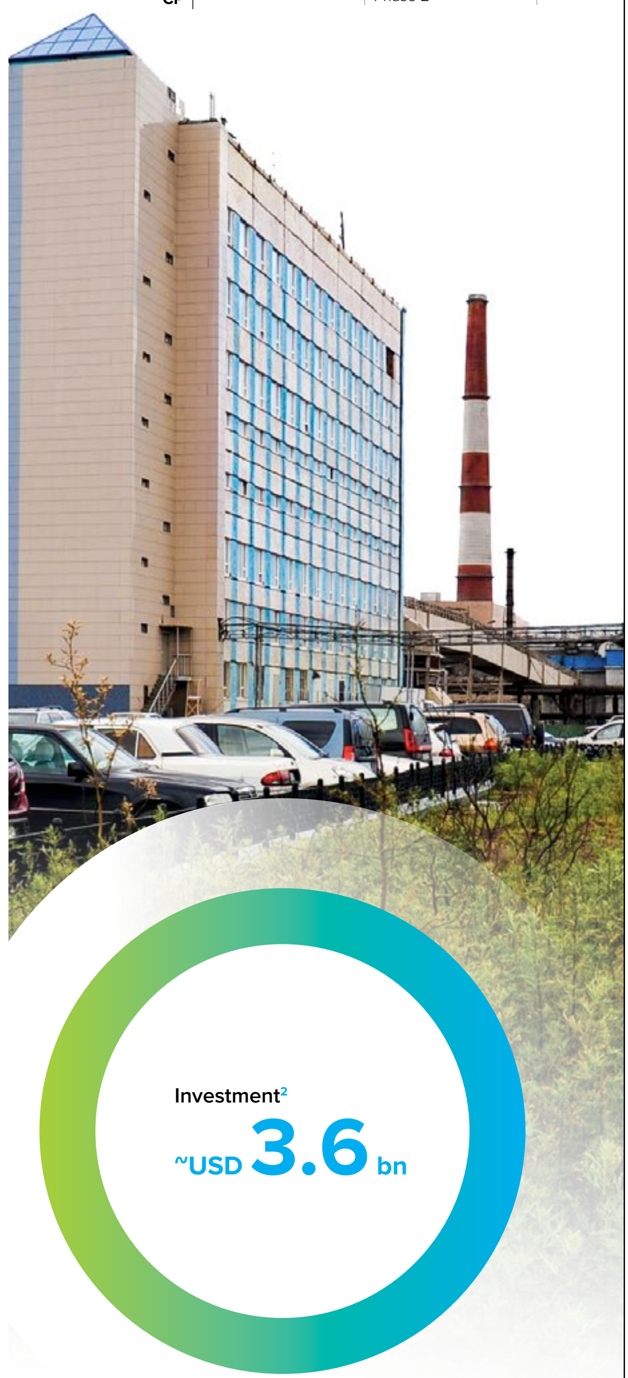
Copper Plant

Project to recover over 99%–99.5% of SO_2 (in line with global best practices), construction of a continuous converting complex. Preparation and update of design solutions:

- **Phase 1:** Launching the retrofit of the gas cleaning unit

~45% **of contracts already signed**

- **Phase 2:** Basic engineering/development of design documents – ongoing. Construction is expected to start in the second half of 2021



Investment[2]

~USD **3.6** bn

[2] Including construction of additional neutralisation facilities and related infrastructure for the 3rd furnace at Nadezhda Metallurgical Plant.

CLIMATE CHANGE STRATEGY

TARGETS TO 2030

Maintain the current level in absolute terms

Maintain absolute greenhouse gas emissions (Scope 1 + 2) from production enterprises below 10 mln t of CO_2 equivalent

Maintain the current level in relative terms

Maintain GHG emissions (Scope 1 + 2) per tonne of Ni equivalent in the bottom quartile of the global GHG intensity curve for the mining and metals industry

Source: [UPD]

CLIMATE RISK ASSESSMENT AND MANAGEMENT

Transition risks

IEA's Sustainable Development Scenario outlines a neutral/positive net effect for Nornickel metals

Physical risks

Adoption of a programme to assess physical risks related to climate change and large site monitoring

KEY INITIATIVES UNDER THE CLIMATE CHANGE STRATEGY

Reducing physical risks

Boosting energy efficiency

Reducing CO_2 emissions

KEY STEPS IN 2021 AND BEYOND

Developing and deploying a system for monitoring the foundations of industrial and municipal facilities within the permafrost area of Norilsk (including through satellites and geographic information systems)

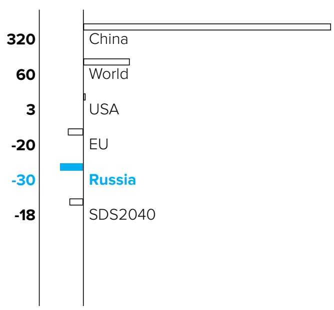
Delivering the strategy across divisions and assets:

- Developing key initiatives to mitigate physical risks, boost energy efficiency and reduce CO_2 emissions
- Drafting CAPEX plans and project implementation schedules

Aligning climate change disclosure with TCFD requirements

RUSSIA'S PROGRESS **TOWARDS THE GOALS OF THE PARIS AGREEMENT**

RUSSIA MAKES PROGRESS TOWARDS THE GOALS OF IEA'S SUSTAINABLE DEVELOPMENT SCENARIO TO 2040, CHANGE IN CO_2 EMISSIONS SINCE 1990, %



SINCE 2010, NORNICKEL HAS SUBSTANTIALLY REDUCED ITS CO_2 EMISSIONS (SCOPE 1 + 2), MLN T

– 70%

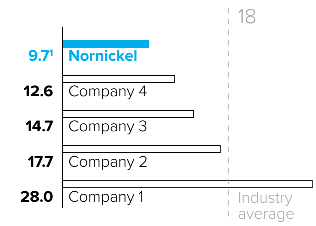
AIM STATED IN THE PARIS AGREEMENT

Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels

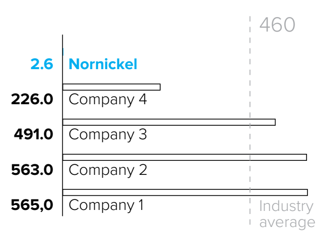
Source: *Company estimates, IEA, World Energy Outlook 2020, https://ourworldindata.org/co2-emissions#co2-emissions-by-region*

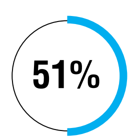
NORNICKEL AHEAD OF ITS **GLOBAL PEERS**

SCOPE 1 + 2 GREENHOUSE GAS EMISSIONS (CO_2 EQUIVALENT)

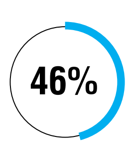


SCOPE 3 GREENHOUSE GAS EMISSIONS (CO_2 EQUIVALENT)[1]





AVERAGE SHARE OF LOW-CARBON ENERGY SOURCES IN ENERGY CONSUMPTION IN THE NORILSK REGION IN 2018–2020

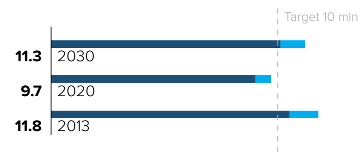


AVERAGE SHARE OF LOW-CARBON ENERGY SOURCES IN THE GROUP'S ENERGY CONSUMPTION IN 2018–2020

Source: *official company data, with the peer group including leading diversified mining companies (BHP, Vale, AngloAmerican, Freeport and RioTinto)*

ENTERPRISES TO CURB ABSOLUTE GREENHOUSE GAS EMISSIONS

KEEP ABSOLUTE GREENHOUSE GAS EMISSIONS (SCOPE 1 + 2) FROM PRODUCTION ENTERPRISES BELOW 10 MLN T OF CO_2 EQUIVALENT, MLN T OF CO_2 EQUIVALENT



- Production emissions[1]
- Emissions from infrastructure facilities and households

2030 AMBITION

MAINTAIN PRODUCTION EMISSIONS OF CO_2 **NOT HIGHER THAN**

10 **MLN T**

OF CO_2 EQUIVALENT OF GREENHOUSE GAS EMISSIONS (SCOPE 1 + 2) ...

... factoring in long-term production growth targets and the launch of Sulphur Programme 2.0[2]

Source: *Company estimates*

[1] Our greenhouse gas emissions were measured in line with the GHG Protocol, which includes emissions from transportation of products from the Company's production units to the customer, as well as from the primary processing of products by the customer.

[2] 2019 estimates in line with the GHG Protocol Corporate Accounting and Reporting Standard. Nornickel's GHG emissions include emissions from supplying electricity to Norilsk through NTEK, along with potential CO_2 emissions from Sulphur Programme 2.0.

KEY INVESTMENT PROJECTS

Upstream facilities

Investment projects to develop mines in the Norilsk Industrial District will ramp up their output from 24 mln t to 26 mln t of ore by 2025.

LOCATION

Norilsk Industrial District, Krasnoyarsk Region

SKALISTY MINE

Rich and cuprous ores from the Talnakhskoye deposit.

2020

Mining

2.5 mln t of ore

Investments

RUB **8** bn

(USD 109 mln)

2021–2025

Maintaining ore production at levels of

up to **2.5** mln t

Investments

RUB **49** bn

(USD 0.7 bn)

KOMSOMOLSKY MINE

Rich, cuprous and disseminated ores from the Talnakhskoye and Oktyabrskoye deposits.

2020

Mining

4.3 mln t of ore

Investments

RUB **3.8** bn

(USD 51 mln)

2021–2023

Maintaining ore production at levels of

up to **4.2** mln t

Investments

RUB **9.7** bn

(USD 0.1 bn)

MAYAK MINE [1]

Rich and disseminated ores from the Talnakhskoye deposit.

2020

Mining
0.8 mln t of ore

Investments
RUB 0.6 bn
(USD 8 mln)

2021–2023

Maintaining ore production at levels of
up to 1.0 mln t

Investments
RUB 20.3 bn
(USD 0.3 bn)

TAIMYRSKY MINE

Rich ores from the Oktyabrskoye deposit.

2020

Mining
4.24 mln t of ore

Investments
RUB 7.1 bn
(USD 97 mln)

2021–2023

Maintaining ore production at levels of
up to 4.25 mln t

Investments
RUB 21.0 bn
(USD 0.3 bn)

[1] Excluding the comprehensive development of Mayak Mine.

OKTYABRSKY MINE

Rich, cuprous and disseminated ores from the Oktyabrskoye deposit.

2020

Mining

5.3 mln t of ore

Investments

RUB **1.1** bn

(USD 16 mln)

2021–2023

Maintaining ore production at levels of

up to **5.0** mln t

Investments

RUB **27.0** bn

(USD 0.4 bn)

SOUTH CLUSTER

In 2017, Nornickel established Medvezhy Ruchey, a wholly-owned subsidiary that operates the assets of the South Cluster. The South Cluster comprises the Norilsk Concentrator (9.3 Mtpa), an open-pit and an underground mine at Zapolyarny Mine, and tailing dumps No. 1 and Lebyazhye.

The Norilsk Concentrator processes all disseminated ores from Zapolyarny Mine and cuprous and disseminated ores from the Oktyabrskoye and Talnakhskoye deposits. In 2020, the plant processed 7.6 mln t of ore.

Ore production is planned to be ramped up to 9.0 mln t by 2027 (750–850 koz of platinum group metals, 13 kt of nickel, 20 kt of copper).

2020

Mining

1.7 mln t of ore

Investments

RUB **8.3** bn

(USD 114 mln)

Processing projects

BYSTRINSKY GOK

Nornickel owns 50.01% in Bystrinsky GOK, with CIS Natural Resources Fund holding 39.32% and the remaining 10.67% belonging to Highland Fund.

LOCATION

Gazimuro-Zavodsky District, Zabaykalsky Region

GRK Bystrinskoye (Bystrinsky GOK) is Nornickel's greenfield project, which includes an open-pit mine at the Bystrinskoye deposit; a mining and processing plant (MPP) with all associated infrastructure, including a power line and the 227 km Borzya–Gazimursky Zavod railway line (Nornickel owns 25%, the government -75%), as well as a rotation camp.

Project overview

Bystrinsky GOK came online in 2019, ramping up to design capacity in 2020. Its EBITDA in 2020 was USD 717 million (up 100% vs 2019).

Balance (economic) ore reserves at year-end – 301 mln t, average metal content: Cu – 0.7%, Fe in magnetite concentrate – 22.4%, Au – 0.84 g/t[1]. Reserves life: 31 years.

2020

Mining

9.8 mln t of ore[2]

(Cu in concentrate – 63 kt, Au in concentrate – 241 koz, Fe in concentrate – 2.0 mln t)

Investments

RUB **7.2** bn

(USD 98 mln)

2021

Mining

10 mln t of ore[2]

(Cu in concentrate – 65–70 kt, Au in concentrate – 230–240 koz, iron ore concentrate –1.8–2.0 mln t)

2022

Mining

10 mln t of ore[2]

(Cu in concentrate – 68–73 kt, Au in concentrate – 234.5–255 koz, Fe in concentrate – 2.0–2.3 mln t)

Investments (2021–2022)

RUB **9.3** bn

(USD 150 mln)

[1] According to the Russian classification (A + B + C1 + C2).

[2] Throughput

TALNAKH CONCENTRATOR

The Talnakh Concentrator (Polar Division) processes rich, cuprous and disseminated ores from the Oktyabrskoye and Talnakhskoye deposits to produce nickel-pyrrhotite and copper concentrates. In 2020, the plant processed 10.9 mln t of ore, with nickel recovery in bulk flotation concentrate reaching 87.9% (+ 2.0% y-o-y).

LOCATION

Norilsk Industrial District, Krasnoyarsk Region

Project overview

The upgrade has been rolled out in three phases. Phase 1 was completed in 2015 and included the retrofit of existing floatation capacity and the replacement of flotation cells that were beyond their useful lives, in order to maintain the concentration capacity at 7.5 Mtpa. Phase 2 was completed in 2018 and involved the expansion of the main building, revamping of the reagent preparation building and construction of new ball mills and vertical mills, as well as the 1st Stage of the tailing dump, all of which helped to boost capacity to 10 Mtpa.

Plans for the 3rd Phase of the Talnakh Concentrator Upgrade include a capacity ramp-up to 18 Mtpa and construction of the tailing dump's 2nd Stage. The new concentration technology will increase recovery by 4–7% for all key metals. The project's completion is slated for 2023, reaching design capacity by 2024. In 2020, the project's CAPEX totalled RUB 2.8 billion (USD 38 million).

NICKEL TANKHOUSE UPGRADE

Project overview

Tankhouse 2 is part of Kola MMC, which produces nickel cathodes using the technology of nickel electrowinning from chlorine dissolved tube furnace nickel powder. The upgrade project provided for harnessing a more effective and cleaner nickel refining technology to increase its output of nickel cathodes to 145 ktpa. In Q1 2020, Nornickel commissioned all series of electrowinning cells. In Q2, Kola MMC's Chemical-and-Metallurgical Shop launched an alternative technology to process chlorine-leaching residues at the tankhouse, increasing the throughput and reducing work-in-progress in producing precious metals from chlorine-leaching residues at Kola MMC and the Polar Division. The new technology will also help achieve the highest purity of metal and reduce air emissions. In 2020, the upgrade was completed, with investments for the period totalling RUB 1.4 billion (USD 18.6 million).

LOCATION

Monchegorsk, Murmansk Region

Environmental projects

SULPHUR PROGRAMME 2.0 (POLAR DIVISION)

Project overview

The Sulphur Programme 2.0 is a major environmental project aimed at gradual reduction of sulphur dioxide emissions in the Norilsk Industrial District by 45% in 2023 and by 90% in 2025 (2015: baseline). In 2020, investment in the project totalled RUB 11.3 billion (USD 154 million) and will reach close to USD 3.6 billion for 2019–2025.

The project is implemented in phases at the Company's two core metallurgical plants in the Norilsk Industrial District – Nadezhda Metallurgical Plant and Copper Plant as follows:

- Phase 1: Recovery of sulphur-rich gases into sulphuric acid at Nadezhda Metallurgical Plant and construction of acid neutralisation facilities (including gypsum storage and related infrastructure), – to be completed by 2023
- Phase 2: Recovery of sulphur dioxide from rich off-gases at sulphuric facilities at Copper Plant, discontinuing of converter operations with sulphur-poor gases and expansion of neutralisation infrastructure (for sulphuric acid from the Cu stream) – to be completed by 2025

LOCATION

Norilsk Industrial District, Krasnoyarsk Region

COMPREHENSIVE ENVIRONMENTAL PROJECT AT KOLA MMC

Project overview

The environmental project at Kola MMC provides for the complete shutdown of smelting operations in Nickel, upgrade of the beneficiation plant in Zapolyarny, construction of a loading point to ship concentrate to consumers and discontinuing copper production in Monchegorsk with the obsolete copper anode electrolysis technology replaced with more advanced electrowinning.

In late 2020, Nornickel shut down its smelting shop in Nickel town. The shop's annual throughput was 900 kt of charge. The project helped reduce sulphur dioxide emissions by 71% in Nickel and Zapolyarny and by 58% in 2020 (from a 2015 baseline) in the Russia–Norway border area.

When shutting down the shop, employees who wished to stay with the Company were offered jobs in other units, while those who decided to try their hand at entrepreneurship were provided with favourable starting conditions. Of the 660 employees of the smelting shop, 72% chose to continue working at the Company. The Company will spend some RUB 912 million (USD 12.8 million) on outplacement programmes for the smelting shop's employees in 2020–2022.

During 2021, the shop's building will be prepared for mothballing: it will be cleaned, while materials containing non-ferrous metals will be collected and sent for recycling. The industrial site may be preserved if an option is found for transforming it by installing green industries and creating new jobs.

With the shutdown of the smelting shop, our production chain was modified, with a preliminary upgrade of the flotation shop conducted at Zapolyarny Concentrator to produce high-grade and low-grade saleable concentrate. The construction of the first 250 kt loading point for low-grade concentrate has been completed. The second loading point, for high-grade concentrate, while still under construction, is in pilot operation. The copper refining shop in Monchegorsk was closed in March 2021.

Project investments between 2021 and 2025 will total RUB 3.5 billion (USD 49 million), in 2020 - RUB 1.2 billion (USD 16 million).

LOCATION

Nickel, Monchegorsk, Zapolyarny, Murmansk Region

Energy projects

ENERGY INFRASTRUCTURE UPGRADES

In the Norilsk Industrial District Nornickel operates its own energy assets, which comprise four natural gas fields, three thermal power plants (CHPP-1, CHPP-2 and CHPP-3), two hydropower plants (Ust-Khantayskaya HPP and Kureyskaya HPP), gas pipelines and power lines. Electricity for the needs of Norilsk Division's production facilities, as well as local municipalities and social institutions is generated using renewables (hydropower) and gaseous hydrocarbons (natural gas).

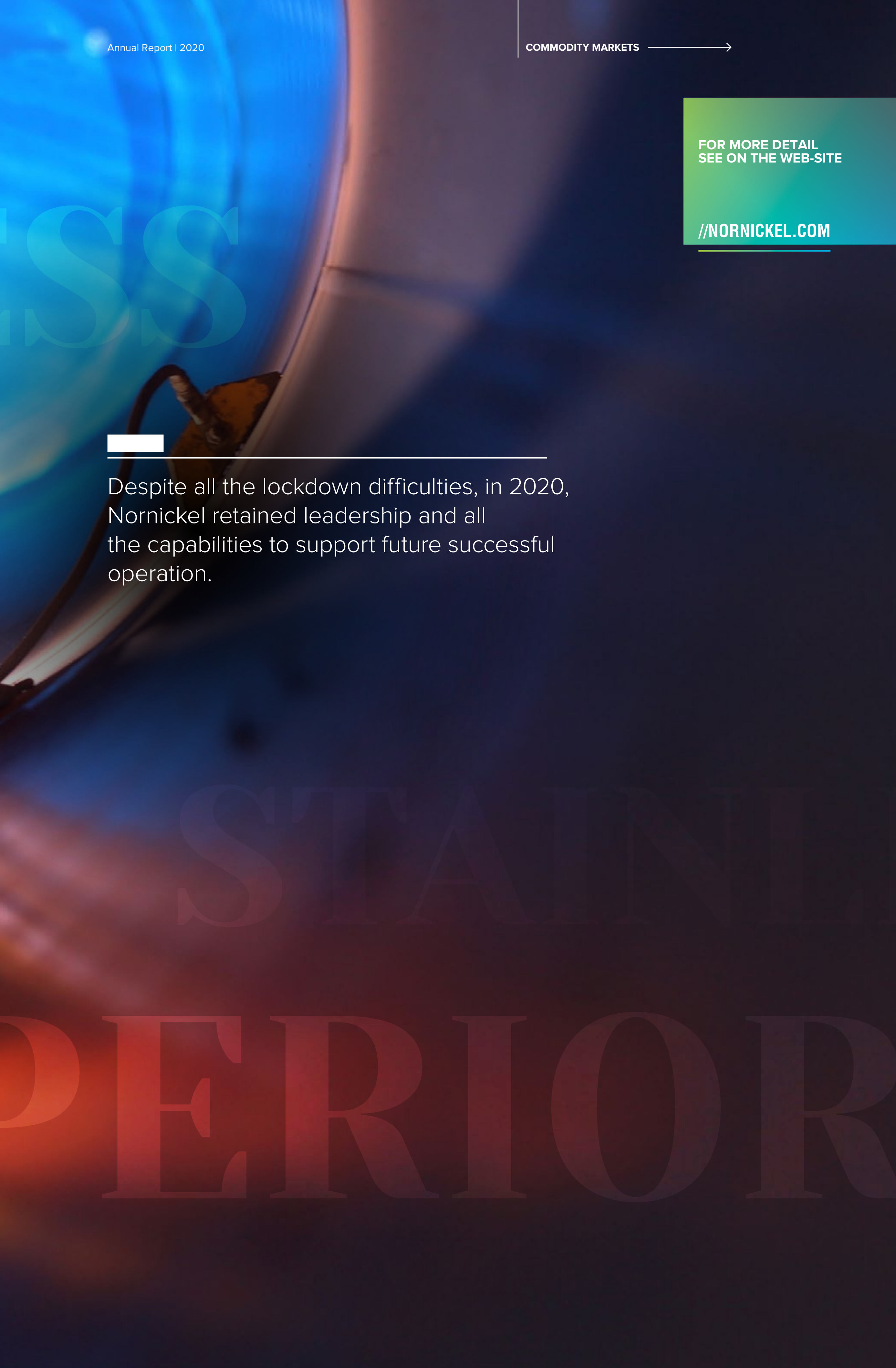
LOCATION

Norilsk Industrial District, Krasnoyarsk Region

Project overview

Investment in energy infrastructure aims to replace outdated and obsolete HPP turbines and CHPP units and retrofit key elements of the gas transmission system. These initiatives will markedly extend the service life of our key infrastructure facilities, enhance the reliability of our energy and gas supply, increase the amount of renewable energy generated and enable the creation of an energy saving ecosystem. Investments in energy assets between 2021 and 2025 will exceed USD 4 billion, including USD 1.3 billion to be spent on a comprehensive program to reduce physical risks, which comprises projects to revamp key infrastructure facilities (fuel storage, electricity supply, gas supply) and on a program of industrial safety improvement. In 2020, investments in energy infrastructure totalled RUB 16 billion (USD 219 million).

STAINLESS SUPERIORITY



FOR MORE DETAIL
SEE ON THE WEB-SITE

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Despite all the lockdown difficulties, in 2020, Nornickel retained leadership and all the capabilities to support future successful operation.

Introduction

LIDERSHIP IN COMMODITY MARKETS

According to Russia's Ministry of Economic Development, non-ferrous metals production in the Russian metals industry returned to pre-crisis levels over the last three years. With the nation's abundant raw materials and leading positions in many global markets, Russian industry players are optimistic about their future amid projections of a 3% to 5% annual growth in metals demand until 2030 contained in Russian and global economic growth forecasts.

Despite all the lockdown difficulties, in 2020, Nornickel retained leadership and all the capabilities to support future successful operation.

However, the coronavirus pandemic has impacted on all industries of the economy, with disruptions to operations, issues with exports and raw material deliveries, a marked drop in stainless crude steel output globally, and declining production of vehicles due to the pandemic - all playing a role.

Nickel

No. 1 globally in high-grade nickel production

In 2019, the nickel market was in deficit but moved into surplus in 2020 driven by a significant growth in nickel pig iron production in Indonesia.

In 2020, the consumption of primary nickel, which is used in stainless steel and batteries, remained almost flat. The growth in stainless crude steel output in China, where the industry was supported by a government stimulus package, and Indonesia, where new production capacity came online, was offset by a two-digit production slump in India (30%), the USA and Japan (18%), Taiwan (14%), and Europe (10%).

A steady trend towards road transport electrification continued supporting nickel usage in lithium-ion batteries. In 2020, global sales of electric vehicles (plug-in HEVs and battery electric vehicles) grew by 37%, with the production of electric vehicles (EV) growing at a CAGR of over 40% since 2016. This led to a 13% growth in nickel consumption by the EV industry in 2020.

Total nickel consumption in other industries slipped 14% due to falling consumer demand amid the COVID-19 pandemic and related restrictions.

Price-wise, nickel declined to USD 11,000/t in Q1 2020 due to the COVID-19 pandemic and falling consumer demand amid suspended production, but as the COVID-19 situation improved nickel surged to USD 15,550/t in early September, supported by a weaker US dollar and the Tesla CEO's call for higher sustainable nickel production. After a brief fall to USD 14,500/t due to a resurgence in coronavirus cases, nickel prices continued trending upwards, reaching USD 17,500/t on the back of higher output of stainless crude steel in China and concerns around ore supply from the Philippines following the suspension of production by a leading ore producer due to COVID-19. At the year end, the price settled at USD 16,500/t.

Copper

No. 11 globally in copper mine production

China is the largest copper consumer in the global market, and the nation's rapid economic recovery following a period of coronavirus restrictions provided a strong support to demand for copper, leading to record low copper exchange inventories by year end. In Europe, where Nornickel sells the bulk of its copper cathodes, consumption slipped 5.7%, while in Russia, consumption grew by 2%. Global refined copper consumption declined 1% in 2020.

Global copper mine production declined marginally in 2020, but a drawdown from the accumulated semi-product inventories boosted refined copper output by 2%.

Despite the negative impact of the COVID-19 pandemic, copper prices grew from the Q1 lows of about USD 4,600/t to USD 7,964/t at the end of December 2020, supported by the following factors:
- Quick economic recovery starting in Q2 2020 and led primarily by China
- Implementation of government stimulus packages in major economies (USA, European Union, China, etc.)
- The US dollar falling against its benchmark currency basket
- Soft monetary policy of central banks
- Growing investor optimism amid expectations of faster road transport electrification and growth in renewables (driven by the government stimulus focus on green technology across the EU and plans announced by the new US administration)
- A new policy of copper scrap recategorisation in China, resulting in temporary scrap shortages on the Chinese market
- Strikes at Las Bambas mine in Peru and El Teniente mine in Chile
- Record low exchange inventories of copper.

Platinum group metals (PGMs)

No. 1 globally in refined palladium production, No. 3 in platinum production, No. 4 in rhodium production

The automotive industry is the predominant consumer of palladium, platinum, and rhodium. Early in 2020, car manufacturers and dealerships had to suspend operations due to the pandemic. On the other hand, tighter environmental regulations in key economies led to higher PGM loadings per vehicle, which has partially offset the downward trend.

The supply of PGMs, particularly platinum and rhodium, was also impacted by operational issues at Anglo American Platinum's pyrometallurgical facilities, which significantly reduced refined PGM output in 2020.

On the palladium market, consumption has been outpacing production since 2010, with the deficit covered by inventories.

Prices were highly volatile throughout 2020: an upward trend that emerged in 2019 continued into 2020, followed by a sharp slump amid the pandemic and then a new surge on the back of the market recovery. The average annual price of palladium grew 43% y-o-y in 2020.

In 2020, enough platinum was produced to meet the needs of existing consumers; however, strong investment demand during the year pushed the platinum supply and demand balance into deficit.

The average annual price of platinum grew 2% y-o-y.

Platinum consumption by the jewellery industry (the second-largest platinum consumer after the automotive industry) continued declining due to lower demand for luxury items amid the pandemic and growing competition from gold jewellery.

The rhodium market remained undersupplied in 2020, with production declines outpacing demand fall in the automotive and other industries.

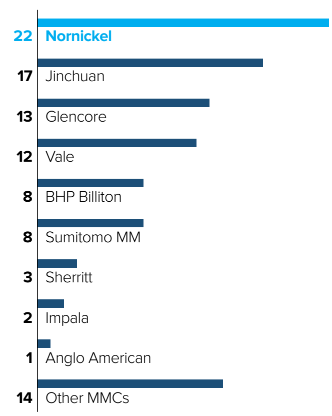
This led to high volatility in rhodium prices, which hit all-time highs twice during the year: USD 13,800/oz in March and USD 17,000/oz in December. The average annual price stood at USD 11,231, up 188% y-o-y.

NICKEL (Ni)

THE COMPANY'S INDUSTRY POSITION

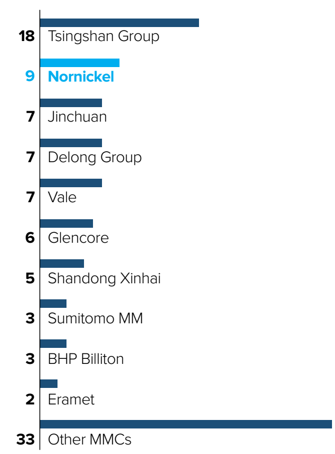
№ 1

IN HIGH-GRADE NICKEL PRODUCTION (%)



№ 2

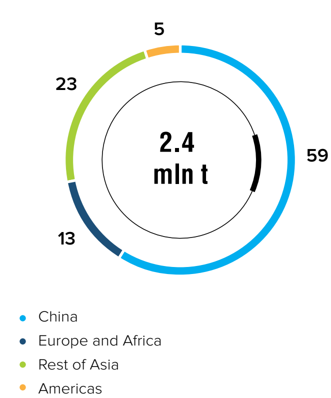
IN PRIMARY NICKEL PRODUCTION (%)



KEY TRENDS IN THE NICKEL MARKET

In 2020, the nickel market moved into a surplus of 87 kt, or 4% of annual consumption (compared to a deficit of 28 kt in 2019). This was due to a record increase in nickel pig iron (NPI) production driven by the commissioning of new facilities in Indonesia amid a COVID-19 related marginal decrease in high grade nickel consumption.

PRIMARY NICKEL CONSUMPTION BY REGION (%)



Source: Company data

Amid the first wave of COVID-19 (with rapidly growing number of cases, national lockdowns imposed in a number of countries, movement restrictions and increased global uncertainty), nickel price fell to USD 11,000/t at the end of the first quarter of 2020; however, starting from the second half of April, the price showed stable growth, reaching USD 17,000/t by year end. As a result, the average nickel price in 2020 decreased by only 1% y-o-y. The price recovery was driven by the following factors:

- Stimulus package introduced by the Chinese government for post-coronavirus recovery of the economy, which led to increased production of 300-series stainless steel in China and Indonesia
- Growth in nickel ore prices due to higher domestic demand in China, Indonesian nickel ore export ban, disruptions to ore supply from the Philippines due to nationwide COVID-19 lockdown
- Lower interest rates, higher global liquidity, and a weaker US dollar, all which had an overall favourable impact on raw material prices
- Long-term expectations of higher demand for nickel in the battery sector on the back of a significant increase in electric vehicle sales in Europe and recovering sales in China, bolstered by the Tesla CEO's call for mining more nickel while maintaining a relentless focus on sustainability.

AVERAGE ANNUAL NICKEL PRICES (USD/T)

2015	2016	2017	2018	2019	2020
11,807	9,609	10,411	13,122	13,936	13,789

Source: London Metal Exchange (cash settlement)

LONDON METAL EXCHANGE NICKEL PRICE (USD/T)

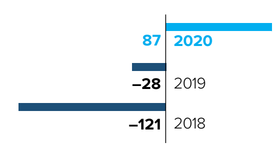
MARKET BALANCE

In 2020, the nickel market moved into a surplus of 87 kt (compared to a deficit of 28 kt in 2019), primarily driven by higher NPI production in Indonesia (up 63%, or 228 kt) on the back of new production start-ups. The commissioning schedules were not affected by the COVID-19 pandemic. NPI production in China dropped by 12%, or 72 kt, due to Indonesian nickel ore export ban introduced from 2020 and disruptions to ore supply from the Philippines, with its high-grade nickel ore reserves running down. Production of refined nickel decreased by 3%, or 29 kt, while production of its chemical compounds increased by 9%, or 12 kt, mostly due to higher nickel sulphate production for use in lithium-ion batteries. Conversely, production of other forms of low-grade nickel decreased by 6%, or 26 kt.

Nickel consumption remained virtually unchanged in 2020 with a marginal decrease of 2 kt. Growth in stainless steel production in China (+8%) and Indonesia (+16%) coupled with higher nickel consumption in the battery sector (+13%) was offset by weaker demand from other industries due to COVID-19 restrictions. Thus, nickel consumption in the stainless steel sector in other countries fell by 15%; global consumption in alloys and special steels by 13%; in electroplating by 12%; and in other industries by 17%.

The combined nickel inventories of the London Metal Exchange (LME) and Shanghai Futures Exchange (SFE) grew by 77 kt to 265 kt by year end. The biggest metal inflow for the year was recorded in January and February when LME-approved warehouses received over 80 kt of nickel, primarily from sources where inventories were built up during a major draw-down of nickel inventories from LME-approved warehouses in 2019. Since March, the exchange nickel inventories remained practically unchanged.

NICKEL PRODUCTION AND CONSUMPTION BALANCE (KT)



Source: Company data

CONSUMPTION

NICKEL CONSUMPTION BY INDUSTRY IN 2020 (KT)

Industry	Consumption	Share, %
Stainless steel	1,779	73
Batteries	211	9
Special steels	131	5
Electroplating	127	5
Alloys	124	5
Other	69	3

MAIN CONSUMING INDUSTRIES

Stainless steel production is the main area of nickel consumption (over 70% in 2020). There are many grades of stainless steel, with austenitic stainless steel being the most common family (over three quarters of global production), which includes the 300 series and 200 series.

The 300 series steels have higher nickel content, ranging typically between 8% and 12% but reaching 20% in certain grades. Nickel in these concentrations improves corrosion resistance and strength in a broad range of operating temperatures, ensures good ductility, resistance to aggressive environments, and makes the metal non-magnetic. This series is the most versatile and is widely used in the construction, food, chemical, transport, energy, and other industries.

In comparison, nickel content in the 200 series is lowered by alloying with manganese, and these steels are not complete substitutes for grades with high nickel content. The 200 series steels are prone to surface (pitting) corrosion, are not heat resistant and are not resistant to aggressive environments. However, due their lower cost, they are widely used in consumer goods such as domestic appliances. China and India alone account for over 90% of the global 200 series steel production.

Although they account for only 1% to 2% of global crude steel output, austenitic-ferritic (duplex) stainless steels also use nickel and are distinguished from other grades by a higher content of chromium (18% to 25%) and molybdenum (1% to 4%).

Ferritic and martensitic stainless steels (400 series) typically do not contain nickel, and their properties are similar to those of low-carbon corrosion-resistant steels; however, their mechanical properties are inferior to those of austenitic stainless steels. These steels are mainly used to manufacture automotive exhaust systems, cargo container frames, water heaters, cutlery, kitchenware, home decor items, and razor blades.

Stainless steel production uses almost all types of nickel feed (except for some special products, such as nickel powder and compounds). As nickel feed quality has practically no impact on the quality of stainless steel, steel mills predominantly use cheaper feeds. It is for this reason that high-grade nickel has been losing its share of nickel units consumed in stainless steel production in recent years.

In 2020, total stainless steel output decreased by 3% to 52 mln t. An increase in crude steel output in China (up 4% to 31 mln t) and Indonesia (up 20% to 2.7 mln t) was offset by steel output declines in other countries and regions due to the COVID-19 pandemic, led by Europe (– 10%), USA (– 18%), Japan (– 18%), India (– 30%) and Taiwan (– 14%).

Nonetheless, primary nickel consumption for stainless steel production grew by 3% to 1.78 mln t. This growth was completely offset by increased use of NPI (up 16% or 156 kt) in China and Indonesia, while the consumption of high grade nickel in stainless steel production dropped by 13%, or 85 kt, to 238 kt. NPI supply is expected to grow in the coming years, putting a significant pressure on high grade nickel consumption by the stainless steel sector.

The battery industry uses nickel as a key element in the production of cathode precursors for battery cells. However, nickel consumption trends vary depending on the type of battery.

⇑ Lithium-ion batteries (Li-ion). Li-ion batteries were first commercially launched in 1991 and became widespread due to their ability to retain a high level of energy capacity, even after multiple recharge cycles. Lithium-cobalt cathodes were initially used in electronics. In the 2000s, nickel and aluminium and later manganese were also added to the composition.

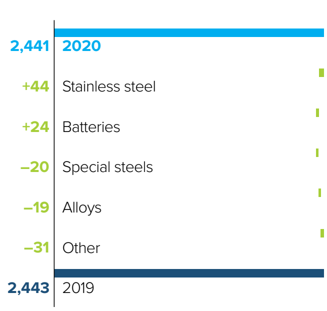
⇔ Nickel-metal hydride batteries (Ni-MH). Ni-MH batteries were developed in 1989 as a substitute for Ni-Cd batteries, to phase out cadmium. Currently, the nickel-metal hydride battery market is growing at a slow pace (with the hybrid vehicle projects of some manufacturers being its only growth driver) and is facing formidable competition from lithium-ion batteries.

⇓ Nickel-cadmium batteries (Ni-Cd). These were the first batteries using nickel, developed back in 1899. These days their use is limited, as the EU prohibited cadmium on grounds of toxicity.

Growth in lithium battery production is primarily driven by road transport electrification. The 2016–2020 CAGR of electric vehicles (plug-in HEVs and battery electric vehicles) was over 40%. The impetus for transport electrification has come from government incentives, more stringent environmental regulations, improved battery performance, and lower production costs of battery cells.

In recent years, China has been one of the most important growth hubs for EV manufacturing, with plans to increase NEV (electric vehicles and plug-in hybrids) sales to 20% of total vehicle sales by 2025 and to 50% by 2035.

NICKEL CONSUMPTION IN 2020
(KT)



Source: Company data

To this end, China implemented a number of initiatives to stimulate transport electrification, including subsidies for the purchase of electric cars and mandatory requirements for large automakers to produce electric vehicles and plug-in HEVs. However, government subsidies were slashed in the second half of 2019, leading to the first-ever decline in NEV sales for 12 consecutive months. As a result, NEV sales dropped by 44% in the first half of 2020. Sales increased as the nation's economy quickly recovered in the second half of the year, posting a 5% annual growth for the full year – nonetheless a multi-year low.

It was against this backdrop, that Europe became the new global driver of EV sales growth. In a number of countries, including Belgium, Germany, the UK and France, buyers receive handsome subsidies and tax incentives for buying EVs; in Norway, where EVs account for 54% of total vehicles sold in 2020, buyers are exempted from vehicle registration tax and value added tax (VAT).

Europe's share of global EV sales grew from 26% in 2019 to 44% in 2020. In March 2019, the European Commission approved new requirements for greenhouse gas emissions from road transport, which call for a more than 2X reduction of CO2 emissions by 2030 from a 2018 baseline. The initiative pressures automakers to expedite electrification under the threat of fines reaching into the billions. Also, the European Green Deal, a plan to achieve carbon neutrality and net-zero emissions by transition from fossil to renewable energy, was adopted. A battery production chain is being developed in the region in anticipation of increased demand. The total announced capacity of key producers (CATL, LG Chem, SK Innovation, Samsung, Northvolt and others) already exceeds 500 GW•h by 2025, which would be equivalent to 400 ktpa of nickel. By 2030, total capacity is expected to exceed 700 GW•h (about 600 kt of nickel per year).

Battery cell production is one of the final stages of battery manufacturing, preceded by the production of cathode precursors (hydroxides of transition metals) and then, the production of cathode material itself by thermal conversion into oxide when lithium is added. The main hubs of cathode precursor production in 2020 included China (63% of global production), Japan (28%) and South Korea (9%).

There are several types of lithium-ion batteries available depending on the cathode materials used: LCO (lithium, cobalt oxide), LFP (lithium, iron phosphate), LMO (lithium, manganese oxide), NCM (nickel, cobalt, manganese) and NCA (nickel, cobalt, aluminium).

LCO batteries are principally confined to mobile electronics, as the small size of the market, high cobalt prices and low power prevent their application in EVs. However, other types of cathodes are widely employed in the EV sector. The current trend is the growing global share of nickel-containing NCM and NCA batteries, owing to their higher energy density and specific energy, which increases drive range. LFP batteries for cars are made only in China, where these batteries accounted for about 30% of the total in 2020.

Growing nickel consumption in Li-ion batteries is driven not only by an increasing share of nickel-containing batteries but also by a higher average nickel content in the cathode material, which, in turn, is caused by the need to replace expensive cobalt units and increase energy density. In comparison to 2016, when NCM 1:1:1 (with a nickel mass fraction of 20% of the total cathode mass) accounted for the lion's share of compounds in cathode materials, 2020 saw nickel-intensive compounds – NCM 6:2:2, NCM 5:3:2, and NCM 8:1:1 – take the lead. Going forward, conversion to NCMA (nickel, cobalt, manganese, aluminium) with a higher content of nickel is expected, and some producers announced plans to launch commercial production of LNO (lithium, nickel oxide), a cathode material with nickel content exceeding 50%.

The growing popularity of electric and hybrid cars, along with the evolution of cathode technology towards nickel-intensive types add to the tailwinds for significant growth in primary nickel consumption by the industry in the longer run.

In 2020, total nickel consumption in other industries (alloys, special steels, electroplating) dropped by 14%, or 71 kt, amid weaker end consumer demand due to COVID-19 restrictions. These sectors are expected to recover in 2021 albeit at the rates below pre-pandemic levels.

PRODUCTION

Primary nickel can be sorted into two major groups:

- High-grade nickel (cathodes, briquettes, carbonyl nickel and nickel compounds), produced from both sulphide and laterite feed. 2020's main producers of high-grade nickel were Nornickel, Jinchuan, Glencore, Vale, BHP and Sumitomo Metal Mining
- Low-grade nickel (ferronickel, NPI and nickel oxide), produced from laterite feed only. In 2020, the key producers of low-grade nickel included Chinese and Indonesian NPI smelters, as well as ferronickel producers such as Eramet, POSCO, Anglo American, Solway, South32 and others

In the first half of 2020, the COVID-19 pandemic caused disruptions to many production sites. In most cases, operations were restarted later although some sites in Australia and Africa have not resumed production yet.

Despite production restrictions, primary nickel production in 2020 grew by 5%, or 112 kt, y-o-y driven primarily by a growing NPI output in Indonesia.

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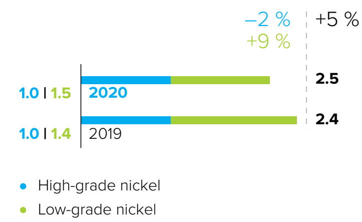
Most of the growth in 2020 low grade nickel production came from Indonesian NPI at 590 kt (+ 63% y-o-y), driven by new production capacity start-ups. COVID-19 pandemic restrictions did not affect the capacity project launch times. NPI production in China decreased to 512 kt (– 12%), due to Indonesian nickel ore export ban imposed in January 2020 and disruptions to ore supply from the Philippines, which reduced availability of raw materials for NPI production in China.

Ferronickel production remained virtually unchanged in 2020 at 388 kt (– 3%). Increases in ferronickel output in the Dominican Republic, Guatemala and Brazil were offset by production curtailments in Japan, Greece, New Caledonia and Columbia.

Nickel oxide output declined by 21% to 52 kt primarily due to VNC's New Caledonia refinery decommissioning and switch to a 100% mixed hydroxide product, followed by a shutdown of operations at Vale's site in Dalian.

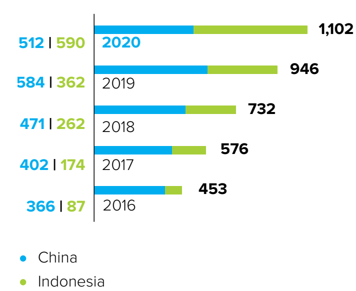
Notably, some ferronickel assets face a growing risk of shutdown due to the threat of potential replacement of ferronickel by NPI in the stainless steel sector. Also, social and political tensions in New Caledonia, where the conflict over the sale of Vale's asset and the island's independence recognition continued to escalate, resulted in a production halt at VNC's site and disrupted operations at SLN's Doniambo.

RIMARY NICKEL PRODUCTION IN 2019–2020 (MLN T)



Source: Company data

NPI PRODUCTION IN 2016–2020 (KT)

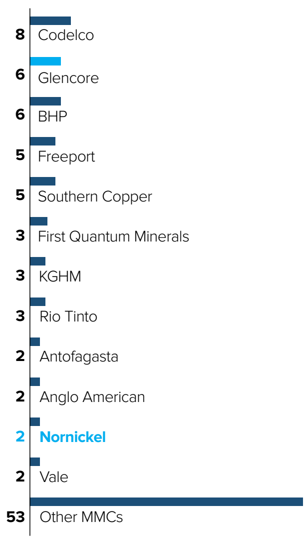


COPPER (Cu)

THE COMPANY'S INDUSTRY POSITION

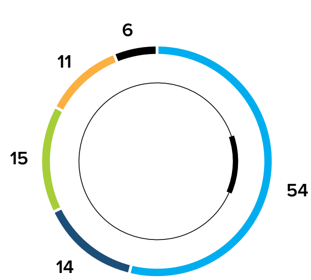
№ 11

IN THE COPPER MINING INDUSTRY



ources: Wood Mackenzie, corporate reports, Company data

REFINED COPPER CONSUMPTION BY REGION IN 2020 (%)



- China
- Rest of Asia
- Europe
- Americas
- Other

KEY TRENDS IN THE COPPER MARKET

Copper was priced at USD 6,200/t early in 2020 but slumped to USD 4,600/t in March amid an escalating COVID-19 pandemic. However, already in April, when lockdowns were lifted and the economy started recovering, copper price trend reversed its trajectory to become positive. In the second half of the year, this price rally intensified bolstered by government support, further production recovery in China, growing investor optimism after positive results of coronavirus vaccine trials were announced, and expectations of accelerated road transport electrification.

Towards the year end, the positive price trend was driven by disruptions to mine operations in Latin American, a new policy of copper scrap recategorization in China, and expectations of additional green economy investments in the United States announced by the new administration. These developments contributed to the copper price peaking at USD 7,964/t in December 2020, a fresh high since 2013.

Despite the global economy taking a hit from the COVID-19 pandemic, global consumption of copper cathodes decreased by only 1% in 2020. This was primarily due to a 4% growth in China's consumption, as the Chinese economy posted a V-shape recovery following a two-month lockdown in early 2020, which boosted demand for copper in the second half of the year. Consumption ex-China slipped 7% in the reporting period.

Copper mine production decreased by 1.5% in 2020; however, the draw-down of copper concentrate inventories boosted refined copper output by 2%. As a result, the market flipped to a marginal surplus of less than 2% of annual consumption.

Stocks held in Shanghai Futures Exchange and London Metal Exchange warehouses kept growing in Q1 2020, peaking early in Q2, then staring to fall as the global economy recovered, and hitting record lows towards the year end amid lower global copper output and increased buying.

The LME copper price averaged in 2020

6,181 USD/t

up 3% from USD 6,000/t a year prior.

AVERAGE ANNUAL COPPER PRICES (USD/T)

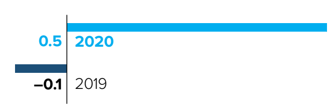
2015	2016	2017	2018	2019	2020
5,494	4,863	6,166	6,523	6,000	6,181

Source: London Metal Exchange

MARKET BALANCE

In 2020, the refined copper market was close to balance, with a surplus of less than 2% of the total market volume, or 544 kt. In 2020, total exchange inventories dropped by 13% to 265 kt (304 kt at year-end 2019), or at little more than four days of global consumption. The fall in exchange inventories was driven by stock relocation to non-exchange warehouses, mostly in China.

REFINED COPPER MARKET BALANCE (MLN T)



Sources: Company data, Wood Mackenzie

CONSUMPTION

Given its high electrical and thermal conductivity, ductility and corrosion resistance, copper is widely used in various industries. Up to 75% of refined copper produced globally is used for manufacturing electrical conductors, including various types of cable and wire. Key copper-consuming industries include construction, electrical and electronic equipment manufacturing, power industry, transport, mechanical engineering, various equipment and consumer goods production.

China remains the largest copper consumer globally, accounting for 54% of the total in 2020. Despite the pandemic, the Chinese economy posted a V-shape recovery as early as Q1 2020. China imported 4.5 mln t of refined copper in 2020, up 30% y-o-y. Copper scrap imports fell 35% to 0.8 mln t due to China's tighter requirements for imported scrap quality. Copper concentrate imports decreased marginally by 1% to 5.4 mln t. Refined copper consumption in China rose by 4% to 12.5 mln t.

Copper demand in developed markets was shrinking in 2020, with consumption in Europe (the Group's key market for copper cathodes) declining by 5.7% in 2020, in North America by 7.2%, in Middle East by 8.9%, and in Asia excluding China by 10%. Russia increased its copper consumption by 2%.

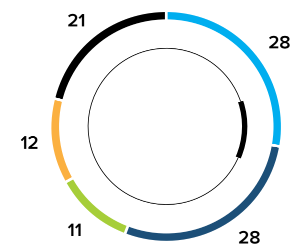
In 2020, global refined copper consumption totalled

23.4 mln t

down 1%, or 0.3 mln t, y-o-y.

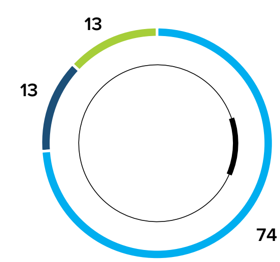
REFINED COPPER CONSUMPTION BY INDUSTRY

END USE BY INDUSTRY (%)



- Construction
- Power grids
- Heavy engineering
- Transport
- Consumer goods and equipment

FIRST USE (%)



- Wire rod
- Pipe
- Rolled products

Sources: Company data, Wood Mackenzie

PRODUCTION

In 2020, global refined copper output rose by 2%, or 0.4 mln t, y-o-y to 23.9 mln t. The biggest growth came from China, which is firmly on track to deliver smelting and refining capacity expansions. In 2020, refined copper production in China grew by 1% to 9.16 mln t, while its share in total global output reached 38%. Copper ore mined locally supports just 20% of total Chinese production, with the remaining 80% covered by imported copper concentrates and scrap copper.

Refined copper output increased by 1% in Asia on the back of growth in Japan and the Philippines; dropped 8% in North America, driven primarily by declines in the US market; rose by 2% in South America (Chile and Peru); and went up by 3% in Europe (led by Germany, Finland and Bulgaria).

In 2020, global copper mine production fell 1.5% to 20.6 mln t due mostly to the coronavirus pandemic and disruptions to Chilean and Peruvian mine operations caused by strikes

In 2020, mined production in Chile, the world's leading producer of copper, declined by 1% y-o-y to 5.8 mln t due to the coronavirus pandemic and short-lived strikes. Production in Peru dropped 13.5% to 2 mln t, also due to the pandemic.

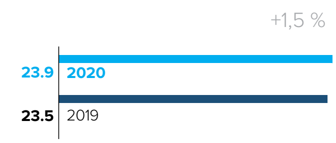
A 6% growth in Africa's mined production to 2.59 mln t was mainly due to higher output from mines in the Democratic Republic of the Congo and Zambia.

China ramped up copper mine production by 4% to 1.8 mln t in 2020, while mined production in Indonesia grew 26% to 0.5 mln t driven by the continued ramp-up of underground operations at Grasberg. Mongolia and Myanmar posted marginal output increases.

Production in North America decreased by 2% to 2.58 mln t – down 3% and 4.5% in the USA and Canada, respectively, and up 1% in Mexico.

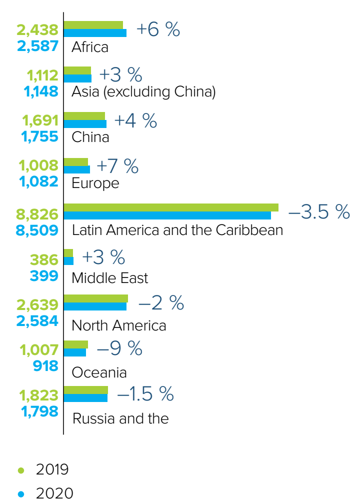
Russia's copper mine production increased by 2% in 2020.

REFINED COPPER PRODUCTION IN 2020 (MLN T)



Sources: Company data, Wood Mackenzie

COPPER MINE OUTPUT IN 2020 (KT)



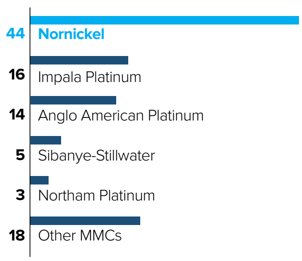
Sources: Company data, Wood Mackenzie

PALLADIUM (Pd)

THE COMPANY'S INDUSTRY POSITION

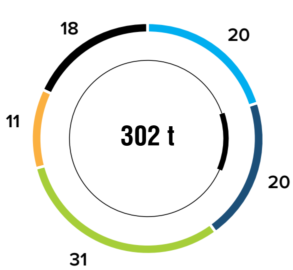
№ 1

NO. 1 IN PALLADIUM PRODUCTION[1] (%)



Source: Company data

INDUSTRIAL CONSUMPTION OF PALLADIUM BY REGION (%)



- North America
- Europe
- China
- Japan
- Rest of world

Source: Company data

2020 palladium prices averaged at

2,197

USD/oz,

up 43% from the 2019 average of USD 1,538/oz.

KEY TRENDS IN THE PALLADIUM MARKET

Despite price volatility in the first half of 2020, palladium chalked up further gains over the year. Early in 2020, palladium maintained its price momentum from the second half of 2019 amid high demand and metal shortages on the spot market, hitting an all-time high of USD 2,795/oz on 28 February. After reaching this level, palladium plummeted by almost 45% in March amid a global pandemic and the automotive industry virtually grinding to a halt. However, the plunge was followed by an equally fast recovery, supported by a faster-than-expected pick-up in the automotive industry and suspended processing operations at South Africa's mines. Palladium price was further bolstered by a weaker US dollar and negative real yields of treasury bills in key countries stemming from extraordinary monetary and fiscal measures taken by central banks and governments across the world. By year end, palladium price consolidated between USD 2,315/oz and USD 2,350/oz. Average annual net speculative positions dropped 71% to 10 tonnes on the New York Mercantile Exchange (NYMEX).

AVERAGE ANNUAL PALLADIUM PRICES (USD/OZ)

2015	2016	2017	2018	2019	2020
691	613	869	1,029	1,538	2,197

Source: LPPM

MARKET BALANCE

Since 2010, there has been a sustained undersupply in the physical palladium market covered by the inventories accumulated in previous years. In 2020, palladium supply deficit was fully offset by drawdown of consumers' strategic stocks on lower demand and uncertainty caused by the pandemic and lower ETF inventories.

[1] Refined metal including production from own feedstock by third parties under tolling agreements

PALLADIUM MARKET BALANCE IN 2020 (T)[2]

Palladium production and consumption balance	–6
Outflows from ETFs	4
Destocking by consumers	2
Supply and demand balance	0

CONSUMPTION

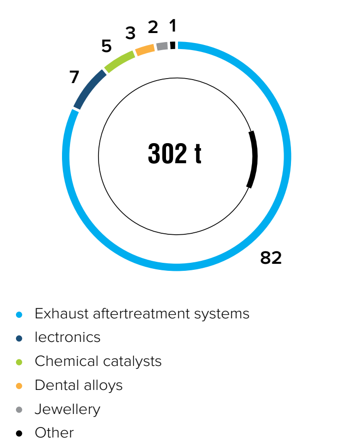
In 2020, industrial consumption of palladium decreased by 43 t (– 14%) y-o-y to 302 t.

AUTOMOTIVE INDUSTRY

Exhaust treatment systems account for the bulk of total palladium consumption. In this sector, palladium is used in catalytic converters to detoxify exhaust fumes. In most countries, such converters are legally required to be installed on all motor vehicles.

Due to its unique catalytic properties ensuring effective chemical reactions throughout the entire vehicle life cycle, there are almost no alternatives to palladium in this sector except for platinum, which is used mostly in diesel vehicles, and rhodium. Given the already significant share of the automotive industry in rhodium consumption and small market size (annual global production stands at 23 t), rhodium is subject to high price volatility and risk of physical metal shortage.

PALLADIUM CONSUMPTION IN 2020 BY INDUSTRY (%)



Source: Company data

INDUSTRIAL CONSUMPTION OF PALLADIUM IN 2019–2020 (t)

Source: Company data

[2] Excluding reallocated other reserves

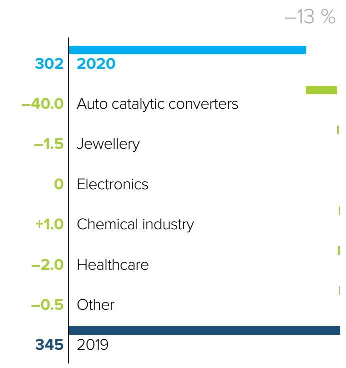
In 2020, palladium consumption in the automotive industry decreased by 40 t. The plunge was driven primarily by the spread of the coronavirus infection and the subsequent halts in business activity across the globe. In early spring, most automakers had to suspend operations, while dealers stopped selling. However, new safety rules were implemented at production sites and sales outlets in a relatively short time, and automakers and their dealerships in various countries were able to resume operations by early summer. China, which was the first market to be hit by the pandemic and subsequent restrictions, led the global automotive market recovery in the second half of the year: while sales fell 79% y-o-y in February, they were up y-o-y as early as April. In the reporting period, car sales in China slipped 4%. European and North American automotive markets were slower to recover as they were affected by the pandemic later than China and were under restrictions for a longer period of time. In September, European and North American market recovery slowed down on fears of a second wave of COVID-19 and tougher restrictions. 2020 automobile sales in Europe and North America were down 20% and 15%, respectively. Notably, fiscal incentives and low interest rates have mitigated the negative impact of the pandemic on the global automobile industry. Fiscal incentives helped towards restoring consumers' purchasing power, while lower interest rates made car loans more affordable.

Despite declining car production and sales, higher usage of platinum group metals (PGMs) per autocatalyst partially offset the negative trend. The higher PGM loadings per vehicle were mostly driven by tougher regulations on pollutant emissions, including the Worldwide Harmonised Light Vehicle Test Procedure (WLTP) – a new procedure for testing cars' emissions that took effect in the EU and Japan in September and October 2019, respectively. WLTP is designed to make tests more rigorous by extending their distance and duration, increasing the car weight, requiring faster acceleration, and stipulating that testing should be performed at different altitudes and temperatures. The Real Driving Emissions (RDE) test in the EU is another recently introduced regulation, in effect as of September 2019. These developments forced automakers to implement more sophisticated exhaust treatment systems and use more PGMs per catalytic converter. In China, the marked increase of palladium usage in autocatalysts came in the wake of tougher environmental requirements as part of the China 6b rollout across the country starting from 2019. The China 6b standard is based on best practices in emission control as developed in the USA and the EU, and sets out certain additional requirements.

Changes in the fleet mix also boosted palladium consumption among automakers as light diesel vehicles were further replaced with petrol cars and hybrids, which make greater use of palladium-based catalytic converters for exhaust fumes. The market share of diesel cars in Europe (the 27 EU countries + the UK + EFTA countries) dropped over the year from 30% to 26%.

Vehicle hybridisation is another trend driving palladium consumption. In 2020, production of hybrid-electric vehicles, so called mild, full and plug-in hybrids (PHEVs), increased by 69%, 8% and 51%, respectively. Since hybrids include petrol engines, they mostly use palladium-based catalytic converters. With the same engine displacement as the regular petrol vehicle, the hybrid uses more of the metal due to more frequent cold starts. The growing use of PGMs in the automotive industry is also driven by consumers migrating from sedans to larger-engine crossovers. In the USA, the SUV/pickup share grew by 5% to 69% in 2020.

CHANGE IN PALLADIUM CONSUMPTION IN 2019–2020 BY APPLICATION AREA (t)



Source: Company data

ELECTRONICS

In 2020, palladium consumption in the electronics industry remained unchanged at 23 t. In recent years, the use of palladium in multi-layer ceramic capacitors has been in decline, becoming limited to the most sophisticated products with a focus on reliability and performance in harsh environments, such as those in the defence and aerospace industries. Given the metal price inelasticity of demand, consumption in these sectors is expected to remain flat. Transition to 5G telecoms networks should also somewhat offset lower demand elsewhere. Moreover, despite disruptions at electronics assembly lines during the first half of the year, the work-from-home trend driven by the pandemic bolstered demand for laptops and TV sets.

CHEMICAL INDUSTRY

In 2020, the use of palladium in chemical catalysts increased by 1 t y-o-y. In the medium term, growing consumption of palladium in the chemical industry will be driven by newly launched terephthalic acid projects in China.

CHEMICAL INDUSTRY

The consumption of palladium in the healthcare sector continued a downward trend and declined by 23%, or 2 t, y-o-y due to the substitution of palladium with composite material alternatives and gold, which is currently priced lower. In Japan, the largest consumer of dental palladium, demand for palladium has been declining in recent years by an average of 5% to 10% per year.

JEWELLERY

Palladium is used in white gold alloys or in its pure form to make wedding rings among other items. In 2020, jewellery-related consumption of palladium decreased by another 1.5 t. A drop in Chinese demand for jewellery amidst a general slowdown in consumer spending and a consumer shift to other luxury goods were the primary cause of the continued sales decline. Sales of men's palladium wedding jewellery were also affected by growing prices for the metal.

INVESTMENTS

Investor demand for palladium kept shrinking in 2020 mostly due to outflows from exchange-traded funds (ETFs), which had their inventories reduced by 4 t to 18 t – an all-time low since 2008. The outflows amid growing palladium prices were driven by a wave of profit taking and by investors reallocating their capital to other palladium investment options.

PRODUCTION

In 2020, primary refined palladium production decreased by 10% y-o-y to 200 t.

In Russia, the leading palladium producing country, palladium output decreased by 3 t due to a high base effect from 2019, when the Krasnoyarsk Precious Metals Refinery (Krastsvetmet) processed Nornickel's work-in-progress inventories that had been built up previously.

South Africa, the world's second largest producer, also demonstrated a decrease (– 19 t) in refined palladium output due to the COVID-19 nationwide lockdown and operational issues at Anglo American Platinum's pyrometallurgical facilities. In Zimbabwe, palladium output increased by 1 t.

Primary palladium production in Canada and the USA remained largely flat.

The main sources of recycled palladium supply are scrapped auto catalytic converters, as well as jewellery and electronic scrap. In 2020, recycled output declined by 15 t to 96 t due to COVID-19 restrictions and a drop in new car sales which, in turn, impacted the supply of vehicles for recycling.

The sources of previously accumulated palladium stockpiles include trading companies, financial institutions, government reserves, and consumers' surplus inventories.

ANNUAL PRIMARY PALLADIUM OUTPUT IN 2019–2020 (t)

2019:— 221 t

Countries	2020
South Africa	– 19
Zimbabwe	+1
Russia	– 3
Canada	0
USA	0
Rest of world	0
Total	200

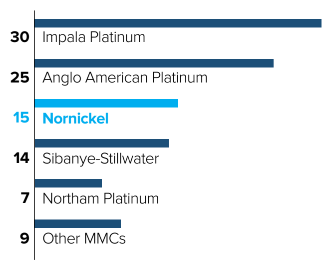
Source: Company data

PLATINUM (Pt)

THE COMPANY'S INDUSTRY POSITION

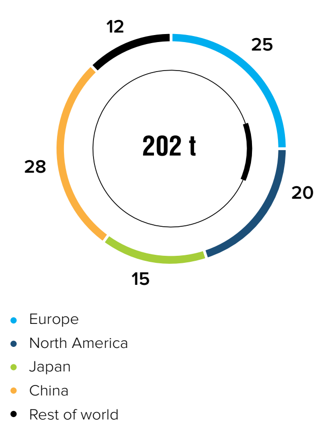
№ 3

IN PLATINUM PRODUCTION[1] (%)



Source: Company data

PLATINUM CONSUMPTION BY REGION (%)



Source: Company data

2020 platinum prices averaged at

884

USD/oz,

a 2% increase over the 2019 average of USD 863/oz.

KEY TRENDS IN THE PLATINUM MARKET

Platinum price remained relatively stable in January and February, staying within a narrow range between USD 900/oz and USD 1,000/oz before falling to a 10-year low of USD 600/oz in March. However, the price quickly recovered to between USD 800/oz and USD 850/oz. In the second half of 2020, the platinum price continued an upward trend, reaching the August 2016 level of USD 1,050/oz driven by equipment failures at Anglo American Platinum's pyrometallurgical facilities and stronger investor demand, which was manifested through inflows into ETFs (+ 16 t) and higher retail investment volume (+ 11 t). Average annual net speculative positions dropped 4% to 49 t on the New York Mercantile Exchange (NYMEX).

AVERAGE ANNUAL PLATINUM PRICES (USD/OZ)

2015	2016	2017	2018	2019	2020
1,053	989	949	880	863	884

Source: LPPM

[1] Refined metal including production from own feedstock by third parties under tolling agreements

MARKET BALANCE

In 2020, the platinum market came into balance, with the metal production sufficient to meet consumption. However, strong investment demand pushed the market into deficit, which was offset by previously accumulated metal stocks. The sources of previously accumulated platinum stockpiles include trading companies, financial institutions, and surplus inventories of consumers, while the movement of these inventories is non-transparent.

PLATINUM MARKET BALANCE IN 2020 (t)

Palladium production and consumption balance	0
Investor demand	11
ETF inflow	16
Supply and demand balance	–27

CONSUMPTION

Industrial consumption of platinum in 2020 declined to

202 t,

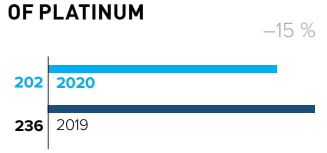
down 34 t (or 15%) y-o-y.

AUTOMOTIVE INDUSTRY

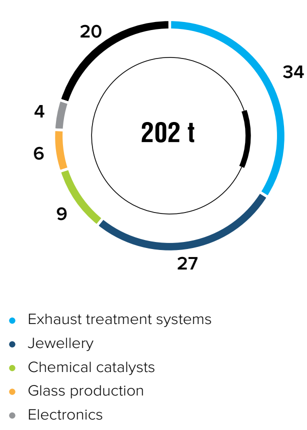
The automotive industry is the predominant consumer of platinum. Over 30% of platinum in this industry is used to manufacture exhaust gas catalysts for diesel vehicles.

Platinum consumption in the automotive sector slumped in 2020 (down 19 t from 2019) due to the COVID-19 pandemic and a falling share of diesel vehicles in the European market (the 27 EU countries + the UK + EFTA countries), a key market for vehicles running on this fuel, – the market share slipped from 30% to 26% in 2020.

INDUSTRIAL CONSUMPTION OF PLATINUM

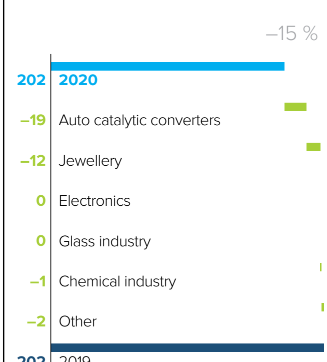


PLATINUM CONSUMPTION IN 2020 BY INDUSTRY



Source: Company data

PLATINUM CONSUMPTION BY APPLICATION AREA (t)



Source: Company data

JEWELLERY INDUSTRY

The second-largest platinum consumer is the jewellery industry, accounting for a third of demand. The reporting period saw a sustained downward trend in platinum consumption in the industry (down 12 t), persisting over the last few years. Apart from the coronavirus, the decrease was driven primarily by lower jewellery demand in China due to consumers switching to other investment options, and the falling demand for luxury goods amid concerns over the country’s sustained economic growth. Platinum in this market is under increasing pressure from gold jewellery.

CHEMICAL INDUSTRY

In 2020, platinum consumption in industrial catalyst manufacturing decreased by 1 t due to falling refining volumes.

GLASS INDUSTRY

Platinum is needed to produce glass fibre and optical glass. Demand for the metal in this industry remained unchanged in 2020.

Platinum consumption in electronics also remained flat.

INVESTMENTS

Platinum is widely used as an investment instrument. Physical investments may vary from coins and smaller bars to investments in physical platinum ETFs, which accumulate large amounts of platinum in standard bars. In 2020, demand for platinum bars from retail investors rose slightly (up 11 t) due to low prices coupled with expectations of growth. During the year, investments in platinum ETFs rose by 16 t to 121 t.

PRODUCTION

Global production of primary refined platinum in 2020 decreased y-o-y by 40 t to 150 t.

In the reporting period, supply from South Africa, the world’s largest platinum producer, declined by 40 t due to the nationwide lockdown and operational issues at Anglo American Platinum’s pyrometallurgical facilities, while Zimbabwe increased its output by 1 t. The Russian Federation’s output remained flat. Production in North America slipped 1 t.

The main sources of recycled platinum include used exhaust gas catalysts and jewellery scrap. In 2020, recycled output declined by 10 t to 52 t due to COVID-19 restrictions and a drop in new car sales which, in turn, impacted the supply of vehicles for recycling.

PRIMARY PLATINUM PRODUCTION IN 2019–2020 (t)

2019: 190 t

Countries	2020
South Africa	–40
Zimbabwe	+1
Russia	0
Canada	–1
USA	0
Rest of world	0
Total	150

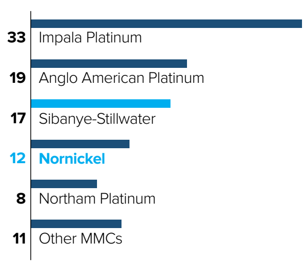
Source: Company data

RHODIUM (Rh)

THE COMPANY'S INDUSTRY POSITION

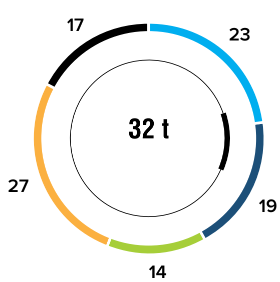
№ 4

IN RHODIUM PRODUCTION[1] (%)



Source: Company data

RHODIUM CONSUMPTION BY REGION (%)



- Europe
- North America
- Japan
- China
- Rest of world

Source: Company data

Rhodium prices in 2020 averaged at

11,231

USD/oz,

up 188% from the 2019 average of USD 3,904/oz.

KEY TRENDS IN THE RHODIUM MARKET

2020 saw a major increase in rhodium prices although with high volatility: rhodium prices reached an all-time high of USD 13,800/oz amid high demand and shortages in the spot market in early March, but due to the spread of COVID-19, the price plunged 60% to USD 5,500/oz on 24 March. However, prices quickly recovered to between USD 8,000/oz and USD 9,000/oz as early as in the beginning of April. In the second half of 2020, the automotive industry recovery and relaxation of coronavirus restrictions as well as the breakdown in Anglo American Platinum's pyrometallurgical processes led to resumed growth in rhodium prices reaching a new high of USD 17,000/oz at the end of December. Stronger rhodium price fluctuations in 2020 compared to other PGMs are attributed to a relatively small size of the market, expectations of further growth in consumption by the automotive industry driven by the new vehicle emission standards, nontransparent reserves, and concentration of production in the southern Africa where production suffered from instability during the year.

AVERAGE ANNUAL RHODIUM PRICES (USD/OZ)

2015	2016	2017	2018	2019	2020
952	694	1,105	2,220	3,904	11,231

Source: JMI

[1] Refined metal including production from own feedstock by third parties under tolling agreements.

MARKET BALANCE

In 2020, the rhodium market remained undersupplied, as the metal's production decline outpaced growth in demand from the automotive and other industries.

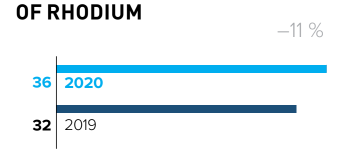
RHODIUM CONSUMPTION IN 2020 BY INDUSTRY (t)

production and consumption balance	–2
Investor demand	0
ETF inflow	0
Supply and demand balance	–2

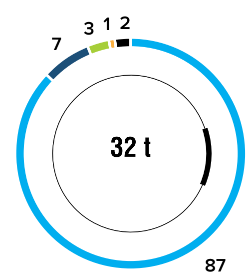
CONSUMPTION

Industrial consumption of rhodium in 2020 declined to 32 t, down 4 t (or 11%) y-o-y.

INDUSTRIAL CONSUMPTION OF RHODIUM



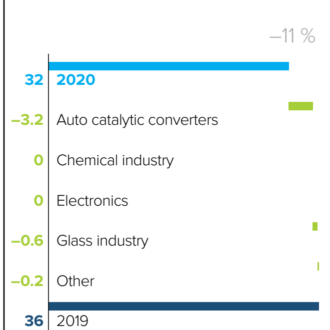
RHODIUM CONSUMPTION IN 2020 BY INDUSTRY



- Exhaust treatment systems
- Chemical catalysts
- Glass production
- Electronics
- Other

Source: Company data

RHODIUM CONSUMPTION BY APPLICATION AREA (t)



Source: Company data

AUTOMOTIVE INDUSTRY

The automotive industry is the key consumer of rhodium which is used in catalytic converters to detoxify exhaust fumes, thanks to the unique properties of this metal. Installation of such converters on motor vehicles is a legal requirement. Rhodium is considered the best catalyst for nitrogen oxide removal in petrol motors. In 2020, rhodium consumption by the automotive industry decreased by 3.2 t (down 10%) to 27.4 t, mainly due to falling vehicle output amid lockdown restrictions. However, the relaxation of coronavirus restrictions in the second half of the year, fiscal stimuli from most governments and monetary easing led to a recovery in demand. Another growth driver included tougher regulations on pollutant emissions, including the Real Driving Emissions (RDE) test, in effect in the EU as of September 2019. In China, the marked increase of rhodium usage in autocatalysts came in the wake of tougher environmental requirements as part of the China 6 rollout across the country starting from 2019. Tighter Tier 3 and LEV III standards in the USA and declining global share of diesel vehicles (due to their replacement with petrol vehicles) also partly offset the consequences of the decline in vehicle production in 2020 thanks to higher rhodium use per vehicle.

In 2020, rhodium consumption in the glass industry also plunged. Rhodium is used to make crucibles for glass batch melting. In 2020, the industry's demand for this metal decreased by 0.6 t due to its replacement with cheaper platinum.

Rhodium consumption in the chemical and electronics industries remained flat.

PRODUCTION

Global production of primary refined rhodium in 2020 decreased by 5 t y-o-y to 20 t. In the reporting period, supply from South Africa, the world's largest rhodium producer, declined by 5 t due to the nationwide lockdown and operational issues at Anglo American Platinum's pyrometallurgical facilities. The output of the Russian Federation, North American and other countries remained flat.

Used exhaust gas catalysts are the main source of recycled rhodium. In 2020, recycled output declined by 0.6 t to 10.4 t due to the pandemic restrictions and a drop in new car sales which, in turn, impacted the supply of vehicles for recycling.

PRIMARY RHODIUM PRODUCTION IN 2019–2020 (t)

2019–25 t

Countries	2020
South Africa	–5.1
Zimbabwe	+0.1
Russia	0
Canada	0
USA	0
Rest of world	0
Total	20

Source: Company data

MINERAL RESOURCE BASE

Resources and reserves as of 31 december, 2020[1]	Ore kt
NORILSK NICKEL GROUP	
TOTAL PROVEN AND PROBABLE RESERVES	742,833
TOTAL MEASURED AND INDICATED RESOURCES	2,018,551
TOTAL INFERRED RESOURCES	575,384
TAIMYR PENINSULA	
Proven and probable reserves	663,128
Proven reserves	
Talnakh ore field, including	315,314
rich	50,942
cuprous	14,735
disseminated	249,637
Norilsk-1 deposit (disseminated ore)	18,666
Probable reserves	
Talnakh ore field, including	307,493
rich	73,441
cuprous	64,185
disseminated	169,867
Norilsk-1 deposit (disseminated ore)	21,655
Measured and indicated resources	1,702,906
Talnakh ore field, including	1,546,330
rich	107,875
cuprous	66,870
disseminated	1,371,585
Norilsk-1 deposit (disseminated ore)	156,576
Inferred resources	433,234
Talnakh ore field	433,234
KOLA PENINSULA (disseminated ore)	
Proven and probable reserves	79,705
Proven ore reserves	40,578
Probable reserves	39,127
Measured and indicated resources	315,645
Inferred resources	142,150

Metal grade						Contained metal					
Ni %	Cu %	Pd g/t	Pt g/t	Au g/t	6 PGM g/t	Ni kt	Cu kt	Pd koz	Pt koz	Au koz	6 PGM koz
0.88	1.56	3.71	0.98	0.21	4.93	6,530	11,590	88,606	23,491	5,115	117,681
0.69	1.14	2.96	0.84	0.18	3.98	13,828	22,989	191,932	54,292	11,494	258,127
0.79	1.38	3.17	0.82	0.19	4.15	4,537	7,915	58,684	15,256	3,540	76,695
0.91	1.71	4.15	1.10	0.24	5.51	6,036	11,347	88,533	23,443	5,092	117,558
0.80	1.51	3.69	0.99	0.22	4.88	2,513	4,756	37,365	10,080	2,219	49,448
2.56	3.12	6.03	1.25	0.23	7.58	1,302	1,589	9,874	2,043	383	12,415
0.94	3.76	9.22	2.23	0.62	11.59	139	554	4,368	1,056	292	5,488
0.43	1.05	2.88	0.87	0.19	3.93	1,072	2,613	23,123	6,981	1,544	31,545
0.35	0.51	3.87	1.58	0.17	5.72	65	95	2,322	950	104	3,434
1.10	2.09	4.64	1.13	0.27	6.09	3,397	6,417	45,859	11,207	2,635	60,197
2.91	4.03	7.42	1.46	0.27	9.51	2,137	2,959	17,512	3,438	628	22,453
0.75	3.06	6.86	1.79	0.49	8.87	484	1,967	14,147	3,689	1,017	18,294
0.46	0.88	2.60	0.75	0.18	3.56	776	1,491	14,200	4,080	990	19,450
0.28	0.36	4.29	1.73	0.19	6.43	61	79	2,987	1,206	134	4,479
0.68	1.29	3.50	0.99	0.21	4.70	11,658	21,934	191,461	53,990	11,322	257,295
0.73	1.38	3.50	0.95	0.21	4.66	11,213	21,368	174,034	47,311	10,612	231,715
3.25	4.30	8.05	1.61	0.30	10.24	3,504	4,635	27,907	5,586	1,029	35,530
0.96	3.89	8.88	2.28	0.63	11.41	644	2,601	19,087	4,892	1,350	24,522
0.52	1.03	2.88	0.84	0.19	3.89	7,065	14,132	127,040	36,833	8,233	171,663
0.28	0.36	3.46	1.33	0.14	5.08	445	566	17,427	6,679	710	25,580
0.84	1.73	4.20	1.09	0.25	5.48	3,641	7,474	58,500	15,135	3,480	76,375
0.84	1.73	4.20	1.09	0.25	5.48	3,641	7,474	58,500	15,135	3,480	76,375
0.62	0.30	0.03	0.02	0.01	0.05	494	243	73	48	23	123
0.58	0.25	0.03	0.02	0.01	0.05	236	101	37	27	11	66
0.66	0.36	0.03	0.02	0.01	0.05	258	142	36	21	11	57
0.69	0.33	0.05	0.03	0.02	0.08	2,170	1,055	471	302	172	832
0.63	0.31	0.04	0.03	0.01	0.07	896	441	184	121	60	320

[1] Excluding deposits in Zabaykalsky Region. Data regarding the mineral resources and ore reserves of the deposits of the Taimyr and Kola Peninsulas were classified according to the Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC code), created by the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists, and the Minerals Council of Australia, subject to the terminology recommended by the Russian Code for Public Reporting of Exploration Results, Mineral Resources, Mineral Reserves (NAEN Code). The six platinum group metals (PGMs) are platinum, palladium, rhodium, ruthenium, osmium, and iridium. The four elements are platinum, palladium, rhodium, and gold.

Nornickel boasts a unique mineral resource base of Tier 1 assets in Russia, on the Taimyr and Kola Peninsulas and in the Zabaykalsky Region. Nornickel's continued focus on replacing and expanding its resource base is essential to its long-term development.

Ore reserves at Zabaykalsky division at year-end – 301 mln t, average metal content: Cu – 0.7%, Fe in magnetite concentrate – 22.4%, Au – 0.84 g/t[1]. Reserves life: 31 years.

>75 years

of resources at the current production rate

RESOURCES AND RESERVES

Item[2]	2018	2019	2020
Proven and probable reserves			
Ore, mln t	785	757	743
Nickel, mln t	6.9	6.7	6.5
Copper, mln t	12.1	11.9	11.6
PGMs, Moz	123	120	118
Measured and indicated resources			
Ore, mln t	2,209	2,193	2,019
Nickel, mln t	15.3	15.2	13.8
Copper, mln t	23.5	23.2	23.0
PGMs, Moz	263	260	258

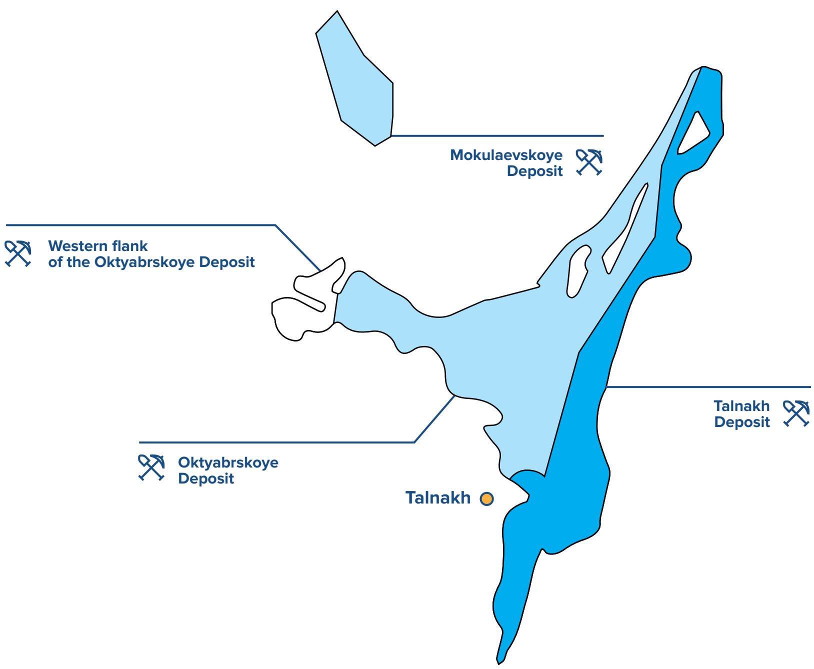
[1] According to the Russian classification (A + B + C1 + C2).

[2] Data on mineral resources and ore reserves are based on the JORC Code, exclude GRK Bystrinkoye's deposits. The 2018–2019 data include the Honeymoon Well project.

EXISTING DEPOSITS

Nornickel is well-positioned to maintain a high level of economic ore reserves given the significant mineral resources within its existing deposits. The depleted proven and probable reserves at the existing mines are replaced through the development of measured, indicated and inferred resources. The Company plans to ramp up its production by tapping into new rich ore deposits and gradually developing disseminated and cuprous ore horizons.

TALNAKH ORE CLUSTER

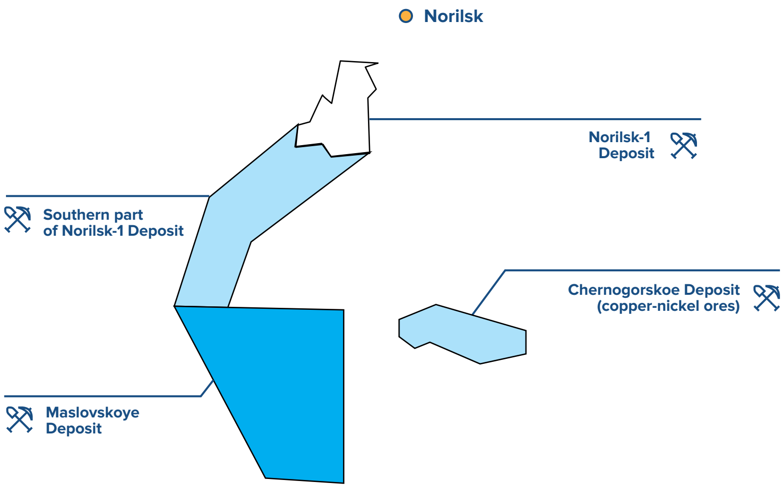


The Talnakh ore cluster is located in the Norilsk Industrial District in the north of the Krasnoyarsk Region, on the right bank of the Norilskaya River. Geologically, the Talnakh ore cluster is located on the north-western margin of the Siberian Craton and includes the world's largest Oktyabrskoye and Talnakhskoye copper-nickel deposits. In the early 1960s, multiple deposits of high-grade, cuprous and disseminated ores were discovered within the area. Nornickel is still well supplied with base and noble metals from the uniquely rich and vast resource base of the Talnakh ore cluster developed through mining operations of its Polar Division.

RESERVES AND RESOURCES

Item	Ore	Nickel	Copper	PGMs
Proven and probable reserves (according to the JORC Code)	622.8 mln t	5.9 mln t	11.2 mln t	109.6 Moz.
Measured and indicated resources (according to the JORC Code)	1,546.3 mln t	11.2 mln t	21.4 mln t	231.7 Moz
Balance reserves	1,979.6 mln t	14.9 mln t	28.8 mln t	308.1 Moz.
Balance metal reserves involved in 2020	14.4 mln t	265.6 kt	464.8 kt	4.5 Moz.
Balance reserves growth in 2020	3.0 mln t	66.6 kt	106.3 kt	1.0 Moz
Average metal content	–	2.22%	3.54%	10.27 g/t

NORILSK ORE CLUSTER



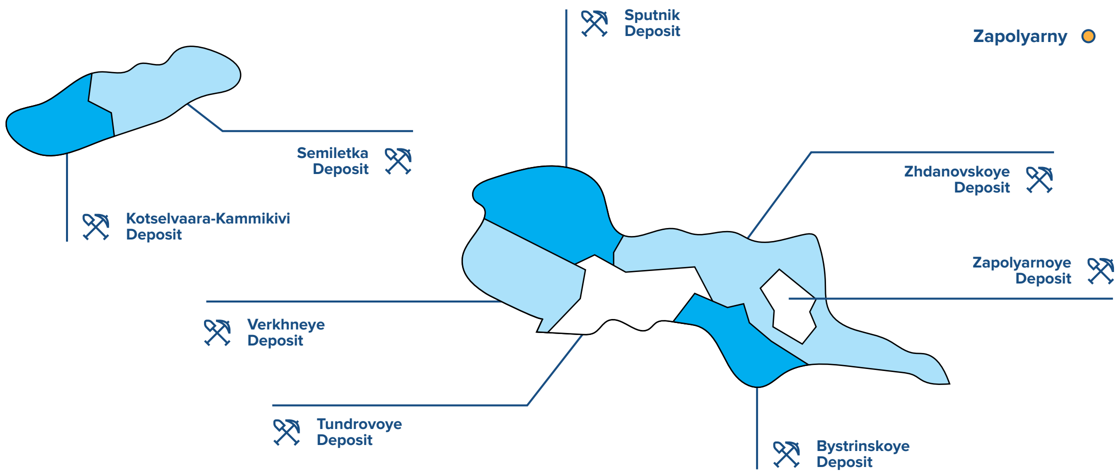
The Norilsk ore cluster (NID) is also located in the Norilsk Industrial District. Brownfields within the NID include the northern part of the Norilsk-1 deposit producing disseminated copper and nickel sulphide ores since the 1930s. In 2020, the deposit was reassessed against new permanent exploratory standards for open-pit and underground mining. A feasibility study of permanent exploratory standards and a reserve statement for the Norilsk-1 deposit (northern part) were approved by the State Commission for Mineral Reserves of the Russian Ministry of Natural Resources and included into the State Register of Mineral Reserves (Minutes No. 6557 dated 20 May 2020).

To raise additional external investments in brownfield expansion in the northern part of the Norilsk-1 deposit, Nornickel has launched the South Cluster project. A licence to develop Norilsk-1 and also some of the Polar Division's assets were transferred to Medvezhy Ruchey, a wholly owned subsidiary established specifically to implement the expansion project. Medvezhy Ruchey includes Norilsk Concentrator, an open-pit and an underground mine at Zapolyarny Mine, and tailing dumps No. 1 and Lebyazhye.

RESERVES AND RESOURCES

Item	Ore	Nickel	Copper	PGMs
Proven and probable reserves (according to the JORC Code)	40.3 mln t	0.1 mln t	0.2 mln t	7.9 Moz
Measured and indicated resources (according to the JORC Code)	156.6 mln t	0.4 mln t	0.6 mln t	25.6 Moz
Balance reserves	156.6 mln t	0.4 mln t	0.6 mln t	25.6 Moz
Balance metal reserves involved in 2020	1.6 mln t	6.8 kt	8.3 kt	0.3 Moz
Balance reserves growth in 2020	11.5 mln t	20.2 kt	21.2 kt	1.4 Moz.
Average metal content	–	0.18%	0.18%	3.91 g/t

KOLA MMC DEPOSITS



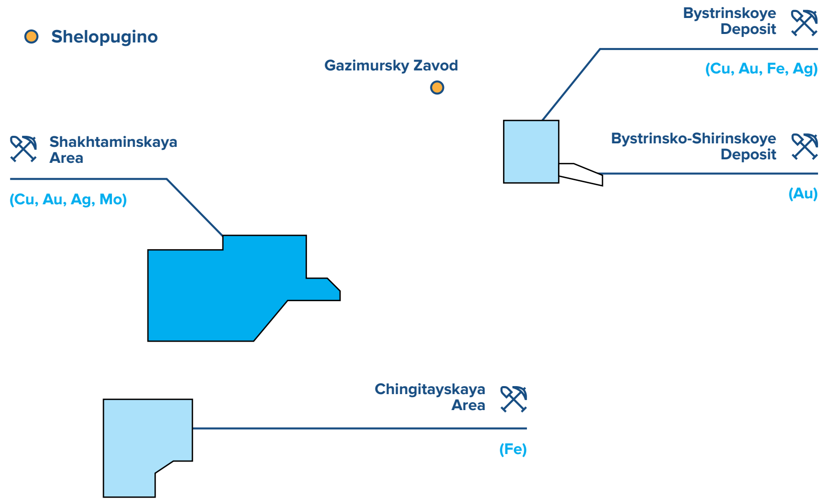
Kola MMC develops deposits located within a 25 km stretch between Nickel and Zapolyarny in the west of the Murmansk Region and grouped into two ore clusters: Western (Kotselvaara and Semiletka deposits) and Eastern (Zhdanovskoye, Zapolyarnoye, Bystrinskoye, Tundrovoye, Sputnik and Verkhneye deposits). The deposits in the Western and Eastern clusters have been developed since the 1930s and 1960s, respectively.

RESERVES AND RESOURCES

Item	Ore	Nickel	Copper
Proven and probable reserves (according to the JORC Code)	79.7 mln t	0.5 mln t	0.2 mln t
Measured and indicated resources (according to the JORC Code)	315.6 mln t	2.2 mln t	1.1 mln t
Balance reserves	457.8 mln t	3.1 mln t	1.5 mln t
Balance metal reserves involved in 2020	6.8 mln t	43.4 kt	20.1 kt

BYSTRINSKOYE DEPOSIT

The Bystrinskoye deposit is located in the Zabaykalsky Region, 16 km east of Gazimursky Zavod. Nornickel owns 50.01% of GRK Bystrinskoye which develops gold-iron-copper ores of the Bystrinskoye deposit. The Bystrinskoye deposit and Bystrinsky GOK came online in 2019.

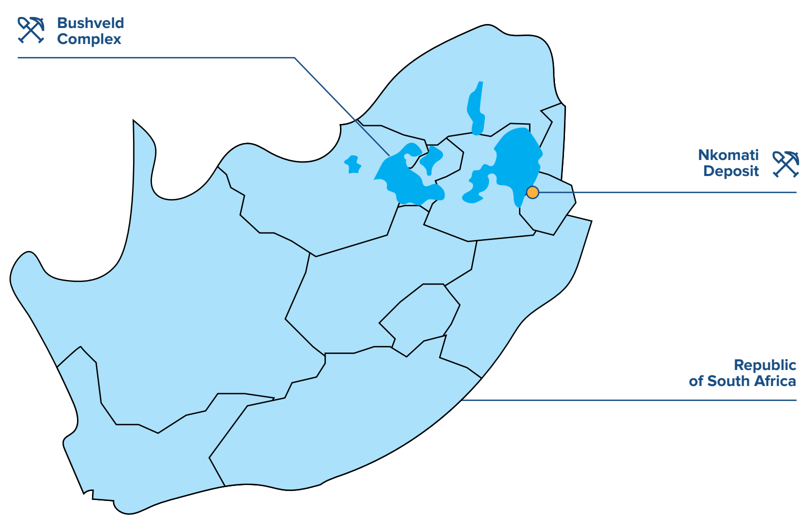


RESERVES AND RESOURCES

Item	Ore	Copper	Gold	Silver	Iron
Balance reserves	300.9 mln t	2.1 mln t	8.1 Moz	36.9 Moz	67.5 mln t
Balance reserves involved in 2020	15.1 mln t	90.8 kt	578 koz	1,444 koz	2.5 mln t

NKOMATI DEPOSIT

The Nkomati disseminated copper-nickel sulphide ore deposit is geologically part of the Bushveld Complex in South Africa. The deposit consists of several ore bodies. The major ones are a solid sulphide ore body (high-grade nickel ore) and the main mineralisation zone (MMZ ore). It also includes a peridotite chromite mineralisation zone (PCMZ) with a lower metal content vs the main mineralisation zone. The deposit is developed by Nkomati (50%-owned by Nornickel).



RESERVES AND RESOURCES

Item	Ore	Nickel	Copper	Cobalt	PGMs
Proven and probable reserves	0.9 mln t	3 kt	1 kt	0.2 kt	0.03 Moz
Measured and indicated resources	168.5 mln t	590 kt	227 kt	29 kt	4.9 Moz

GROWTH PROJECTS

MASLOVSKOYE DEPOSIT

The Maslovskoye deposit is located in the Norilsk Industrial District, 12 km south of Norilsk. Geologically, the deposit is part of the Norilsk Ore Cluster.

The Company received the licence to explore and mine the Maslovskoye deposit's platinum-copper-nickel sulphide ores upon its discovery in 2015.

Reserves

A feasibility study of permanent exploratory standards and a reserve statement for the Maslovskoye deposit were approved by the State Commission for Mineral Reserves of the Russian Ministry of Natural Resources and included into the State Register of Mineral Reserves (Minutes No. 5561 dated 12 October 2018).

B + C1 + C2 MINERAL RESERVES

Item	Reserves	Metal content in ore
Total ore	206,8 mln t	–
Palladium	33 087 koz	5.0 g/t
Platinum	13 040 koz	2.0 g/t
Nickel	711 kt	0.3%
Copper	1 098 kt	0.5%
Cobalt	26 kt	0.01%
Gold	1 268 koz	0.2 g/t

BUGDAINSKOYE DEPOSIT

The Bugdainskoye molybdenum deposit lies in the Alexandrovo-Zavodsky District of the Zabaykalsky Region, 30 km north-west of Alexandrovsky Zavod.

Its mineral reserves were included into the State Register of Mineral Reserves in 2007. In 2014, Nornickel halted the development of the Bugdainskoye deposit for three years in a low-price environment across the global molybdenum market, and in 2017 extended the suspension of operations for another five years, until 31 December 2022.

B + C1 + C2 MINERAL RESERVES

Item	Reserves
Ore	812 mln t
Molybdenum	600 kt
Gold	360 koz
Silver	6,221 koz
Lead	41 kt

BYSTRINSKO-SHIRINSKOYE DEPOSIT

The Bystrinsko-Shirinskoye gold ore deposit is located 24 km south-east of Gazimursky Zavod in the Zabaykalsky Region. The licence area shares a boundary with the Bystrinskoye deposit. In 2017–2020, SRK Consulting (Russia) Ltd conducted a scoping study of development options for the Bystrinsko-Shirinskoye gold ore deposit and completed a mineral resource estimate in line with the JORC Code, followed by the evaluation of technical and economic viability of the potential development option. The Company is exploring options for ores from the Bystrinsko-Shirinskoye deposit to be processed along with gold ores from the Bystrinskoye deposit.

TALNAKH ORE CLUSTER DEPOSITS

To unlock the full potential of its deposits supporting existing operations and determine the best configuration for new operations, Nornickel explores the Talnakh ore cluster deposits, ensuring increases in high-grade and cuprous ore reserves.

Eastern flank of the Oktyabrskoye deposit

In 2020, Nornickel conducted surface exploration within its licence boundaries as part of the Follow-Up Exploration of the Oktyabrskoye Deposit project. The project uncovered new high-grade ore zones as well as further defined the boundaries and delivered a detailed geology of the high-grading ore reserves within the Severnaya 3 and Severnaya 4 deposits. A quantitative estimate of the newly identified resource potential is planned following the project completion in the second half of 2021.

Western flank of the Oktyabrskoye deposit

In 2017, Nornickel obtained an exploration licence to prospect for, and appraise, mineral deposits within the western flank of the Oktyabrskoye deposit. The exploration licence area shares a boundary with the already licensed mining area at the Oktyabrskoye copper-nickel ore deposit. Prospecting on the Severny section continued in 2020. Preliminary estimates of the Zapadny section suggest potential reserve growth of 822 kt in high-grade copper and nickel ores, 2,717 kt in cuprous ores and 688 kt in disseminated ores.

NON-METALLIC MINERAL DEPOSITS IN THE NORILSK REGION

Mokulaevskoye deposit

The Mokulaevskoye limestone deposit lies 10 km north-west of the production sites of the Oktyabrsky and Taimyrsky Mines. The mining licence for this limestone deposit was obtained upon its discovery in 2017. In 2018, the State Commission for Mineral Reserves of the Russian Ministry of Natural Resources reviewed the feasibility study of permanent exploratory standards and the reserve statement for the deposit and included its limestone reserves into the State Register of Mineral Reserves for potential use in cement and lime production and in sulphuric acid neutralisation. The deposit can be developed through open-pit mining.

Its B + C1 + C2 balance reserves of limestone are 135,661 kt.

Ozero Lesnoye deposit

In 2017, Nornickel obtained a survey, exploration and mining licence for the basalt reserves of the Ozero Lesnoye deposit (licence area No. 2), located 22 km north of Norilsk.

Following a review of the 2019 feasibility study of permanent exploratory standards and the reserve statement, the deposit's basalt reserves were included into the State Register of Mineral Reserves for potential use as inert reinforcement for backfill concrete in underground mines.

The C1 + C2 balance reserves of basalt are 187,911 thousand m^3.

Gribanovskoye deposit

In 2020, Nornickel obtained an exploration and mining licence upon the discovery of the Gribanovskoye deposit, located on the Yenisey River, 22.5 km south of Dudinka. Exploration phase activities were completed, and a pilot operation was started at the deposit in 2020. In 2021, Nornickel plans to present the feasibility study of permanent standards and the reserve statement to be reviewed by the State Commission for Mineral Reserves to confirm the reserves of silica sand. The Gribanovskoye deposit's reserves are measured based on provisional exploratory standards, and the C1 + C2 reserves are currently estimated at 88,371 kt.

Gorozubovskoye deposit

In 2020, following further examination of the deposit's flanks carried out as part of follow-up exploration of the Gorozubovskoye anhydrite deposit, the reserves were reclassified from C2 to C1. As a result, the deposit's reserves were recalculated. Certificate

No. 6507 issued by the State Commission for Mineral Reserves of the Russian Ministry of Natural Resources on 13 December 2020 confirmed the parameters of updated standards; anhydrite reserves were confirmed as follows: C1 balance reserves at 81,830 kt, C2 balance reserves at 12,484 kt, and A + B + C1 + C2 off-balance reserves at 1,640 kt.

PROMISING AREAS AND PROSPECTS

Khalilskaya area

The Razvedochny, Mogensky, Khalilsky, Nizhne-Khalilsky, and Nirungdinsky copper-nickel sulphide ore prospects lie within the Khalilskaya area, located 150–160 km south-east of Norilsk. In 2014, Nornickel obtained exploration licences to prospect for, and appraise, deposits within the area. In 2020, the Company conducted prospecting drilling across all promising areas. A report on the area's potential is to be prepared in 2021 upon the completion of chemical and analytical studies and laboratory tests.

Lebyazhninskaya area

The Lebyazhninskaya copper-nickel sulphide ore prospect is located 20 km north-west of Norilsk. In 2014, Nornickel obtained an exploration licence to prospect for, and appraise, deposits within the area. In 2020, laboratory tests were completed, and a report was prepared based on prospecting results, which included the appraisal of the area's resource potential. P1 disseminated ore resources within the Lebyazhninskaya area are estimated at 172.25 mln t. An economic evaluation concluded that disseminated ore development would be unviable, and a decision was taken to give up the exploration right and hand back the license.

Yuzhno-Norilskaya area

The Morongovsky and Yuzhno-Yergalakhsky copper-nickel sulphide ore prospects lie within the Yuzhno-Norilskaya area, located 30 km south of Norilsk. In 2019, Nornickel obtained exploration licences to prospect for, and appraise, deposits within the area. In 2020, the Company conducted geophysical and geochemical prospecting across areal zones and identified drilling targets to confirm the geology.

Mikchangdinskaya area

The Neralakhsky, Yuzhno-Neralakhsky, Snezhny, Yuzhno-Ikensky and Medvezhy copper-nickel sulphide ore prospects lie within the Mikchangdinskaya area, located 70 km north-east of Norilsk. Between December 2019 and April 2020, Nornickel obtained exploration licences to prospect for, and appraise, deposits within the area. In 2020, the Company conducted geophysical and geochemical prospecting across areal zones and identified drilling targets to confirm the geology.

Arylakhskaya area

The Yttakhsky, Samoedsky and Mastakh-Salinsky copper-nickel sulphide ore prospects lie within the Arylakhskaya area, located 160 km north-east of Norilsk. In May 2020, Nornickel obtained exploration licences to prospect for, and appraise, deposits within the area. In 2020, the Company conducted geophysical and geochemical prospecting across areal zones and identified drilling targets to confirm the geology.

Alenuyskaya area

The Severo-Alenuysky and Yuzhno-Alenuysky gold-copper porphyry and epithermal gold-quartz mineralisation prospects lie within the Alenuyskaya area, located in the Aleksandrovo-Zavodsky Municipal District of the Zabaykalsky Region. In February and March 2020, Nornickel obtained exploration licences to prospect for, and appraise, deposits within the area. In 2020, the Company conducted geophysical and geochemical prospecting across areal zones, to be continued in 2021 to further identify drilling targets to confirm the geology.

Mostovskaya area

The Zapadno-Mostovsky and Vostochno-Mostovsky gold-copper porphyry and epithermal gold-quartz mineralisation prospects lie within the Mostovskaya area, located in the Mogochinsky District of the Zabaykalsky Region. In May 2020, Nornickel obtained exploration licences to prospect for, and appraise, deposits within the area. In 2020, the Company conducted geophysical and geochemical prospecting across areal zones, to be continued in 2021 to further identify drilling targets to confirm the geology.

OPERATIONAL PERFORMANCE

OPERATING PERFORMANCE FOR THE PAST 10 YEARSEARS

Norilsk nickel group saleable metals production»[1]	2011	2012	2013
Total nickel, t	295,098	300,340	285,292
including from own Russian feed	234,906	223,153	219,273
including from 3d parties feed	60,192	77,187	66,019
Total copper, t	377,944	363,764	371,063
including from own Russian feed	362,854	344,226	345,737
including from 3d parties feed	15,090	19,538	25,326
Total palladium, koz	2,806	2,732	2,662
including from own Russian feed	2,704	2,624	2,529
including from 3d parties feed	102	108	133
Total palladium, koz	696	683	650
including from own Russian feed	672	658	604
including from 3d parties feed	24	25	46
Norilsk and Kola Division (Russia)			
Nickel, t	237,227	233,632	231,798
Norilsk Division	124,000	124,000	122,700
Kola Division	113,227	109,632	109,098
including from own Russian feed	110,906	99,153	96,573
Copper, t	363,460	352,466	359,102
Norilsk Division	303,940	295,610	296,760
Kola Division	59,520	56,856	62,342
including from own Russian feed	58,914	48,616	48,977
Palladium, koz	2,704	2,628	2,580
Norilsk Division	2,038	1,989	2,006
Kola Division	666	639	574
including from own Russian feed	666	635	523
Platinum, koz	672	660	627
Norilsk Division	536	529	504
Kola Division	136	131	123
including from own Russian feed	136	129	100

[1] Total amounts may vary from the sum of numbers due to arithmetical rounding. The production results of Nkomati are not included in the total amounts of the Group.

[2] Norilsk Nickel owns 50.01% of Bystrinsky GOK. Production results are shown metal in concentrate for sale on 100% basis and the total operating results fully include Bystrinsky GOK. Bystrinsky GOK was commissioned in 2019.

	2014	2015	2016	2017	2018	2019	2020
	274,248	266,406	235,749	217,112	218,770	228,687	235,709
	223,224	220,675	196,809	210,131	216,856	225,204	232,532
	51,024	45,731	38,940	6,981	1,914	3,482	3,177
	368,008	369,426	360,217	401,081	473,654	499,119	487,186
	345,897	352,766	344,482	397,774	473,515	498,838	486,816
	22,111	16,660	15,735	3,307	139	281	370
	2,752	2,689	2,618	2,780	2,729	2,922	2,826
	2,582	2,575	2,526	2,728	2,729	2,919	2,820
	170	114	92	52	0	3	6
	662	656	644	670	653	702	695
	595	610	610	650	653	700	693
	67	46	34	20	0	2	2
	228,438	222,016	182,095	157,396	158,005	166,265	172,357
	122,390	96,916	50,860	0	0	0	0
	106,048	125,100	131,235	157,396	158,005	166,265	172,357
	100,834	123,335	126,937	155,110	157,519	166,265	172,357
	354,943	355,707	350,619	387,640	436,201	442,682	422,031
	297,552	292,632	280,347	306,859	353,131	355,706	351,413
	57,391	63,075	70,272	80,781	83,070	86,976	70,618
	48,345	60,134	63,542	78,587	82,987	86,976	70,618
	2,660	2,606	2,554	2,738	2,671	2,868	2,809
	2,065	1,935	1,703	956	987	1,042	1,180
	595	671	851	1,782	1,684	1,826	1,630
	517	640	815	1,737	1,684	1,826	1,630
	627	622	622	660	642	690	691
	500	488	449	259	260	251	302
	127	134	173	401	381	439	390
	95	122	159	385	381	439	390

Norilsk nickel group saleable metals production»[1]	2011	2012	2013
Zabaykalsky Division (Russia)[2]			
Copper (in concentrate), t	–	–	–
Gold (in concentrate), koz	–	–	–
Iron ore concentrate, t	–	–	–
Kola Division (Finland)			
Nickel, t	48,525	45,518	44,252
including from own Russian feed	–	–	–
Copper, t	5,681	1,006	6,549
including from own Russian feed	–	–	–
Palladium, koz	34	21	39
including from own Russian feed	–	–	–
Platinum, koz	12	9	16
including from own Russian feed	–	–	–
Nkomati (South Africa)[3]			
Nickel, t	5,815	9,624	11,920
Copper, t	2,927	4,594	5,034
Palladium, koz	24	32	46
Platinum, koz	9	12	20
Norilsk Nickel Tati (Botswana)[4]			
Nickel, t	9,346	12,215	6,416
Copper, t	8,803	10,292	5,412
Palladium, koz	68	83	43
Platinum, koz	12	14	7
Lake Johnston (Australia)			
Nickel, t	–	8,975	2,826

[1] Total amounts may vary from the sum of numbers due to arithmetical rounding. The production results of Nkomati are not included in the total amounts of the Group.

[2] Norilsk Nickel Group owns 50.01% of Bystrinsky GOK. Production results are shown metal in concentrate for sale on 100% basis and the total operating results fully include Bystrinsky GOK. Bystrinsky GOK was commissioned in 2019.

[3] Norilsk Nickel Group owns 50% of Nkomati. Production results report metal contained in saleable concentrate on a 50% basis and are not consolidated in the Group's total operating results. In 2019, the Group and its operating partner, African Rainbow Minerals, reached an agreement to scale down production at Nkomati Nickel Mine. The operations of the mine are planned to cease in 1H2021 whereafter the mine is to be placed on limited care and maintenance pending the finalisation and submission of a closure plan.

[4] The sale of the asset was closed on 2 April 2015.

	2014	2015	2016	2017	2018	2019	2020
	–	–	–	–	19,417	43,489	62,664
	–	–	–	–	89	177	241
	–	–	–	–	346	1,311	2,046
	42,603	43,479	53,654	59,716	60,765	62,422	63,352
	–	424	19,012	55,021	59,337	58,939	60,175
	10,629	13,048	9,598	13,441	18,036	12,948	2,491
	–	–	593	12,328	17,980	12,667	2,121
	74	78	64	42	58	54	17
	–	–	8	35	58	51	11
	31	33	22	10	11	12	4
	–	–	2	6	11	9	2
	11,359	11,350	8,486	8,006	6,597	6,485	5,839
	4,938	5,301	4,007	4,504	3,055	3,419	2,877
	48	53	40	46	33	33	30
	19	20	15	20	13	14	13
	3,207	911	–	–	–	–	–
	2,436	671	–	–	–	–	–
	18	5	–	–	–	–	–
	4	1	–	–	–	–	–
	–	–	–	–	–	–	–

Despite a number of serious environmental and COVID-related challenges facing the Company in 2020, we have fully achieved our production targets. With optimised operating processes and new refining site at Kola MMC now running at design capacity, we delivered on our nickel production guidance and exceeded production targets for platinum group metals. We also met our copper production guidance thanks to the scheduled ramp-up at Bystrinsky GOK. In the last quarter of 2020, Bystrinsky GOK reached design capacity for all metals.

The Company has implemented maximum measures to protect its people as part of its COVID-19 response. The COVID-19 situation is under management's control and does not impact significantly on our operating processes.

GROUP ORE OUTPUT (MLN T)

Asset	2018	2019	2020
Assets in Russia (copper-nickel sulphide ore)	**25.2**	**26.3**	**26.5**
Norilsk Division	17.3	18.4	18.8
Kola Division	7.9	7.9	7.7
Assets in Russia (gold-iron-copper ores)	**7.9**	**10.5**	**16.0**
Zabaykalsky Division	7.9	10.5	16.0
Nkomati (South Africa)[1]	**3.1**	**3.5**	**2.7**

AVERAGE METAL CONTENT IN MINED ORE

Asset	2018	2019	2020
Nickel, %			
Norilsk Division	1.3	1.3	1.3
Kola Division	0.6	0.5	0.5
Nkomati	0.3	0.3	0.3
Copper, %			
Norilsk Division	2.2	2.2	2.3
Kola Division	0.2	0.2	0.2
Zabaykalsky Division	0.4	0.6	0.6
Nkomati	0.1	0.1	0.1
PGMs, g/t			
Norilsk Division	6.8	6.9	6.9
Kola Division	0.1	0.1	0.1
Nkomati	N/a	N/a	N/a

[1] All metrics for Nkomati are hereinafter shown based on the 50% ownership. Nkomati's operating results are not consolidated into the Group's total results.

[2] The PGMs are palladium, platinum, rhodium, ruthenium and iridium.

METALS RECOVERY IN CONCENTRATION (%)

Asset	2018	2019	2020
Nickel			
Norilsk Division	81.5	83.1[3]	84.81
Kola Division	69.5	67.9	62.9
Nkomati	65.9	64.2	68.3
Copper			
Norilsk Division	94.6	95.2[3]	95.1[3]
Kola Division	74.1	73.2	71.8
Zabaykalsky Division	82.9	87.7	87.4
Nkomati	88.4	87.7	85.4
PGMs			
Norilsk Division	82.7	85.2[3]	86.4[3]

METALS RECOVERY IN SMELTING (%)

Asset	2018	2019	2020
Nickel			
Norilsk Division [4]	94.6	94.6	94.1
Kola Division (Kola MMC)[5]	96.7	96.7	96.8
Kola Division (Kola MMC)[6]	98.0	97.0	96.3
Kola Division (NN Harjavalta)[6]	97.9	97.9	98.2
Copper			
Norilsk Division [4]	94.4	94.1	94.6
Kola Division (Kola MMC)[5]	96.1	96.2	96.5
Kola Division (Kola MMC)[6]	97.6	96.5	95.4
Kola Division (NN Harjavalta)[6]	99.7	99.8	99.8
PGMs			
Norilsk Division [4]	95.9	95.8	96.4
Kola Division (Kola MMC)[6]	94.0	91.6	92.9
Kola Division (NN Harjavalta)[6]	99.8	99.8	99.9

[3] Metals recovery in bulk concentrate.
[4] Feedstock to finished products.
[5] Feedstock to converter matte.
[6] In refining, converter matte to finished products.

SALEABLE METALS PRODUCTION

Product	2018	2019	2020
Group total			
Nickel, kt	218.8	228.7	235.7
from own feed	216.9	225.2	232.5
Copper, kt	473.7	499.1	487.2
from own feed	473.5	498.8	486.8
Palladium, koz	2,729	2,922	2,826
from own feed	2,729	2,919	2,820
Platinum, koz	653	702	695
from own feed	653	700	693
Norilsk and Kola Divisions			
Nickel, kt	158.0	166.3	172.4
Copper, kt	455.6	486.2	484.7
Palladium, koz	2,671	2,868	2,809
Platinum, koz	642	690	691
Kola Division – NN Harjavalta			
Nickel, kt	60.8	62.4	63.4
Copper, kt	18.0	12.9	2.5
Palladium, koz	58	54	17
Platinum, koz	11	12	4
Nkomati (South Africa)[1]			
Nickel, kt	6.6	6.5	5.8
Copper, kt	3.1	3.4	2.9
Palladium, koz	33	33	30
Platinum, koz	13	14	13

NORILSK DIVISION (RUSSIA)

The Norilsk Division is the Group's flagship assets boasting a full metals production cycle from ore mining to the shipment of finished products to customers. They are located on the Taimyr Peninsula in Russia, in the north of the Krasnoyarsk Region beyond the Arctic Circle, and linked to other regions by the Yenisey River, the Northern Sea Route, and by air.

Operating the largest deposits in the Company's portfolio, the Norilsk Division mines over 18 Mtpa of copper-nickel sulphide ore.

In 2020, the Norilsk Division accounted for

72% copper

42% PGMs

of the Group's total

[1] Nkomati's operating results are not consolidated into the Group's total results.

MINING

The Norilsk Division mine copper-nickel sulphide ores of three grades: rich ores, characterised by a higher content of base and precious metals; cuprous ores, with a higher copper content vs nickel; and disseminated ores, with a lower content of all metals.

The Talnakhskoye and Oktyabrskoye deposits are developed by Taimyrsky, Oktyabrsky, Komsomolsky, Skalisty and Mayak Mines. The mines deploy slicing and chamber methods with the cut-and-fill system. Stopes are refilled with backfill mixtures, with their composition adjusted in each case depending on technological requirements for mine backfill durability.

The Norilsk-1 deposit is developed by Zapolyarny Mine (Medvezhy Ruchey – South Cluster project), through open-pit and underground mining. Underground mining is carried out through sublevel (level) caving using front ore passes and self-propelled vehicles.

Ore production from the Norilsk Division was 18.8 mln t in 2020, up 0.4 mln t y-o-y (+2%). Rich and disseminated ore production increased by 2% and 10%, respectively, with Taimyrsky and Skalisty Mines also increasing their combined rich ore production by 12% y-o-y. Disseminated ore production grew at Komsomolsky Mine (+42%) and Zapolyarny Mine (+4%). Total production of cuprous ore decreased by 5% y-o-y. The change in the mined ore output was in line with the annual production plan.

ORE OUTPUT (MLN T)

Mining asset, ore type	Mine type	2018	2019	2020
Total ore		17.32	18.42	18.82
rich		6.78	7.35	7.48
cuprous		5.24	5.75	5.49
disseminated		5.30	5.32	5.85
ZAPOLYARNY				
Oktyabrskoye deposit:		**8.95**	**9.45**	**9.58**
Oktyabrsky Mine	Underground	5.17	5.37	5.34
rich		0.98	0.88	0.80
cuprous		2.98	3.38	3.41
disseminated		1.21	1.11	1.13
Taymirsky Mine	Underground	3.79	4.08	4.24
rich		3.79	4.08	4.24
Talnakhskoye and Oktyabrskoye deposits:		**6.70**	**7.34**	**7.55**
Komsomolsky Mine	Underground	3.82	4.00	4.25
rich		0.11	0.10	0.14
cuprous		2.18	2.28	1.81
disseminated		1.53	1.62	2.3
Skalisty Mine	Underground	1.95	2.34	2.54
rich		1.87	2.25	2.27
cuprous		0.09	0.09	0.27
Mayak Mine	Underground	0.93	1.00	0.76
rich		0.04	0.04	0.03
disseminated		0.89	0.97	0.73
MEDVEZHY RUCHEY				
Norilsk-1 deposit				
Zapolyarny Mine	Open-pit/underground			
disseminated		1.67	1.63	1.69

CONCENTRATION

Talnakh Concentrator processes rich, cuprous and disseminated ores from the Oktyabrskoye and Talnakhskoye deposits to produce nickel-pyrrhotite and copper concentrates, and metal-bearing products. The key processing stages include crushing, milling, flotation and thickening.

Norilsk Concentrator processes all disseminated ores from the Norilsk-1 deposit, cuprous and disseminated ores from the Oktyabrskoye and Talnakhskoye deposits, and low-grade ores from Copper Plant to produce nickel and copper concentrates. The key processing stages include crushing, milling, flotation, gravity concentration and thickening.

Thickened concentrates are transported from Talnakh and Norilsk Concentrators via slurry pipelines for further processing. In 2020, the Company's concentration facilities processed a total of 18.5 mln t across all types of ore feedstocks (including rich, cuprous and disseminated ores).

Talnakh Concentrator processed 10.9 mln t of ore in 2020 (up 0.2 mln t y-o-y). Its nickel recovery from ore into bulk flotation concentrate, including the output of metal-bearing pyrrhotite products, increased by 2.0% y-o-y to 87.9% due to the optimised technology for obtaining copper-nickel concentrate deployed at Talnakh Concentrator.

Talnakh Concentrator increased ore processing to 7.6 mln t (up 0.1 mln t y-o-y) in 2020. The facility's nickel recovery into bulk concentrate was 0.7% lower y-o-y at 70.6%. During the year, the facility also processed significant amounts of low-grade ores from Copper Plant.

CONCENTRATION FACILITIES

- Talnakh Concentrator
- Norilsk Concentrator

ORE PROCESSING AND NICKEL RECOVERY

Concentrator	2018	2019	2020
Sulphide ores processed (mln t)			
Talnakh Concentrator	10.4	10.7	10.9
Norilsk Concentrator	6.8	7.5	7.6
Nickel recovery (%)			
Talnakh Concentrator	83.2	85.9	87.9
Norilsk Concentrator	71.9	71.3	70.6

SMELTING

Production chain

The produced concentrates, including steam cured sulphide concentrate, and secondary materials are fed into flash smelting furnaces at Nadezhda Metallurgical Plant. Steam cured sulphide concentrate is leached at Hydrometallurgical Shop of Nadezhda Metallurgical Plant from products with low metal content, such as Talnakh Concentrator's metal-bearing products, products from Nadezhda Metallurgical Plant's tailings facility, and concentrates from tailings ponds. The matte produced in flash smelting furnaces is then converted into high-grade converter matte.

Copper Plant processes all of the copper concentrate from the Company's concentrators, as well as third-party feedstocks, to obtain copper cathodes, elemental sulphur and sulphuric acid for the operational needs of the Polar Division.

SMELTING ASSETS

- Nadezhda Metallurgical Plant
- Copper Plant
- Copper Plant's smelting shop

Copper Plant's smelting shop recycles sludge from the copper tankhouses of Copper Plant and Kola MMC to produce precious metal concentrates, commercial selenium and tellurium.

The precious metals produced by the Norilsk Division are refined at Krastsvetmet, URALINTECH, and Prioksky Plant of Non-Ferrous Metals under tolling agreements.

Copper production remained basically flat y-o-y in 2020, with a slight decrease of 1% due to a lower-than-expected copper content in the stored copper concentrate provided by Rostec and concentrate stock drawdowns by Rostec. PGM output increased by 15% y-o-y, mainly due to temporary processing of chlorine dissolution residue by Copper Plant (during the deployment of a new precious metal production technology at Kola MMC) and higher precious metal content in the copper cake supplied by Norilsk Nickel Harjavalta.

The Polar Division products:

- Copper cathodes
- Nickel converter matte sent for processing to Kola MMC
- Precious metal concentrates
- Commercial sulphur, selenium
- Tellurium in billots

PRODUCTION VOLUMES

Product	2018	2019	2020
Copper, t	353,131	355,706	351,413
Palladium, koz	987	1,042	1,180
Platinum, koz	260	251	302

KOLA DIVISION (RUSSIA)

Kola MMC is Nornickel's wholly owned subsidiary and a valuable production asset located in the Kola Peninsula in the Murmansk Region of Russia.

In 2020, Kola MMC accounted for 73%, 14% and 57% of the Group's total nickel, copper, and PGM finished products, respectively.

MINING

Kola MMC mines disseminated copper-nickel sulphide ores.

At Kola MMC, various ore mining methods are used:

- The Zhdanovskoye and Zapolyarnoye deposits use three mining methods: gravity caving with front ore passes, sublevel caving with room-and-pillar ore removal, and room-and-pillar mining. To ensure full utilisation of the concentrator's design capacity, off-balance (sub-economic) open-pit mining waste is processed as well
- The Kotselvaara and Semiletka deposits primarily use stoping from sublevel drifts and sublevel caving. Room-and-pillar short-hole and long-hole stoping are also used on a limited scale

In 2020, Kola MMC produced about 7.7 mln t of ore (down 3% y-o-y), with the marginal decrease attributable to dwindling surplus ore inventories that had built up at the end of 2019 due to scheduled maintenance at the concentrator.

ORE OUTPUT (MLN T)

Mining asset	Mine type	2018	2019	2020
Total ore		7.90	7.91	7.65
Zhdanovskoye deposit:		**7.14**	**7.25**	**7.08**
Severny Mine	Underground	6.56	6.49	6.43
Severny Mine	Open-pit	0.58	0.77	0.65
Zapolyarnoye deposit:		**0.08**	**0.06**	**0.05**
Severny underground section	Underground	0.08	0.06	0.05
Kotselvaara and Semiletka deposits:		**0.68**	**0.60**	**0.52**
Kaula-Kotselvaara mine	Underground	0.68	0.60	0.52

CONCENTRATION

The concentrator produces briquetted copper-nickel concentrate. Briquettes are delivered to a smelting shop in Nikel to produce converter matte.

In 2020, Kola MMC's concentrator processed 7.96 mln t of ore (up 5%).

The rate of metals recovery in bulk concentrate decreased, due to a higher share of complex morphology ores with disseminated sulphide minerals in the charge.

CONCENTRATION FACILITIES

- Zapolyarny Concentrator

ORE PROCESSING

Concentrator	2018	2019	2020
Ore processing by the concentrator, mln t	7.90	7.60	7.96

SMELTING

Nornickel has continued to ramp up Tankhouse 2 to design capacity for the production of nickel cathode using the technology of electrowinning from chlorine dissolved tube furnace nickel powder.

In 2020, Kola MMC used only Nornickel's own Russian feedstock in metals production. Growth in saleable nickel output was mostly driven by the start-up of saleable nickel loading point at the concentrator. Saleable copper output decreased due to changes in the output mix of saleable products and the redistribution of copper semi-products within the Company. Lower PGM output in 2020 was caused by temporary shipments of chlorine leaching residuals to the Polar Division (during the deployment of a new precious metal production technology at Kola MMC) and larger amount of transportation and production work-in-progress along the Kola MMC – Norilsk Nickel Harjavalta – the Polar Division leg due to shipments of converter matte with a higher PGM content to Norilsk Nickel Harjavalta.

Products:

- Nickel cathodes
- Nickel carbonyl
- Saleable nickel concentrate
- Copper cathodes
- Saleable copper concentrate from converter matte separation
- Sulphide concentrate from the concentrator
- Cobalt cathodes
- Cobalt concentrate
- Precious metal concentrates
- Sulphuric acid
- Crushed converter matte for Harjavalta

DOWNSTREAM FACILITIES

- Smelting shop (Nikel), shut down in December 2020
- Briquetting section (Zapolyarny), shut down in December 2020
- Smelting shop (Monchegorsk), shut down in March 2021
- Chemical-and-metallurgical shop (Monchegorsk)
- Refining shop (Monchegorsk)
- Tankhouses 1 and 2 (Monchegorsk)

PRODUCTION VOLUMES

Product	2018	2019	2020
Nickel, t	158,005	166,265	172,357
from own Russian feed	157,519	166,265	172,357
Copper, t	83,070	86,976	70,618
from own Russian feed	82,987	86,976	70,618
Palladium, koz	1,684	1,826	1,630
from own Russian feed	1,684	1,826	1,630
Platinum, koz	381	439	390
from own Russian feed	381	439	390

KOLA DIVISION (FINLAND)

Norilsk Nickel Harjavalta is Nornickel's wholly owned subsidiary, acquired by the Group in 2007. The Harjavalta facility processes Nornickel's Russian feedstock and nickel-bearing raw materials sourced from third-party suppliers.

Founded in 1959, it is Finland's only nickel refinery and one of the largest nickel producers in Europe. Harjavalta's capacity is 66 ktpa of nickel products.

The facility uses sulphuric acid leaching with metal recovery rates above 98%, which is a best practice in the global mining and metals industry.

In 2020, Norilsk Nickel Harjavalta accounted for 27%, 1% and 1% of the Group's total nickel, copper and PGM finished products, respectively.

SMELTING

In 2020, the refining facilities of Kola MMC were gradually increasing their nickel feedstock supplies to Norilsk Nickel Harjavalta in line with the Group's downstream reconfiguration strategy. Third-party feedstocks, i.e., converter matte from Boliden and nickel salts from other suppliers, were supplied regularly in small amounts throughout 2020. Metal recovery improved y-o-y on better quality of copper cake.

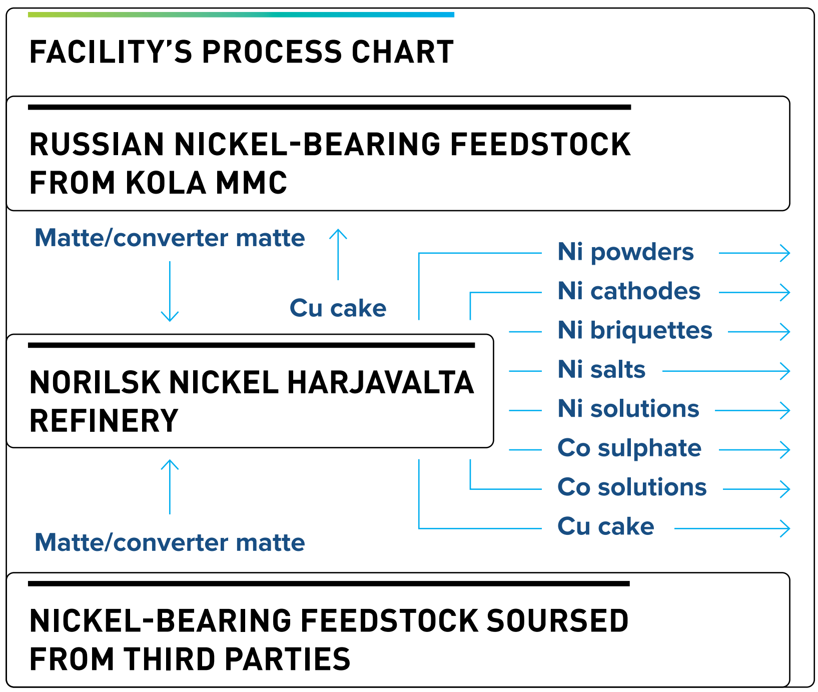
In 2020, Norilsk Nickel Harjavalta produced 63.4 kt of saleable nickel (up 1.5% y-o-y), an all-time high for the refinery. The growth was driven by the reconfiguration of refining facilities and increased nickel feedstock supplies from Kola MMC.

The production of copper in copper cake totalled 2.5 kt, down 83% y-o-y, while the output of saleable palladium in copper cake decreased by 69% y-o-y and platinum output was down by 67% y-o-y.

The decrease in copper and palladium output was due to the fact that the copper cake mined was mostly shipped to the Polar Division for further processing.

Products:

- Nickel cathodes and briquettes
- Nickel salts, powders and solutions
- Cobalt sulphate and solutions
- PGM-bearing copper cake



PRODUCTION VOLUMES

Product	2018	2019	2020
Nickel, t	60,765	62,422	63,352
from own Russian feed	59,337	58,939	60,175
Copper (in copper cake), t	18,036	12,948	2,491
from own Russian feed	17,980	12,667	2,121
Palladium (in copper cake), koz	58	54	17
from own Russian feed	58	51	11
Platinum (in copper cake), koz	11	12	4
from own Russian feed	11	9	2

ZABAYKALSKY DIVISION

Nornickel commenced the construction of Bystrinsky GOK in 2013. In October 2017, Nornickel started the pre-commissioning activities. Bystrinsky GOK was commissioned in 2019 and reached its design capacity in 2020.

In 2020, Zabaykalsky Division accounted for 13% of the Group's total copper.

MINING

Bystrinsky GOK mines gold-iron-copper ores of the Bystrinskoye deposit.

ORE OUTPUT (MLN T)

Mining asset	Mine type	2018	2019	2020
Total ore		7.86	10.49	16.04
Bystrinskoye deposit		**7.86**	**10.49**	**16.04**
Verkhneildikansky open-pit mine	Open-pit	7.43	8.60	11.57
Bystrinsky-2 open-pit mine	Open-pit	0.43	1.89	4.47

CONCENTRATION

The concentrator construction commenced in 2015; the facility's purpose is to process ores of the Bystrinskoye deposit into copper, iron ore and gold concentrates. The key processing stages include crushing, milling, flotation, thickening, filtration and end product packaging. The concentrator has two processing lines. In 2020, it processed 9.76 mln t of ore (2019: 7.5 mln t). The increase was due to scheduled ramp-up to design capacity.

Copper and iron ore concentrates are sold via third parties, while gold concentrates are further processed at the Polar Division.

Products:
- Copper concentrate
- Gold concentrate
- Iron ore concentrate

CONCENTRATION FACILITIES

- Concentrator

PRODUCTION VOLUMES

Product	2018	2019	2020
Ore processing, mln t	3.8	7.5	9.8
Copper (in copper concentrate), t	19,417	43,489	62,663
copper content in the concentrate, %	25.4	25.5	24.7
Gold (in copper and gold concentrates), koz	89	177	241
gold content in the concentrate, g/t	6,218	4,034	3,050
Iron ore concentrate, kt	346	1,311	2,047
iron content in the concentrate, %	64.1	64.6	64.2

NKOMATI (SOUTH AFRICA)

Nkomati is a joint venture between Nornickel (50% interest) and African Rainbow Minerals. Nkomati's performance is reflected in Nornickel's financial results using proportional consolidation, based on our stake. The operations of the mine are planned to cease in 1H2021 whereafter the mine is to be placed on limited care and maintenance pending the finalisation and submission of a closure plan.

Nkomati is located in the Mpumalanga Province, South Africa, 300 km east of Johannesburg. It is South Africa's only producer of nickel concentrate, which also contains copper, cobalt and PGMs. Nkomati produces chrome concentrate as well.

MINING

The Nkomati deposit has a substantial resource base represented by disseminated copper-nickel sulphide ores. The deposit consists of several ore bodies. The major ones are a solid sulphide ore body with a high nickel content and a peridotite chromite mineralisation zone with a relatively lower nickel content and a relatively higher chrome content.

In 2020, total ore mined by Nkomati reached 2.7 mln t (attributable to the Group's 50% shareholding) with an average nickel content of 0.27% and copper content of 0.11%.

CONCENTRATION AND SMELTING

The mined ore is processed at the concentrators using the sulphide flotation technology, with the resulting concentrates then sold by Nornickel to third parties.

In 2020, Nkomati (50% owned by the Group) produced 6 kt of nickel, 3 kt of copper, 30 koz of palladium and 13 koz of platinum. The metals output decline in the reporting period was due to the planned placement of the mine in care and maintenance and the completion of reserve mining.

Products:

- Saleable concentrates

CONCENTRATION FACILITIES

- Concentrator for ore mined in the main section, with installed capacity of 375 kt of ore per month
- Concentrator for ore mined in the peridotite chromite section, with installed capacity of 250 kt of ore per month

PRODUCTION VOLUMES[1]

Copper (in concentrate), t	2018	2019	2020
Nickel, kt	6.6	6.5	5.8
Copper, kt	3.1	3.4	2.9
Palladium, koz	33	33	30
Platinum, koz	13	14	13

NKOMATI (SOUTH AFRICA) as of 31 December 2020[2]	Ore kt	Metal grade				Contained metal			
		Ni %	Cu %	Co %	4 PGM g/t	Ni kt	Cu kt	Co kt	4 elements koz
Proven and probable reserves	980	0.29	0.11	0.02	0.90	3	1	0.2	27
Measured and indicated resources	168,490	0.35	0.14	0.02	0.94	590	227	29	4,926
Inferred resources	46,350	0.41	0.13	0.02	1.00	188	62	8	1,438

1 Volumes based on the 50% ownership.
2 The Company owns 50% of Nkomati. Nkomati's mineral reserves and resources are not included Group's total amounts.

SALES

Despite the constraints caused by the COVID-19 pandemic, in 2020 Nornickel successfully maintained its long-standing reputation as a reliable supplier of high-quality products. The integrated index of customer satisfaction with the Company's products and services fully matched the target level.

Overall, the pandemic had a significant impact on consumption in the Company's markets in 2020, which declined as a result of the global effort to curb the spread of COVID-19. Demand for some products declined by as much as 20%. Faced with uncertainty, consumers sought to reduce their stock and increase the share of call options/spot trades in procurement. However, the overall decline in demand did not lead to a proportional decrease in the Company's sales. The Company's strong sales performance in 2020 despite external headwinds can be seen as a testament to the effectiveness of the sales strategy chosen by the Company to position itself in its sales markets through developing Nornickel's own sales platform that relies on direct long-term relationships with key consumers and diversified client base.

As a top global producer of base and platinum group metals, Nornickel sees its role as leading the industry on building an improved ecosystem for all market players. The Company continues to advance its innovative project that embeds its business into a digital ecosystem for higher performance and transparency throughout the metals supply chain, including enabling responsible sourcing for customers. The Company plans to digitise some of its metal supply contracts via Atomyze, an advanced DLT (Distributed Ledger Technology) platform. In 2020, Nornickel's Global Palladium Fund issued its first tokens to digitise the Company's contracts with several of its major customers. Digital investment instruments will also be issued as part of the project, representing a new class of investment products that open up access to commodity markets to a wide range of investors.

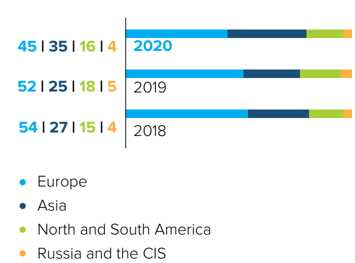
Nornickel's products are listed on the London Metal Exchange and the Shanghai Futures Exchange. Registration at the world's top exchanges ensures the necessary liquidity for the Company's products. In early 2020, NORNICKEL full-plate nickel cathodes produced by Kola MMC were registered at the Shanghai Futures Exchange, the leading metals trading platform in China and Asia. Another highlight of the year was the rebranding of NORNICKEL (formerly NORILSK I) cobalt cathodes on the London Metal Exchange.

The Company's products are supplied to 37 countries around the world, with Europe as the major consumer.

«The tokens issued via Atomyze will enable the Global Palladium Fund to market Nornickel's products in an effective and transparent way to a wide range of customers interested in using digital solutions. We are confident that this will give the mining industry the ability to guarantee responsible sourcing».

Anton Berlin,
Nornickel's Vice President, Sales and Distribution

SALES BY REGION (%)



SALES STRATEGY

Sales, along with production, have traditionally been a key focus area of Nornickel's business.

When it comes to nickel products, the sales strategy focuses on achieving a balance between supplies to stainless steel manufacturers and other industries to secure a stable position in the market.

Electric vehicles and batteries are a priority segment in the **nickel consumption structure**, as its growth rates suggest that in a longer range it can become the key source of demand for high-grade nickel. Therefore, the Company is running a programme to support high-growth nickel applications, primarily in the battery sector. Cooperation with the growing battery sector relies on our wide range of nickel products, high reliability of supplies, availability of the Company's own global sales platform and a long track-record of partnering with automotive manufacturers and chemical companies. The Company also maintains an ongoing, proactive dialogue with new leading players in this area. All these factors make Nornickel well-positioned to become a key element in the battery components value chain. In the battery segment, the Company is set to support the electric-vehicle (EV) market and related value chains while maintaining a strong focus on building long-term partnerships with key industry players.

Nornickel's sales team is closely monitoring changes in the technical requirements for nickel and cobalt products in the sector. The Company is actively engaging major players in the battery segment, as evidenced by its agreement with BASF, signed in 2018. Under the agreement, pilot production facilities were launched, commencing supplies of precursors for certification by automakers in 2019. The Company also confirms its plans to arrange for battery recycling.

In the alloys and special steels sector, the Company seeks to maximise the benefits of its product portfolio and improve product quality to boost its share in high-quality, premium segments.

In the electroplating sector, Nornickel is optimising its product offering to better meet customer needs and acquire new customers in other markets.

Accordingly, in order to secure a stable position in the nickel market, the Company seeks to achieve a balanced presence across all segments of the market.

As the world's largest producer of palladium, the Company continues to implement its strategy of entering into direct long-term contracts with end consumers to bolster sustainable and **strong demand for platinum group metals**.

One of Nornickel's priorities is to ensure stable supply of palladium as the world palladium market remains significantly undersupplied. As the leading supplier of this metal, the Company's strategy includes a number of measures to maintain the long-term stability of the palladium market and the launch of the new South Cluster project.

PRODUCT RANGE

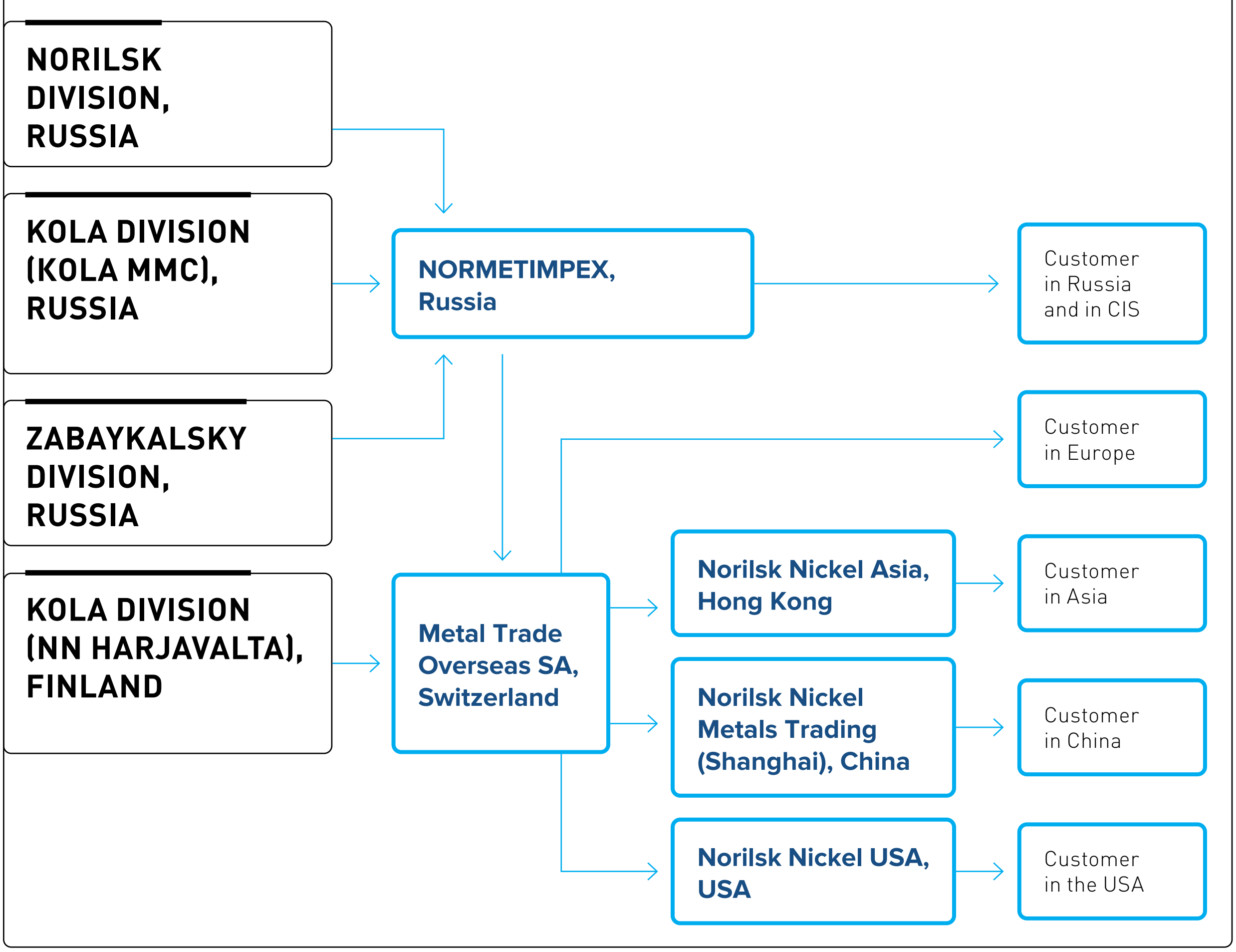
One of Nornickel's objectives is to make sure its product range matches the current and anticipated global metals demand.

Nickel product diversification is a priority in developing the product mix as the Company is implementing a range of initiatives to enhance and expand its existing product range, with a particular focus on changes in the metals demand structure, including the rapid growth in the share of electric vehicles and batteries. In particular, Nornickel continues active interactions with the battery sector players to expand its product range to meet the new requirements for shape and quality emerging in the market.

Norilsk Nickel Harjavalta is recognised as one of world's foremost producers of nickel used to make precursors (semi-products essential for manufacturing the cathode material that forms part of batteries). Norilsk Nickel Harjavalta's nickel and cobalt sulphates are considered the industry benchmark and are widely used in battery manufacturing. Norilsk Nickel Harjavalta is uniquely flexible when it comes to manufacturing various shape products, which enables it to factor in consumer preferences in developing its product portfolio.

In particular, Nornickel is developing new product solutions for critical consumer segments. Over the past two years, the Company developed specialised products for the battery sector based on nickel sulphate solution at its Finnish refining plant. In addition, Nornickel cooperated with a partner to design a competitive process for dissolving nickel and cobalt cathodes as a technological solution for customers to ensure the availability of nickel feed for the production of electric vehicles.

THE COMPANY'S PRODUCT DISTRIBUTION



SALEABLE PRODUCTS

Type of metals	Saleable products	Sales markets
Base metals	copper cathodes, copper saleable intermediate products, copper cake	Russia, Europe, Asia, Americas
	nickel cathodes, nickel carbonyl (powder and pellets), nickel briquettes, nickel saleable intermediate products, nickel sulphate (crystals), nickel sulphate solution, nickel hydroxycarbonate	
Presuaus metalls	Platinum, palladium, phodium, iridium, ruthenium, gold, gold gravity concentrate, silver	
Others	Cobalt cathodes and sulphates	
	Tellurium ingots	Europe
	Commercial selenium (powder)	Russia, Europe,
	Commercial sulphur	Russia, Asia
	Sodium sulphate	Russia
	Sulphuric acid	Russia
	Iron ore concentrate	Asia, Russia

PROCUREMENT AND SUPPLY CHAIN

PROCUREMENT PROCESS

Nornickel's procurement process is certified to ISO 9001:2015 Quality Management Systems ("ISO 9001:2015") and ISO 14001:2016 Environmental Management Systems ("ISO 14001:2016"). Factors underlying the procurement framework include streamlining supply chains and supplier mix (by increasing the share of manufacturers, their marketing arms, and major traders in total procurement) as well as on-time delivery and price control.

Procurement activities can be either centralised or organised independently by the Head Office units, Nornickel branches or Group companies. Depending on the purchase budget, procurement can be organised either as a bidding procedure, simple procurement or simplified procurement. Procurement procedures may involve collective procurement bodies, such as the tender committee, tender commissions of the Head Office, procurement and tender commissions of branches and Group companies. Over 4,000 agreements were signed in 2020 for the supply of inventories under centralised procurement procedures, worth about RUB 89.4 billion (USD 1,239 million) in total. Nornickel has in place category procurement policies.

In 2020, about 58% of inventories were purchased for Nornickel's core operations under the category procurement policies.

Nornickel's SAP SRM, an automated solution for supplier relationship management, provides its suppliers with anytime access to its tender process information and enables supplier feedback. Over 10 thousand potential suppliers have registered in the system, with 4,800 of them successfully passing accreditation.

SUPPLY CHAIN CONTROL

Supply chain management at Nornickel ensures continuous operation of the Group, high quality of its products, and reliable shipments to its customers. Nornickel is constantly striving to improve its supply chain performance by adopting global best practices and standards, optimising and automating business processes.

Given the diversity of Nornickel's business activities across a wide geography, efficient, timely and full provision of necessary resources is essential to the success of its business. Nornickel pays close attention to fostering ties with reliable suppliers offering unique products that are critical to the Company's success in achieving its strategic goals. Nornickel is committed to increasing local content, which totalled 93% in 2020 (up 7% y-o-y). Long-term supply contracts are signed with certain producers.

Foreign suppliers are mainly engaged to deliver unique equipment or systems that do not have Russian alternatives.

Nornickel focuses on local sourcing to provide social support for its operating regions. Along with saving jobs, this policy supports unique enterprises whose continuous operation is essential to both the well-being of their employees and the social fabric of local communities.

ESG-DRIVEN SUPPLIER SELECTION

In engaging with suppliers and other counterparties, Nornickel, in addition to requirements for product/service quality, pricing and delivery timelines, focuses on three sustainability pillars: environmental safety of operations and supplied products; health and safety compliance; and contribution to the social development of local communities.

Prior to engaging any supplier, the Company signs a Master Agreement setting out the requirements for shipping documents, including for hazardous cargoes, and certification and labelling. The Master Agreement commits suppliers to comply with the following standards:

- Human rights, including freedom of association and zero tolerance to discrimination and retaliation
- Labour relations, including requirements on working conditions and remuneration, and prevention of child and forced labour
- Environmental protection
- Anti-corruption
- UN Global Compact

To mitigate potential negative environmental impact of the cargo in transit, the Company includes a separate clause in the Master Agreement with requirements for cargo packaging. Cargoes to be shipped must meet cargo standards and requirements of GOST 26653–2015 Preparation of general cargoes for transportation and GOST 15846–2002 Production for transportation to the areas of the Far North and similar regions. Packing, marking, transportation and storage. There is a mandatory requirement for transport containers and product packaging to ensure the integrity of cargo during multiple transshipments and transportation legs on a route to the Far North.

Environmental impact is assessed throughout the life cycle of purchased products, including production, transport, storage, use and disposal. Nornickel requires its contractors to have a functioning environmental management system in place and to ensure that all services and products supplied by them comply with local environmental laws.

The anti-corruption clause included in the Master Agreement outlines the course of action to be taken between the counterparty and Nornickel with respect to various risks of abuse. By signing the Master Agreement, counterparties acknowledge that they have read MMK Norilsk Nickel's Anti-Corruption Policy published in the anti-corruption section on Nornickel's website (see Preventing and Combatting Corruption).

The Company also expects its counterparties to comply with global best practices in sustainable use of natural resources and with Nornickel's key policies such as the Human Rights Policy, Working Conditions Policy, Occupational Health and Safety Policy, Freedom of Association Policy and Equal Opportunities Programme. The Supplier Code of Conduct will be developed in Q2 2021 to fulfil Nornickel's responsibility toward ESG issues for entire supply chain.

ENERGY ASSETS

Nornickel owns an integrated network of fuel and energy assets, including four hydrocarbon deposits.

Most of Nornickel's production facilities are located beyond the Arctic Circle, operating in sub-zero temperatures for eight months of the year. It is therefore critical for the Group to ensure energy supplies to its production and infrastructure facilities, as well as to communities in its regions of operation.

Norilskgazprom (100% stake) produces gas and gas condensate at the Pelyatkinskoye, Yuzhno-Soleninskoye and Severo-Soleninskoye gas condensate fields, as well as the Messoyakhskoye gas field.

2,728 Mcm[1]
natural gas production

114 kt
— gas condensate production

46%
— electricity generated from renewable sources

Start of production: 1969

Gas reserves
244 bcm

Gas condensate reserves:
4,576 kt

MINING VOLUME

Asset	2018	2019	2020
Natural gas, Mcm	2,896	2,804	2,728
Taimyrgaz[2]	2,027	0	0
Norilskgazprom	869	2,804	2,728
Gas condensate, kt	90	92	114
Taimyrgaz[2]	88	0	0
Norilskgazprom	2	92	114

1 Data on gas condensate production include production losses (carryover with separation gas

2 in 2019 was the reorganisation of Taimyrgaz.

Norilsktransgaz (100% stake) transports natural gas and gas condensate from deposits to consumers.

The length of gas and gas condensate pipelines totals 1,602.5 km. The pipelines were commissioned between 1969 and 2018.

NTEK (100% stake) is focused on electricity and heat generation, transmission and sales harnessing the assets of Norilskenergo, a branch of Nornickel. Energy is produced from both renewable (e.g. hydropower) and non-renewable (e.g. natural gas) sources. NTEK supplies electricity, heat, and water to households in the city of Norilsk and to all production facilities within the Norilsk Industrial District. In terms of its location and operational mode, the local electricity grid is isolated from the national grid (the Unified Energy System of Russia), which means stricter reliability requirements. NTEK operates five generating facilities – three thermal power plants with installed electricity generation capacity of 1,115 MW, and two hydropower plants (HPPs) with total installed capacity of 1,101 MW. The total installed capacity of all plants is 2,216 MW.

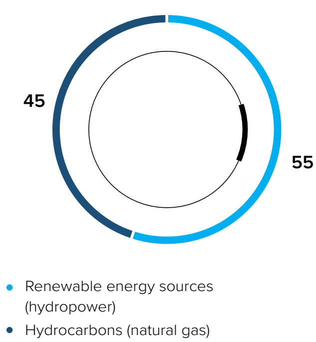
Ust-Khantayskaya and Kureyskaya HPPs are Nornickel's two renewable electricity generation facilities. In 2020, renewables accounted for 46% of total electricity consumed by the Group and 55% of total electricity consumption within the Norilsk Industrial District.

To boost the share of renewables such as hydropower, capture fuel and energy savings, and improve the reliability of energy and gas supplies, Nornickel's investment programme contains a number of large-scale priority projects. Selected major projects being implemented by Nornickel to improve equipment reliability, enhance energy efficiency, and boost product output:

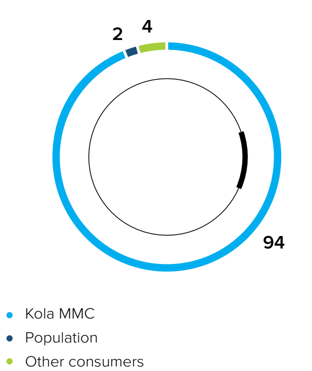
- Replacement of seven hydropower units at Ust-Khantayskaya HPP
- Replacement of power units at CHPP-2 and CHPP-3 in Norilsk
- Upgrade of power grids, main gas pipelines, and gas distribution networks within the Norilsk Industrial District

Arctic-Energo (100% stake) supplies electricity to Kola MMC and other Group entities in the Murmansk Region, is a default electricity supplier within its area of operations and has the right to trade in the wholesale electricity and capacity market. The company was established to ensure energy independence, efficient and uninterrupted electricity supply at cheapest rates to Kola MMC operations. In 2020, it sold 2,596,781 thousand kWh of electricity.

POWER GENERATION BREAKDOWN IN THE NORILSK INDUSTRIAL DISTRICT IN 2020 (%)



ARCTIC-ENERGO ELECTRICITY SALES BREAKDOWN IN 2020 (IN KOLA PENINSULA) (%)



TRANSPORT ASSETS

1. Murmansk Transport Division
2. Arkhangelsk Transport Division
3. Norilsk Airport, Norilsk Avia, NordStar (100%)
4. Polar Transport Division (Dudinka Port)
5. Krasnoyarsk Transport Division, Krasnoyarsk River Port (89%) and Nornickel-YRSC
6. Yenisey River Shipping Company (82%)
7. Bystrinsky Transport Division
8. Lesosibirsk Port (51%)

Norilsk Nickel's transportation and logistics assets include:

- sea fleet – six heavy ice-class vessels
- river fleet – 627 vessels (including 198 self-propelled and 429 towed vessels)
- rail car and locomotive fleet – 118 container flatcars, one switch locomotive, one Yermak electric locomotive (sold in 2020), and one 2M62 diesel locomotive
- aircraft fleet – 18 helicopters operated by Norilsk Avia and 15 airplanes operated by NordStar Airlines.

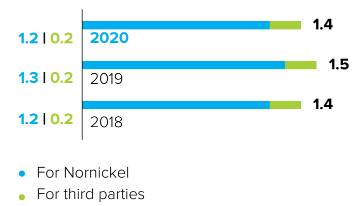
Nornickel owns a modern transport infrastructure capable of handling most challenging freight logistics tasks and ensuring continuity and sustainability of operations of the Group's enterprises. Nornickel's transportation and logistics assets cover the full range of transportation and freight forwarding services.

FREIGHT SHIPPING SERVICES

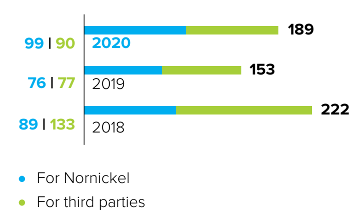
Nornickel has a unique Arctic fleet comprising five dry cargo vessels and one Yenisey heavy ice-class tanker (Arc7 as per the classification of the Russian Maritime Register of Shipping). The vessels are capable of breaking through Arctic ice up to 1.5 m thick without icebreaker support. The Yenisey tanker carries gas condensate exports from the Pelyatkinskoye gas condensate field to European ports and makes commercial voyages to other destinations.

Nornickel's dry cargo fleet provides year-round freight shipping services between Dudinka, Murmansk, Arkhangelsk, Rotterdam, and Hamburg sea ports while also serving other destinations. In 2020, 66 voyages were made from Dudinka (2019: 68), including nine direct voyages to European ports (2019: 11).

DRY CARGO TRANSPORTATION BY NORNICKEL'S FLEET (MLN T)



TRANSPORTATION BY YENISEY TANKER (KT)



AVIATION ASSETS

Norilsk Avia (Nornickel interest 100%) serves the transportation needs of local communities in the Norilsk and Taimyrsky Dolgano-Nenetsky Districts of the Krasnoyarsk Region. The air carrier has its own fleet of 18 helicopters and provides air services related to the operations of the Norilsk Nickel Group, emergency air medical services, search and rescue operations, and local passenger traffic.

NordStar Airlines (Nornickel interest 100%) is an aviation project that has been steadily growing since its establishment in 2008. Its fleet comprises 15 aircraft. NordStar Airlines is a major air carrier in the Siberian Federal District and the anchor airline of Norilsk Airport.

The air carrier's annual passenger traffic is in excess of one million people. The airline's current route network covers over 30 cities in Russia and the CIS.

Norilsk Airport (Nornickel interest 100%) is located 36 km away from Norilsk. It plays an essential role in ensuring the region's transport accessibility as it connects the north of the Krasnoyarsk Region with other parts of Russia.

Between 2015 and 2020, the public-private partnership between Nornickel and the Federal Agency for Air Transport (Rosaviatsiya) renovated the airfield complex and airport infrastructure.

The renovated Norilsk Airport meets all current regulatory requirements, offering higher quality and safety standards and ensuring reliable and consistent passenger and freight transportation services.

TRANSPORT DIVISIONS AND PORTS

The Polar Transport Division and Dudinka Port are the key industrial facilities of the city port of Dudinka, accessible by both sea and river vessels.

Located in the Far North, Dudinka Port is the world's only port that gets flooded every year during the spring thaw. From November to May, its water area and the Yenisey River freeze over. At this period, Dudinka Port handles only sea vessels using icebreakers to de-ice the berths and provide support during manoeuvring and mooring operations. In May and June, during the flooding, the service is suspended to be resumed for sea and river vessels when ice flows pass and the water level goes down.

Dudinka Port transships cargoes destined for the Taimyr Peninsula, including goods for local residents (except for perishables and mail). In summer, river vessels deliver equipment and materials (sand, round timber, clinker, etc.) for process needs from Krasnoyarsk and Lesosibirsk. Sulphur shipments are directed both via the Yenisey River and via sea routes. Converter matte and metal products are shipped by sea from Dudinka throughout the year.

The Polar Transport Division operates its own fleet of port service vessels which includes a river-class icebreaker, towboats, motorboats, a bunker barge, and a floating crane. To reduce its environmental footprint, the division runs programmes to cut fuel consumption and prevent pollution of the Dudinka and Yenisey Rivers while also investing in bioresource management (e.g. releasing fingerlings).

The year-round ice-free sea port of Murmansk is home to Nornickel's **Murmansk Transport Division.**

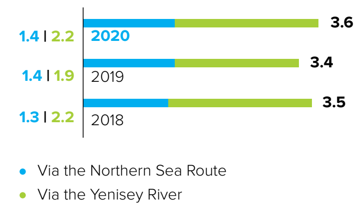
Murmansk Transport Division's key functions:

- Shipment of Nornickel's finished metal products from Murmansk to European ports
- Receipt of converter matte from Dudinka and its shipment by rail to Kola MMC
- Shipment of empty containers, equipment and materials to Dudinka

In addition to sea transportation, Murmansk Transport Division is focused on freight forwarding, transshipment and storage of cargoes, and rail transportation between Murmansk and Monchegorsk.

The division's shipping department complies with international maritime conventions by ensuring environmentally friendly and safe sea transportation, with the vessels undergoing regular scheduled repairs and safety inspections. In addition, in 2019, Murmansk Transport Division's Information Security Management System was certified to ISO/IEC 27001:2013.

CARGO TRAFFIC AT DUDINKA PORT (MLN T)



CARGO TRAFFIC AT MURMANSK TERMINAL (MLN T)

Arkhangelsk Transport Division is based in Arkhangelsk. The division provides year-round transshipment services for Nornickel's cargo via Arkhangelsk sea port, which is conveniently linked to other Russian and foreign regions by road, air and rail.

Krasnoyarsk Transport Division is based in Krasnoyarsk. This division is responsible for transportation and forwarding of Nornickel's cargoes and for carriage of precious metal concentrates.

In 2019, Nornickel-YRSC (Nornickel interest 100%) was established to coordinate operations of Krasnoyarsk port and Yenisey River Shipping Company, which operate a strictly seasonal service due to the Yenisey River getting frozen in winter. When ice flows pass, the Group uses the ports to transship Nornickel's cargoes to Dudinka, including crushed rock, clinker, equipment, materials, and socially significant cargoes (as part of the Northern Deliveries programme).

Yenisey River Shipping Company (Nornickel interest 82%) carries the bulk of the Group's and third-party cargoes shipped on the Yenisey River. The company owns over 600 river vessels, including self-propelled and towed ones. The fleet operates in the Yenisey, Angara, Nizhnyaya and Podkamennaya Tunguska Rivers, and their largest tributaries.

Krasnoyarsk River Port (Nornickel interest 89%) is one of the largest ports in the Yenisey basin. The port transships cargoes delivered by road, rail and water, provides storage services and transports cargoes using private railway lines. The port has three operating areas – Yenisey, Zlobino and Peschanka.

Lesosibirsk Port (Nornickel interest 51%) is located 40 km downstream of the point of confluence of the Angara and Yenisey Rivers and downstream of the hard-to-navigate rapids. This secures the delivery of Nornickel's cargoes at times of low water on the Yenisey and the use of fully loaded ships. The port's unique benefits:

- The only dedicated port on the Yenisey River capable of handling explosives with a storage option
- Offers year-round service (rail-to-road and road-to-rail cargo transshipment services in between the navigation periods)
- Has access to the Baikal (M53) federal highway via the Krasnoyarsk–Yeniseysk highway
- A railway to Achinsk links Lesosibirsk to the Trans-Siberian Railway

Bystrinsky Transport Division was established in 2017 to support shipments of finished products from Bystrinsky GOK and handle its inventories. Bystrinsky Transport Division provides maintenance services for the 227-km Naryn (Borzya)–Gazimursky Zavod private railway line built through a public-private partnership.

INVESTMENT IN TRANSPORT AND LOGISTICS ASSETS

INVESTMENT

Expenditure	2018		2019		2020	
	USD mln	RUB bn	USD mln	RUB bn	USD mln	RUB bn
Capital construction	6.4	0.4	3.1	0.2	5.8	0.4
Equipment purchases	12.8	0.8	40.2	2.6	77.6	5.7
Other	15.9	1.0	12.4	0.8	12.3	0.9
Total	35.1	2.2	55.6	3.6	95.7	7.0

Higher CAPEX in 2020 vs 2019 was due to the programme to replace mobile harbour cranes in Dudinka Port, as well as the purchase of a new aircraft. In addition to the programme, in 2020, Nornickel completed scheduled repairs of vessels, overhauled several berths and harbour cranes, implemented projects to improve security and shift shore power supply from marine fuel-fired generation to power grids, introduced fuel consumption metering and upgraded marine equipment.

The Company's transport and logistics subsidiaries and units are fully environmentally permitted and compliant with applicable environmental regulations, namely:

- Air pollutant emissions from mobile sources do not exceed the maximum allowable levels
- Marine fuels are purchased from suppliers that have all required documents confirming fuel quality. The quality of fuel is verified by an independent laboratory
- Onboard wastewater treatment plants are subject to annual certification to prevent pollution and contamination of water bodies and marine environment
- Oily water is transferred to specialist contractors at sea ports

DIGITAL TRANSFORMATION JOURNEY

Nornickel has been consistently implementing a programme to improve its operational efficiency, including through the use of advanced information technologies. The Company is clearly ahead of the curve on technology adoption, rolling out multiple innovations that are unique in the industry. In 2020, Nornickel moved to the second phase of its IT strategy: advanced automation projects. Nornickel is already rolling out Industry 4.0 innovations across its operations and business activities, while our powerful IT infrastructure built out as part of Nornickel's digital transformation journey enabled fast response to the last year's unprecedented challenge and our continued operation throughout the pandemic.

IT INFRASTRUCTURE DEVELOPMENT

Nornickel's global IT strategy includes a programme to deploy high performance computing capabilities. The construction of a data centre in Moscow was the culmination of a major programme to build out a more resilient, advanced IT infrastructure. It also included projects to upgrade four data centres at the Polar Division and Kola MMC, build a company-wide backup system, create a new corporate-wide data transmission network, and build out a corporate services and infrastructure monitoring system. The IT infrastructure upgrade provided a solid foundation for Nornickel's further digital projects, from process automation to new ERP functionality, as well as ensured business continuity throughout the pandemic. Over 14,000 Nornickel employees were shifted to work from home in the shortest timeframe while meeting all information security requirements.

Our near-term key priority in developing IT infrastructure is to enable ubiquitous access to data centre resources and ensure fast data sharing between all sites. This will significantly accelerate management decision-making and support it, among other things, by data from resource-intensive AI platforms. Further development in this area will also be focused around an effective scale-up and high availability. During the year, Nornickel kicked off its private corporate cloud project, expected to dramatically accelerate IT infrastructure provisioning through automation. Within a few years, employees will be able to submit requests for a virtual machine or disk space via the self-service portal.

In 2020, Nornickel also launched a project to promote local solutions by upgrading technology networks through aggregation at a regional level and at our production sites. This includes networks to support projects within the Technology Breakthrough and Technology Breakthrough 2.0 programmes, as well as regional segments of the corporate network, including the creation of internet traffic filtering nodes.

BUSINESS APPLICATIONS

In 2020, Nornickel continued the successful automation of its key business processes through the implementation and rollout of corporate IT systems. For example, as part of digitising its document management, a document management system for binding B2B documents was deployed across pilot sites.

The project received an award for the Electronic Document Management Innovation of the Year at the CFO Russia contest. The number of users of the corporate document automated management & control system (CDAMCS) grew to 23,000, with an average of 4,000 documents and 6,000 orders generated in CDAMCS on a daily basis.

The Company also completed a project for comprehensive internal audit automation based on the SAP Audit Management solution to improve its audit processes and speed up analytical reporting. The project significantly boosted the reliability and performance of our corporate reporting, with 350 new users connected to the corporate data warehouse.

As part of net working capital optimisation, an IT service was set up to identify comparable inventories. Over 10,000 comparable products were identified in 2020, which allowed increasing the use of stale stocks in production processes. We have deployed RPA solutions across over 40 new use cases, with 40,000 Group employees already connected to the Nika virtual assistant.

Nornickel places a particular emphasis on improving industrial safety. In 2020, three more Group companies rolled out a video analytics system to monitor the use of personal protective equipment. The pilot implementation of the Control, Management, Safety system was also successfully completed, covering 70 OHS business processes. The system captures 700 behavioural safety audits and issues over 30 work permits on a daily basis.

Active digitisation of the Company's HR processes is also ongoing. In 2020, Nornickel completed the rollout of its HR management system, with the project covering 53 branches and legal entities across 12 cities within our footprint. The system has 4,500 users while 22,000 employees are using self-service products. In 2020, the project won the SAP Quality Award as the most ambitious business transformation project.

The Company also launched an onboarding solution to improve the engagement and performance of its new hires. The solution is integrated with the Nika virtual assistant: employees can use the chat-bot to get updated on their tailored onboarding plan tasks, find out more about the Company and fill in the necessary questionnaires.

Progress on the social agenda included the deployment of an integrated software suite for the Your Home housing programme. The service automates the processes for engaging and recording the performance under the corporate programme for relocating employees from the Far North.

IMPROVING DIGITAL LITERACY

Our IT function is actively developing the Digital Nornickel educational programme, which focuses primarily on improving the digital literacy of Company employees and enhancing their digital skills and knowledge. This list includes both basic IT competencies (knowledge of office applications and other software, messengers, electronic document management, etc.) and more advanced competencies such as coding, RPA basics, understanding and use of innovative technology: machine vision, digital twins, big data, virtual reality and artificial intelligence. 12 interactive courses under the IT and Digitalisation programme are already available on the Nornickel Academy portal. More than 500 employees took the courses over several months, while over 4,000 users successfully completed the Digital Literacy online course via the Tsifronikel mobile app.

DIGITAL LAB

Digital Lab (Nornickel's R&D function) is responsible for implementing innovative technology at Nornickel, exploring the applicability of innovations to the Company's operating processes and testing them.

In 2020, as part of measures to prevent the spread of COVID-19, the Digital Lab explored the use of a disinfecting robot in office spaces and the use of video surveillance to monitor mask-wearing.

The Digital Lab's pipeline of environmental initiatives included a number of projects to reduce the Company's environmental footprint:

- The Digital Tailings Dump, an integrated solution that combines automation and autonomous monitoring tools to ensure effective and safe operation of hydraulic structures. The technology includes space imagery using the InSAR method (a satellite-based radar technique used in geodesy), UAV surveys of the dam (using photogrammetric survey to create a 3D model of the tailings facility and detect weak zones in the hydraulic structure), as well as bathymetry of the pond bottom using an autonomous echoboat – a special boat carrying a geodetic-grade high-precision echo sounder and GPS receiver. The devices digitise the bottom surface and transmit the data to the operator's computer via an industrial Wi-Fi network)
- SO_2 Emissions Monitoring in Monchegorsk, driven by a hardware and software system designed to monitor air pollution and inform preventive measures
- An innovative oil filter designed to reduce the consumption of fuel and lubricants in rail transport

30% of the initiatives within the Digital Lab's 2021 portfolio are related to the environment.

The Lab's operating model is fully integrated into the Company's ongoing operational excellence programme. The Digital Lab seeks out innovative solutions to do more and better with less. The economic benefits generated by the Digital Lab's activities over 2018–2020 total RUB 650 million (USD 9 million).

collected by the Digital Lab at production units.

>200 ideas

The Digital Lab's research pipeline contains

>70 initiatives.

The use of the Digital Twin technology is a key focus area for the Digital Lab, which has already enabled a number of innovative solutions:

- An advisory system at Kola MMC's Concentrator, which increased component extraction by 0.73% from the baseline period
- A Digital Twin in the main aisle of Copper Plant's smelting shop – a system for optimising in-process logistics of the converter operations through the use of digital tools for real-time charge planning
- The Digital Core, a software suite that uses machine vision components in combination with neural network algorithms to enable the online detection and analysis of ore present in a core using a photograph, as well as highly accurate estimates of mineralisation grades.

As part of the efforts to ensure safety and drive operational efficiency at Kola MMC's Severny Mine, the Digital Lab tested a prototype of an autonomous UAV to inspect the workings. The drone's built-in navigation allows it to fly without connecting to GPS/GLONASS while video-recording the surrounding space to build a horizontal section of the area. The solution can survey workings that cannot be accessed by people or machinery.

Awards and partnerships

The Digital Lab's initiatives consistently generate strong interest and recognition from the industry. Its projects won awards at the Mine Digital contest of innovative solutions and technologies for digital transformation of the mining industry held as part of the MINEX Russia 2020 Mining & Exploration Forum. The Intelligent Automated Process Control System at Kola MMC's Concentrator project was the gold winner while the Digital Core project won the bronze award.

Also in 2020, a cooperation agreement was signed between Nornickel and Gazprom Neft for the development and implementation of digital products and industrial exoskeletons designed by the Digital Lab.

BIG DATA

In 2020, the Nornickel – Shared Services Centre data analytics group used machine learning to develop and test a number of systems to optimise concentration processes at the Talnakh Concentrator. The implemented algorithms provide real-time recommendations on ore milling and floatation. The process aims to increase metal recovery in concentrate.

Plans are in place to roll out the new approaches to the Company's other concentrators over the next few years.

CREATING A DATA LAKE

In 2020, Nornickel set out to create a corporate data lake, a latest-generation data processing and storage platform with a number of advantages over incumbent architecture solutions:

- Storage and efficient processing of extra-large data sets – millions of gigabytes or more
- Ease of horizontal scaling
- Integration of diverse data sources with both structured and unstructured data
- Advanced business analytics including predictive analytics and data processing with machine learning algorithms
- Near real-time data delivery from source to the end user of business analytics
- Effective change management: short lead time from business need definition to implementation and productive use

The corporate data lake will help reinvent Nornickel's consolidated data assets (including entirely new data sources ranging from video files to social media data) to capture value and boost operational efficiency. Kola MMC was selected as a pilot site to launch a data lake prototype. The effort covered two business segments: HR management and production process management. Five prototypes of business solutions were implemented as Tableau dashboards:

- Production data deviation monitoring, a system to support process operator decisions on selecting optimal equipment operating parameters
- Production data quality monitoring, a control tower to detect and forecast abnormal equipment behaviour, with event logging and follow-up examination and corrective actions
- Sick leave prediction model, a system to predict employee sick leaves mathematically
- Career development/multi-skilling, an analytics system to define a career path for each employee and identify high-potential employees that could add value to the business
- Actual employee attendance analysis, a business analytics tool for real-time monitoring of employee workplace attendance and systematic analysis of employee and department working time

SAP ERP

Nornickel consistently automates business activities of the Group companies to achieve a high level of optimisation across its operational, logistics, financial and HR processes. In 2020, the following support companies were successfully connected to the unified management system of the Company's SAP ERP: Polar Construction Company, Nornickel – Shared Services Centre, Norilsk Avia, Norilsk Airport, Nortrans-Norilsk, Norilsk Plant and the Company's transportation branches (at Dudinka, Krasnoyarsk, Arkhangelsk and Murmansk), etc. The unified management system already enables interactions between more than 17,000 users.

Over the next two years, the system is expected to be rolled out to Nornickel's global sales network and a number of division-specific support companies, such as Norilsk Support Complex, Taimyr Fuel Company, Yenisey River Shipping Company, etc.

In parallel with the system's roll-out, it will be continuously improved to capture additional business impacts. Under the SAP 2.0 development programme, the Company's business units implement commercially viable (self-sustaining) initiatives for advanced automation with digital elements, e.g. Integrated Planning, Digital Treasury, and Tax Monitoring. Digital assistants, mobile solutions and analytics tools are developed under the programme. The Company's pilot project included 14 initiatives carefully selected out of 50 ideas based on the size of expected business impact.

Nornickel's holistic approach to business process transformation and digitisation has earned international acclaim. The Company won the gold award in the Business Transformation category at SAP Quality Awards — 2019 for EMEA (Europe, Middle East and Africa). For over 15 years, this award has been given by an independent international judging panel to recognise high-quality, large-scale business transformations based on a SAP platform, and Nornickel did very well representing Russia amongst the world's largest and most ambitious leaders in SAP-driven business transformation and performance improvement.

SMART CITY

Nornickel is also actively contributing to social projects. In 2019, the Company launched the Smart City project positioned as a new business segment and implemented in three phases until 2025. The project is aimed at the digital transformation of cities, harnessing innovative technology for an easier and more comfortable life for city dwellers.

In 2020, during the first phase of the project, Nornickel subsidiary Edinstvo launched the City Online platform in five cities: Norilsk, Dudinka, Monchegorsk, Murmansk and Krasnoyarsk. This digital solution was developed to improve quality of live and enhance urban management systems in northern cities and open up additional opportunities for business development.

The new platform received positive user feedback: support for its launch by city administrations; high focus group ratings (scores of more than eight points out of ten); early customer satisfaction metrics NPS = 7 and SCI = 78%; 68,000 unique users as at 15 December 2020.

A total of 14 products have been implemented on the platform, which is above target; however the product mix roll-out was adjusted to incorporate market feedback, prioritising the launches of traffic generating services and postponing some commercial service launches until 2021.

Preparations for future scale-up in 2020 included establishing close relations with the Ministry for the Development of the Russian Far East and Arctic, setting up a working group with representatives from 12 cities, diagnostics of urban needs, obtaining confirmations of interest in Edinstvo’s offer from most cities, identifying the scale-up approach and getting it approved by the ministry, and identifying opportunities for co-financing and platform launches in small and medium towns.

The portal features telemedicine and remote learning services as well as news and upcoming events. SME support, urban online voting, utility bill payment, public transport tracking and monitoring, further education, professional development, and other services are expected to be added shortly. The platform is available both online and as a mobile app.

[1] NPS = 34 based on focus group data; NPS = 20 based on both survey and focus group research; NPS = 7 based on surveys only, excluding focus group data.

PRODUCTION AUTOMATION

TECHNOLOGY BREAKTHROUGH PROGRAMME

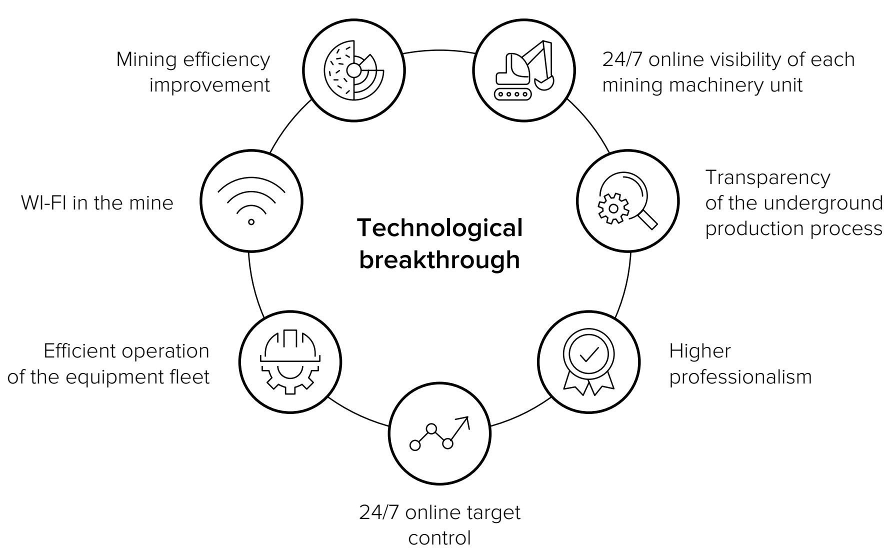
In 2015, as part of basic production automation, Nornickel launched the Technology Breakthrough programme running from December 2015 to April 2021.

The programme's key objective is to embed all operating processes in a new effective system of multiple option planning and automated day-to-day monitoring, aligning performance with KPIs.

By December 2020, 26 IT projects were implemented under the Technology Breakthrough programme, 31 IT systems were developed and put into operation at all relevant sites, and 2,418 users were connected.

UNDERGROUND INFRASTRUCTURE AND DISPATCH PROGRAMME

UNDERGROUND INFRASTRUCTURE AND MINING CONTROL



>70 km
of cable laid

365
contact points established

386
self-propelled diesel equipment items equipped

>500
employees trained

EXECUTION CONTROL
- Mining plan implementation
- In-mine ore movement control
- Hourly performance profile

PRODUCTION CULTURE
- Execution discipline
- Employee qualifications data

STATISTICS
- Mining operations performed
- Equipment use statistics

In 2018, a separate programme was spun off from the Technology Breakthrough programme – Underground Infrastructure and Mining Operations Dispatch that comprises six IT projects to be implemented between July 2018 and December 2020.

All systems were put into operation at all relevant sites in 2020, and in December 2020, the Underground Infrastructure and Mining Operations Dispatch programme was completed with the following measures implemented:

- Dispatch control over rock delivery from the mine face to the ore pass and further from the ore pass to the intermediate stockpile (autonomous haul trucks, rail transport)
- Dispatch control over drilling operations

More than 70 km of fibre was laid in mines, 365 access points were installed to provide Wi-Fi coverage, 386 pieces of mining equipment were connected, and more than 500 specialists were trained.

At the same time, the progress on the mining and ore transportation plan is monitored online 24/7. These measures helped enhance the production culture and execution discipline.

EFFECTIVE SOLUTIONS FOR PRODUCTION MANAGEMENT

By end-2020, upon completion of the Technology Breakthrough and Underground Infrastructure and Mining Operations Dispatch programmes, the Company implemented unique solutions that significantly improved production management efficiency. The solutions were deployed across all production operations, from ore mining to metals production.

INDUSTRIAL SAFETY MANAGEMENT

The Control, Management, Safety system was designed to collect, process, record and analyse health and safety data. The system's main objectives are to automate labour-intensive and routine functions associated with health and safety processes and to create a single information environment for its users. This will reduce time and information constraints when making management decisions, and improve the quality and efficiency of industrial safety processes.

PRODUCTION DISPATCH

All key processes in the Company are controlled from control centres at the Norilsk and Kola Division, covering a total of 18 operating units. Dispatch control allowed the Company to completely abandon collecting information by phone and recording it on paper. By automating the collection of data from production chains, Nornickel is able to effectively calculate and monitor process and production parameters, including development of production plans and schedules and progress monitoring in real time.

METALS BALANCE

Based on real-time data, all production units simultaneously prepare metals inventory plans, enabling detailed, granular views into metal-bearing products at each production stage, and accurate real-time control over commodity flows within the Company and the actual volume of products manufactured.

GEOLOGICAL MODELLING AND MINE PLANNING SOLUTIONS

By deploying geological modelling and mine planning solutions, the Company was able to develop a single mining database, design underground workings and obtain survey data. 3D models of underground ore bodies or workings can be displayed at any time to assess the current situation in a mine. The system enables the preparation and feeding to automated drill rigs of electronic data sheets, with significant gains to be achieved in drilling and blasting performance.

SIMULATION MODELLING SYSTEM

The simulation modelling system enables the development and prompt analysis of mining plan options to select the best ones. To make it possible, more than 500 pieces of equipment were modelled, including LHDs, autonomous haul trucks and self-propelled drilling rigs, electric locomotives and skip shafts. Simulation models comprise data on 5,000 underground workings and their characteristics. Nornickel plans to create a single simulation model covering all production operations – a full digital twin that will feature optimal operation modes to manage all processes in the Company, based on modelling and big data.

PRODUCT QUALITY MANAGEMENT

LIMS (Laboratory Information Management System) automates operations at control and analysis centres and supports the entire cycle of quality control processes, from sample registration to reporting on test results. With LIMS, Nornickel has centralised the collection and storage of all information about laboratories' activities and ensured its reliability and confidentiality.

ENERGY ACCOUNTING

The automated system for commercial energy accounting monitors the consumption of electricity, heat, gas, cold water, as well as industrial oxygen and compressed air in real time. Thanks to the energy accounting system, enterprise managers will be able to see the actual consumption of all resources at once, track any deviations from the planned parameters, and decide on necessary measures to ensure efficient use of resources.

TECHNOLOGY BREAKTHROUGH 2.0 PROGRAMME

In 2020, the Company launched the Technology Breakthrough 2.0 programme, which, in turn, includes 10 sub-programmes. Business milestones have already been set for each sub-programme, with a roadmap consisting of 42 IT initiatives and IT projects to achieve these milestones.

The Technology Breakthrough 2.0 Programme is planned to be implemented within five years with a total budget of RUB 6.5 billion.

Our experience in implementing projects across existing operations over the last five years gives us confidence that we will also successfully complete Technology Breakthrough 2.0.

To sum up, between 2015 and 2020:

- all projects approved for implementation were completed
- the targeted outcomes and outputs were achieved under the Technology Breakthrough and Underground Infrastructure and Dispatch programmes
- a 2020–2024 further development plan was prepared.

TRANSITION FROM BASIC AUTOMATION TO DIGITAL OPERATIONS

In 2020, the Company completed the basic automation of its production processes, with 31 information systems (including systems developed under the Technology Breakthrough and Underground Infrastructure and Dispatch programmes) deployed and put into operation with more than 3,000 active users.

As a result of basic production automation, all underground mines were equipped with positioning and communication systems. A powerful system was created to feed data from the surface underground and back. All in all, we have created the basic infrastructure to manage mining operations.

We collected and digitised all equipment data sheets and process sheets for the most critical equipment, which allows effective production asset management via a unified system. The deployment of geological and mining information systems has enabled us to develop a single mining database and 3-D models of underground ore bodies, design mine workings and

OPERATIONAL EXCELLENCE

Improved production asset performance

- Reliability management
- EBITDA@RISK modelling
- Workload management

Improved energy efficiency

- Energy management
- Energy balance

Lights-out/autonomous operation

- Automatic management of self-propelled drilling rigs during extraction and shaft sinking operations
- Autonomous remote management of electric locomotive haulage
- Autonomous remote management of self-propelled diesel vehicles

Improved efficiency of mining and exploration operations

- Processing and analysis of mining and geological data
- Licence risk management

Production planning and management

- Precious metal balance
- Inventory and semi-product movement accounting
- Management of ore dressing, charge blending and concentration processes with forecasting
- Day-to-day planning of mining and metallurgical operations
- Modelling the content of valuable components in the ore released and optimising the release strategy

Process data analysis

Occupational safety

- Occupational health
- Smart PPE and intelligent analytics
- Contractor management
- Mobile solutions

IP asset management

Digital model to manage capex projects

- Digital construction control
- Netgroup management
- Interactive and analytical reports
- Database of resource and process models

Investment activities

manage mine survey information. 100% of ore bodies and measured reserves of the Company have been digitised, with mining plans designed based on this data. Local mining projects have also been fully digitised in 3D.

The mining plans generated by the geological and mining information systems are promptly checked for feasibility in a simulation modelling system. The mine simulation model can simulate the implementation of the annual programme in less than 10 minutes, factoring in:

- the actual geometry of the transport network
- the position of mine workings
- the operation of the core and some of the auxiliary equipment
- the actual performance parameters of the equipment
- the mine's operating mode
- emergency and scheduled repairs
- restrictions during blasting and venting operations.

Moreover, the system's deployment delivered significant economic benefits, sparing the need to purchase 40 units of mining equipment. Currently, over 80% of operations (all key processes) are monitored in real time from control centres at the Company's Polar Division and Kola MMC.

Based on real-time data, all production units simultaneously prepare metals inventory plans, enabling detailed, granular views into metal-bearing products at each production stage, and accurate real-time control over commodity flows within the Company and the actual volume of products manufactured.

All energy consumption is also metered in real time now. Data from the core process equipment is fed into the process data storage, which captures over 100 thousand parameters collected from the Company's enterprises.

We also made further progress towards the Company's digital future, with plans for remote equipment control, big data analytics, AI-based decision making and unmanned mines where human involvement in the production process will be minimised. We are currently working on unmanned solutions and have already obtained the first results. For example, in February 2020, Russia's first unmanned autonomous haul truck was successfully tested at a Nornickel mine. Through this entire transformation journey, we will build highly effective and agile digital operations with advanced business processes.

AWARDS OF THE TECHNOLOGY BREAKTHROUGH PROGRAMME

Industry experts have been long interested in and recognised the contribution of the industrial automation projects integrated into the Company's ambitious Technology Breakthrough programme to improve operational efficiency of operations. In October 2020, the Company was given the Russian Mining Award for its Underground Infrastructure and Dispatch programme implemented at seven mines. The Technology Breakthrough programme has a total of eight awards.

FINANCIAL PERFORMANCE (MD&A)

2020 HIGHLIGHTS

Consolidated revenue increased 15% y-o-y to USD 15.5 billion owing to higher prices of palladium and rhodium as well as the scheduled ramp-up of Bystrinsky project.

EBITDA decreased 3% y-o-y to USD 7.7 billion due to the USD 2 billion environmental provision related to the reimbursement of environmental damages caused by the fuel spill in Norilsk industrial district, expenses related to containment of COVID-19 spread and increase of inventory of saleable metals.

CAPEX increased 33% y-o-y to USD 1.8 billion owing to the execution of mining projects at Talnakh ore cluster, development of South Cluster, increased capital repairs of energy infrastructure, investments into improvement of industrial safety as well as the launch of an active construction phase of the Sulfur project.

Net working capital decreased 28% to USD 0.7 billion mainly driven by the depreciation of the Russian rouble and changes in income tax payable, which was partly compensated by increase of inventory of saleable metals.

Free cash flow increased 36% y-o-y to USD 6.6 billion driven by higher revenue and scheduled ramp-up of Bystrinsky project.

Net debt was down 33% y-o-y to USD 4.7 billion. Net debt/EBITDA ratio decreased to 0.6x as of December 31, 2020. The Company's financial stability was confirmed by investment grade credit ratings from all three major rating agencies.

On 29 May 2020, diesel fuel leaked from the emergency fuel tank at the heat and power plant N°3 (HPP-3) due to sudden sinking of support posts based in permafrost. By now, the main phase of the clean-up operations has been completed.

On September 10, 2020, the Federal Service for Supervision of Natural Resources ("Rosprirodnadzor") filed a claim with the Arbitration Court of the Krasnoyarsk region seeking compensation from the Company of damages caused to the environment in the amount of RUR 147.78 billion (or approximately USD 2 billion).

In September 2020, the Company successfully placed a 5-year USD 500 million eurobond offering with a record low annual coupon rate of 2.55%.

In December 2020, in line with its complex environmental programme the Company shut down a smelter at Nickel town (Kola GMK), which resulted in the complete elimination of sulphur dioxide emissions in the cross-border area with Norway and alongside other environmental initiatives should enable a reduction of sulphur dioxide emissions in the Murmansk region by 85% by the end of 2021.

In response to coronavirus, the Company provided a comprehensive support to safeguard the health and safety of its employees and regional communities s. In total, the Group spent USD 157 million net of VAT to prevent and combat spread of COVID-19.

Starting from 2021, Mineral Extraction Tax has been increased 3.5x for certain minerals, including ores mined by Norilsk Nickel.

RECENT DEVELOPMENTS

In January 2021, investment tokens backed by physical metal were issued using EU-registered financial vehicle listed on Deutsche Börse and London Stock Exchange;

On February 5, 2021, Arbitration Court of Krasnoyarsk Kray announced that it decided to award diesel spill damages claimed by Rosprirodnadzor in the amount of RUB 146.2 billion (USD 1,979 million at the exchange rate as of December 31, 2020). The Company has set up a provision that fully covers both the damages and the expenses related to liquidation of incident consequences and rehabilitation of disturbed area. The decision of the Krasnoyarsk Region Arbitration Court was implemented on 10 March 2021.

On February 12, 2021, the Company made an early repayment of exchange-traded bonds in the amount of RUB 15 billion (USD 203 million at the exchange rate as of 31 December 2020).

KEY CORPORATE HIGHLIGHTS (USD MILLION)

Index	2020	2019	Change
Revenue	15,545	13,563	15%
EBITDA[1]	7,651	7,923	(3%)
EBITDA margin	49%	58%	(9 p. p.)
Net profit	3,634	5,966	(39%)
Capital expenditures	1,760	1,324	33%
Free cash flow[2]	6,640	4,889	36%
Normalized net working capital[2 3]	712	985	(28%)
Net debt[2]	4,705	7,060	(33%)
Net debt, normalized for the purpose of dividend calculation[4]	3,469	4,952	(30%)
Net debt/12M EBITDA	0.6x	0.9x	(0.3x)
Net debt/12M EBITDA for dividends calculation	0.5x	0.6x	(0.1x)
Dividends paid per share (USD)[5]	26.3	26.3	0%

[1] A non-IFRS measure, for the calculation see the notes below.

[2] A non-IFRS measure, for the calculation see an analytical review document ("Data book") available in conjunction with Consolidated IFRS Financial Results on the Company's web site.

[3] Paid during the current period

[4] Normalized on interim dividends (at the rate of the Board of Directors meeting date) and deposits with maturity of more than 90 days

[5] Normalized on receivables from the registrar on transfer of dividends to shareholders

KEY SEGMENTAL HIGHLIGHTS[1] (USD MILLION (UNLESS STATED OTHERWISE))

Index	2020	2019	Change
Revenue	**15,545**	**13,563**	**15%**
GMK Group	12,700	13,836	(8%)
South cluster	694	864	(20%)
KGMK Group	8,926	3,115	3x
NN Harjavalta	1,308	1,172	12%
GRK Bystrinskoye	1,004	201	5x
Other mining	137	133	3%
Other non-metallurgical	1,387	1,412	(2%)
Eliminations	(10,611)	(7,170)	48%
EBITDA	**7,651**	**7,923**	**(3%)**
GMK Group	6,171	9,522	(35%)
South cluster	407	475	(14%)
KGMK Group	1,757	58	30x
NN Harjavalta	70	74	(5%)
GRK Bystrinskoye	717	349	2x
Other mining	(14)	(31)	(55%)
Other non-metallurgical	31	31	0%
Eliminations	(556)	(1,770)	(69%)
Unallocated	(932)	(785)	19%
EBITDA margin	**49%**	**58%**	**(9 p. p.)**
GMK Group	49%	69%	(20 p. p.)
South cluster	59%	55%	4 p. p.
KGMK Group	20%	2%	18 p. p.
NN Harjavalta	5%	6%	(1 p. p.)
GRK Bystrinskoye	71%	n.a.	n.a.
Other mining	(10%)	(23%)	13 p. p.
Other non-metallurgical	2%	2%	0 p. p.

In 2020, revenue of GMK Group segment decreased 8% to USD 12,700 million primarily due to decrease in PGMs sales volumes that was partly compensated by higher palladium prices. PGMs sales volumes decreased due to the launch of direct sales of semi-products to KGMK Group in 1H2019 and higher base effect in 1H2019 owing to the release of work-in-progress inventory, which was exacerbated by decrease in palladium global demand owing to the coronavirus pandemic.

Revenue of South cluster segment decreased 20% to USD 694 million due to the launch of direct sales of semi-products to GMK Group in 1H2019.

Revenue of KGMK Group segment increased three times to USD 8,926 million due to the launch of direct sales of semi-products supplied by GMK Group segment and increase of sales of semi-products to GMK Group and NN Harjavalta.

Revenue of NN Harjavalta increased 12% to USD 1,308 million driven by higher palladium price and increase in sales volumes of semi-products, that was partly compensated by decrease in refined nickel sales volume.

Revenue of GRK Bystrinskoye amounted to USD 1,004 million, which included sales of semi-products since the full commissioning of Bystrinsky project in September 2019.

[1] Segments are defined in the consolidated financial statements

Revenue of Other mining segment increased 3% to USD 137 million driven by higher realized price of Nkomati nickel concentrate, that was partly compensated by decrease of it's sales volume.

Revenue of Other non-metallurgical segment decreased 2% to USD 1,387 million mostly owing to lower sales volumes from Palladium Fund and decrease in other sales due to depreciation of Russian rouble and negative effect of coronavirus pandemic that was partly compensated by higher palladium price.

In 2020, EBITDA of GMK Group segment decreased 35% to USD 6,171 million primarily owing to accrual of environmental provisions and decrease in revenue. EBITDA of GMK Group segment included profit from the sale of semi-products to KGMK Group segment, which was eliminated from EBITDA of the Group.

EBITDA of South cluster segment decreased 14% to USD 407 million due to decrease in metal sales.

EBITDA of KGMK Group segment increased 30 times to USD 1,757 million primarily owing to the launch of direct sales of semi-products supplied by GMK Group segment.

EBITDA of NN Harjavalta decreased by USD 4 million to USD 70 million primarily driven by increase in transportation expenses due to the launch of semi-products sales to the GMK Group segment.

EBITDA of GRK Bystrinskoye segment increased 2 times to USD 717 million primarily due to higher production volumes since the full commissioning of Bystrinsky project in September 2019.

EBITDA of Other non-metallurgical segment was unchanged and amounted to USD 31 million.

EBITDA of Unallocated segment decreased by USD 147 million and amounted to a negative USD 932 million primarily driven by increase in social expenses.

SALES VOLUME AND REVENUE

Index	2020	2019	Change
Metal sales			
Group			
Nickel, thousand tons[2]	221	230	(4%)
from own Russian feed	198	213	(7%)
from 3d parties feed	3	3	0%
in semi-products[3]	20	14	43%
Copper, thousand tons[2 4]	500	479	4%
from own Russian feed	427	433	(1%)
in semi-products[3]	73	46	59%
Palladium, koz[2]	2,634	2,988	(12%)
from own Russian feed	2,604	2,890	(10%)
in semi-products[3]	30	98	(69%)
Platinum, koz[2]	689	714	(4%)
from own Russian feed	684	698	(2%)
in semi-products[3]	5	16	(69%)
Rhodium, koz[2]	58	78	(26%)
from own Russian feed	56	69	(19%)
in semi-products[3]	2	9	(78%)
Cobalt, thousand tons[2]	6	7	(14%)
from own Russian feed	5	7	(29%)
in semi-products[3]	1	-	100%

[2] All information is reported on the 100% basis, excluding sales of refined metals purchased from third parties and semi-products purchased from Nkomati.

[3] Metal volumes represent metals contained in semi-products. .

[4] Includes metals and semi-products purchased from third parties and Nkomati. Includes revenue from semi-products, produced by GRK "Bystrynskoe", after ramp-up of Bystrinsky project that was fully commissioned in September 2019.

Index	2020	2019	Change
Gold, koz[1]	386	235	64%
from own Russian feed	192	184	4%
in semi-products[2]	194	51	4x
Average realized prices of refined metals produced by the Group			
Metal			
Nickel (USD per tonne)	13,916	14,355	(3%)
Copper (USD per tonne)	6,221	6,047	3%
Palladium (USD per oz)	2,176	1,524	43%
Platinum (USD per oz)	882	862	2%
Rhodium (USD per oz)	12,056	3,948	3x
Cobalt (USD per tonne)	30,745	26,756	15%
Gold (USD per oz)	1,764	1,393	27%
Revenue, USD million[3]			
Nickel	**3,144**	**3,388**	**(7%)**
including semi-products	342	285	20%
Copper	**3,078**	**2,877**	**7%**
including semi-products	424	257	65%
Palladium	**6,365**	**5,043**	**26%**
including semi-products	147	194	(24%)
Platinum	**622**	**628**	**(1%)**
including semi-products	19	27	(30%)
Rhodium	**682**	**291**	**2x**
including semi-products	6	20	(70%)
Gold	**676**	**328**	**2x**
including semi-products	336	71	5x
Other metals	**410**	**296**	**39%**
including semi-products	224	81	3x
Revenue from metal sales	**14,977**	**12,851**	**17%**
Revenue from other sales	**568**	**712**	**(20%)**
Total revenue	15,545	13,563	15%

[1] All information is reported on the 100% basis, excluding sales of refined metals purchased from third parties and semi-products purchased from Nkomati.

[2] Metal volumes represent metals contained in semi-products.

[3] Includes metals and semi-products purchased from third parties and Nkomati. Includes revenue from semi-products, produced by GRK “Bystrynskoe”, after ramp-up of Bystrinsky project that was fully commissioned in September 2019.

REVENUE

NICKEL

Nickel sales contributed 21% to the Group's total metal revenue in 2020, down from 26% in 2019. This reduction in nickel share in metal revenue was primarily driven by the different price dynamics of nickel in comparison with other metals within the metal basket.

In 2020, nickel revenue was down 7% to USD 3,144 million. The decline was driven both by the decrease in sales volume (-USD 167 million) and lower realized nickel price (-USD 77 million).

The average realized price of refined nickel decreased 3% from USD 14,355 per tonne in 2019 to USD 13,916 per tonne in 2020.

Sales volume of refined nickel produced from own Russian feed, decreased 7% (or -15 thousand tonnes) to 198 thousand tonnes owing to the temporary accumulation of metal inventory following the weak demand for the metal amidst the coronavirus pandemic.

Sales volume of nickel produced from third-party feed remained unchanged and amounted to 3 thousand tonnes.

In 2020, sales of nickel in semi-products increased 20% to USD 342 million primarily owing to higher sales volume of semi-products.

COPPER

In 2020, copper sales accounted for 21% of the Group's total metal sales, increasing 7% (or +USD 201 million) to USD 3,078 million. The increase was driven by both higher sales volume (+USD 123 million) and realized copper price (+USD 78 million).

The average realized price of refined copper increased 3% from USD 6,047 per tonne in 2019 to USD 6,221 per tonne in 2020.

Physical volume of refined copper sales from the Company's own Russian feed decreased 1% (or -6 thousand tonnes) to 427 thousand tonnes primarily due to lower copper production from concentrate purchased from Rostec.

Revenue from copper in semi-products in 2020 increased 65% to USD 424 million primarily due to the production increase by the Bystrinsky project that was fully commissioned in September 2019.

PALLADIUM

In 2020, palladium accounted for 42% of total metal revenue, increasing 3 p.p. y-o-y. Palladium revenue increased 26% (or +USD 1,322 million) to USD 6,365 million due to higher realized price (+USD 1,954 million) which was partly offset by lower sales volume (-USD 741 million).

The average realized price of refined palladium increased 43% from USD 1,524 per troy ounce in 2019 to USD 2,176 per troy ounce in 2020.

Physical volume of refined palladium sales from the Company's own Russian feed decreased 10% (or -286 thousand troy ounces) to 2,604 thousand troy ounces in 2020. The decline in sales volume was primarily due to the weak palladium global demand owing to the coronavirus pandemic, as well as the launch of production using a new technology at the Kola MMC and higher base effect in 2019 owing to the release of work-in-progress inventory.

Revenue of palladium in semi-products decreased 24% to USD 147 million in 2020 primarily due to lower sales volume of semi-products resulting from processing of semi-products produced by NN Harjavalta at the Polar division refinery in 2020.

In 2020, revenue from the resale of palladium purchased from third parties amounted to USD 553 million (vs USD 444 million in 2019).

PLATINUM

In 2020, platinum sales decreased 1% (or -USD 6 million) to USD 622 million and accounted for 4% of the Group's total metal revenue. The decline of sales volume (-USD 21 million) was partly positively offset by the increase in realized platinum price (+USD 15 million).

Physical volume of refined platinum sales from the Company's own Russian feed decreased 2% (or -14 thousand troy ounces) to 684 thousand troy ounces in 2020 primarily due to higher base effect in 2019 owing to the release of work-in-progress inventory.

Revenue of platinum in semi-products in 2020 decreased 30% to USD 19 million primarily due to lower sales volume of semi-products resulting from processing of semi-products produced by NN Harjavalta at the Polar division refinery in 2020.

OTHER METALS

In 2020, revenue from other metals increased 93% (or +USD 853 million) to USD 1,768 million. The main factors were:

- higher revenue from rhodium (+USD 391 million), primarily due to favorable pricing environment in 2020;
- higher revenue from gold (+USD 348 million) and iron ore concentrate (+USD 146 million), primarily due to the ramp-up of Bystrinsky project in September 2019.

OTHER SALES

In 2020, other sales decreased 20% to USD 568 million negatively impacted by the Russian rouble depreciation (-USD 69 million) and lower air transportation service revenue owing to the pandemic.

COST OF SALES

COST OF METAL SALES

In 2020, the cost of metal sales was unchanged amounting to USD 4,500 million, with the main impacts coming from the following changes:

- Increase in cash operating costs by 2% (or +USD 78 million);
- Increase in depreciation and amortisation by 15% (or +USD 110 million);
- Comparative effect of change in metal inventories y-o-y leading to cost of metal sales decrease of USD 187 million.

CASH OPERATING COSTS

In 2020, total cash operating costs increased 2% (or +USD 78 million) to USD 3,886 million.

The positive effect of Russian rouble depreciation (-USD 314 million) was partly compensated by inflationary growth of cash operating costs (+USD 69 million), higher mineral extraction tax and other levies (+USD 50 million), higher purchases of refined metals for resale (+USD 44 million) and expenses related to anti-COVID measures (+USD 55 million).

Cash operating costs also increased by USD 156 million y-o-y due to the full commissioning of Bystrinsky project in September 2019.

COSTS OF METAL SALES (USD MILLION)

Index	2020	2019	Change
Labour	1,307	1,295	1%
Materials and supplies	731	712	3%
Purchases of refined metals for resale	482	438	10%
Purchases of raw materials and semi-products	298	402	(26%)
Third party services	276	239	15%
Mineral extraction tax and other levies	248	221	12%
Electricity and heat energy	151	155	(3%)
Fuel	109	101	8%
Transportation expenses	90	78	15%
Sundry costs	194	167	16%
Total cash operating costs	**3,886**	**3,808**	**2%**
Depreciation and amortisation	845	735	15%
(Increase)/decrease in metal inventories	(231)	(44)	5x
Total cost of metal sales	4,500	4,499	0%

Labour

In 2020, labour costs increased 1% (or USD 12 million) to USD 1,307 million amounting to 34% of the Group's total cash operating costs driven by the following factors:

- -USD 129 million – positive effect of the Russian rouble depreciation against US dollar;
- +USD 56 million - indexation of salaries and wages in line with the terms of collective bargaining agreement;
- +USD 44 million - ramp-up of Bystrinsky project that was fully commissioned in September 2019;
- +USD 45 million – hardship payments to employees due to the pandemic.

Materials and supplies

In 2020, expenses for materials and supplies increased 3% (or USD 19 million) to USD 731 million driven by the following factors:

- -USD 72 million - positive effect of the Russian rouble depreciation against US dollar;
- +USD 38 million - ramp-up of Bystrinsky project that was fully commissioned in September 2019;
- +USD 35 million - higher consumption of materials primarily due to increased volume of repairs;
- +USD 5 million - higher materials expenses due to the pandemic;
- +USD 7 million - inflationary growth of materials and supplies expenses.

Purchases of refined metals for resale

In 2020, expenses related to purchase of refined metals for resale increased 10% (or USD 44 million) to USD 482 million owing to the increase in palladium price, which was partly compensated by lower purchase volume.

Purchases of raw materials and semi-products

In 2020, purchases of raw materials and semi-products decreased 26% (or USD 104 million) to USD 298 million mainly driven by lower processed volumes of Rostec concentrate.

Third-party services

In 2020, cost of third party services increased 15% (or USD 37 million) to USD 276 million mainly driven by:

- -USD 24 million - positive effect of the Russian rouble depreciation against US dollar;
- +USD 34 million - ramp-up of Bystrinsky project that was fully commissioned in September 2019;
- -USD 16 million - lower Nkomati production volumes;
- +USD 29 million – increase in repair services;
- +USD 11 million - inflationary growth of third-party services.

Mineral extraction tax and other levies

In 2020, mineral extraction tax and other levies increased 12% (or USD 27 million) to USD 248 million driven by the following factors:

- -USD 23 million - positive effect of the Russian rouble depreciation against US dollar;
- +USD 50 million – primarily increase in payments related to negative environmental impact due to changes in the legislation.

Electricity and heat energy

In 2020, electricity and heat energy expenses decreased by USD 4 million to USD 151 million driven by the following:

- -USD 11 million - positive effect of the Russian rouble depreciation against US dollar;
- +USD 7 million - ramp-up of Bystrinsky project that was fully commissioned in September 2019.

Fuel

In 2020, fuel expenses increased by 8% (or USD 8 million) to USD 109 million driven by the following factors:

- -USD 10 million - positive effect of the Russian rouble depreciation against US dollar;
- +USD 18 million - ramp-up of Bystrinsky project that was fully commissioned in September 2019.

Transportation expenses

In 2020, transportation expenses increased 15% (or +USD 12 million) to USD 90 million driven by the following factors:

- -USD 6 million - positive effect of the Russian rouble depreciation against US dollar;
- +USD 3 million - inflationary growth of expenses;
- +USD 15 million – primarily increase in transportation expenses in Norilsk industrial region.

Sundry costs

In 2020, sundry costs increased 16% (or +USD 27 million) to USD 194 million mainly driven by the commissioning of Bystrinsky project and higher expenses in Norilsk industrial region.

Depreciation and amortisation

In 2020, depreciation and amortisation expenses increased 15% (or USD 110 million) to USD 845 million.

Positive effect of the Russian rouble depreciation amounted to -USD 72 million.

Depreciation charges in real terms increased by USD 182 million mainly due to transfers from construction in progress to production assets including the full commissioning of Bystrinsky project and KGMK.

(Increase)/decrease in metal inventories

Comparative effect of change in metal inventory amounted to -USD 187 million resulting in a decrease of cost of metal sales, primarily driven by accumulation of refined metals owing to coronavirus pandemic in 2020.

COST OF OTHER SALES

In 2020, cost of other sales decreased by USD 109 million to USD 575 million.

The effect of the Russian rouble depreciation was exacerbated by lower air transportation sales due to travel restrictions during the pandemic.

SELLING AND DISTRIBUTION EXPENSES

In 2020, selling and distribution expenses increased 23% (or USD 29 million) to USD 156 million primarily due to increase in transportation expenses (USD +18 million) and other expenses (USD +9 million) primarily due to the commissioning of production facilities at Bystrinsky project in September 2019.

SELLING AND DISTRIBUTION EXPENSES (USD MILLION)

Index	2020	2019	Change
Transportation expenses	71	53	34%
Marketing expenses	44	45	(2%)
Staff costs	18	15	20%
Other	23	14	64%
Total	156	127	23%

GENERAL AND ADMINISTRATIVE EXPENSES

In 2020, general and administrative expenses decreased 7% (or USD 69 million) to USD 869 million. Positive effect of the Russian rouble depreciation amounted to -USD 90 million. Changes of the general and administrative expenses in real terms were primarily driven by the following:

- -USD 12 million – decrease in staff costs mainly due to decrease of one-off payments related to management bonuses, which was partly compensated by salaries indexation;
- +USD 28 million – increase of third party services primarily related to information security.

GENERAL AND ADMINISTRATIVE EXPENSES (USD MILLION)

Index	2020	2019	Change,%
Staff costs	529	601	(12%)
Third party services	134	117	15%
Taxes other than mineral extraction tax and income tax	69	77	(10%)
Depreciation and amortisation	67	69	(3%)
Transportation expenses	18	15	20%
Rent expenses	2	5	(60%)
Other	50	54	(7%)
Total	869	938	(7%)

OTHER OPERATING (EXPENSES)/INCOME

In 2020, other operating expenses increased by USD 2,434 million to USD 2,737 million driven by the following factors:

- +USD 2,241 million – primarily the environmental provision related to the liquidation of diesel fuel leak at the industrial site of the Heat and Power Plant Nº 3 of Norilsk and compensation for environmental damage;
- +USD 192 million - cease of recognition of net income earned during the pre-commissioning stage generated by GRK “Bystrinskoye” owing to the full commissioning of Bystrinsky project in September 2019;
- +USD 276 million - increase in social expenses including coronavirus relief packages provided to the regions of the Company's operations;
- -USD 200 million - change in provision on production facilities shut down at the Kola GMK.

OTHER OPERATING (EXPENSES)/INCOME, NET (USD MILLION)

Index	2020	2019	Change,%
Environmental provisions	2,242	1	100%
Social expenses	500	224	2x
Change in other provisions	24	39	(38%)
Change in provision on production facilities shut down	(10)	190	n.a
Net income earned during the pre-commissioning stage	–	(192)	(100%)
Other, net	(19)	41	n.a
Total	2,737	303	9x

FINANCE COSTS

In 2020, finance costs, net increased three times and amounted to USD 879 million primarily due to a change in the fair value of cross-currency interest rate swaps y-o-y, caused by a comparative effect of depreciation of the Russian ruble against the US dollar in 2020 and its appreciation in 2019, and also due to a change in the fair value of other long-term and other current liabilities y-o-y, representing an obligation to exercise a put option in relation to transactions with the owners of non-controlling interests of Bystrinsky GOK.

The average value of total debt increased in 2020, while the effective interest rate of the Company's debt portfolio as of the end of 2020 (2.9% in USD[1]) decreased, as compared to this as of the end of 2019 (4.3% in USD1) because of the following factors:

- Loose monetary policies of the Federal Reserve System of the USA and the Bank of Russia, which positively impacted the Company's debt obligations bearing floating interest rates and on the back of which a share of the Company's total debt tied to floating indicators, main of which were 1 Month Libor and Key rate of the Bank of Russia, increased from 38% to 54% for the period from December 31, 2019 to December 31, 2020;
- Refinancing of a syndicated loan facility, originally signed in December 2017, with a group of international banks in February 2020, which resulted in the reduction of the loan's interest rate to Libor+1.40% per annum and the increase of the loan's funding limit from USD 2,500 million to USD 4,150 million;
- Issuance of five-year USD 500 million Eurobonds at a coupon of 2.55% per annum in September 2020; and
- Redemption of USD 1 billion Eurobonds bearing a coupon of 5.55% per annum in October 2020 and early repayment of RUB 60 billion loan at an interest rate of 8.3% per annum in November 2020.

FINANCE COSTS, NET (USD MILLION)

Index	2020	2019	Change,%
Interest expense, net of amounts capitalised	364	340	7%
Changes in fair value of other long-term and other current liabilities	262	64	4x
Fair value (gain)/loss on the cross-currency interest rate swap	182	(199)	n.a.
Unwinding of discount on provisions and payables	61	84	(27%)
Interest expense on lease liabilities	12	12	0%
Other, net	(2)	5	n.a.
Total	879	306	3x

INCOME TAX EXPENSE

In 2020, income tax expense decreased 39% y-o-y to USD 945 million driven mostly by the decrease of profit before tax.

The effective income tax rate in 2020 of 20.6% was above the Russian statutory tax rate of 20%, which was primarily driven by recognition of non-deductible social expenses.

THE BREAKDOWN OF THE INCOME TAX EXPENSE (USD MILLION)

Index	2020	2019	Change,%
Current income tax expense	1,685	1,924	(12%)
Deferred tax (benefit)/expense	(740)	(366)	2x
Total	945	1,558	(39%)

[1] According to management accounts of the Company

THE BREAKDOWN OF THE CURRENT INCOME TAX EXPENSE BY TAX JURISDICTIONS (USD MILLION

Index	2020	2019	Change,%
Russian Federation	1,648	1,883	(12%)
Finland	11	16	(31%)
Rest of the world	26	25	4%
Total	1,685	1,924	(12%)

EBITDA

In 2020, EBITDA decreased 3% (or -USD 272 million) to USD 7,651 million primarily owing to environmental provisions and additional expenses related to the containment of COVID-19 pandemic, which was partly offset by higher metal revenue.

EBITDA (USD MILLION)

Index	2020	2019	Change,%
Operating profit	**6,400**	**7,036**	**(9%)**
Depreciation and amortisation	943	911	4%
Impairment of non-financial assets	308	(24)	n.a.
EBITDA	**7,651**	**7,923**	**(3%)**
EBITDA margin	**49%**	**58%**	**(9 p. p.)**

STATEMENT OF CASH FLOWS

CASH FLOWS (USD MILLION)

Index	2020	2019	Change,%
Cash generated from operations before changes in working capital and income tax	**10,254**	**8,226**	**25%**
Movements in working capital	(662)	(307)	2x
Income tax paid	(1,304)	(1,910)	(32%)
Net cash generated from operating activities	**8,288**	**6,009**	**38%**
Capital expenditure	(1,760)	(1,324)	33%
Other investing activities	112	204	(45%)
Net cash used in investing activities	**(1,648)**	**(1,120)**	**47%**
Free cash flow	**6,640**	**4,889**	**36%**
Interest paid	(472)	(460)	3%
Other financing activities	(3,860)	(3,163)	22%
Net cash used in financing activities	**(4,332)**	**(3,623)**	**20%**
Effects of foreign exchange differences on balances of cash and cash equivalents	99	130	(24%)
Net increase in cash and cash equivalents	**2,407**	**1,396**	**72%**

In 2020, free cash flow increased 36% to USD 6.6 billion. Higher cash generated from operating activities was partly offset negatively by more cash used in investing activities.

In 2020, net cash generated from operating activities increased 38% to USD 8.3 billion primarily driven by higher metal revenue as well as the decrease in income tax payments due to lower taxable profit.

In 2020, net cash used in investing activities increased 47% (or USD 528 million) primarily driven by a 33% capital expenditures increase (or USD 436 million). In real terms, capital expenditures increased 51% as flagship investment projects entered active construction stage.

In 2020, CAPEX increased 33% (or USD 436 million) to USD 1.8 billion following higher investments in main industrial sites of the Group – Polar Division and South cluster, including higher investments in mining projects and launch of the active phase of sulfur project. This was exacerbated by sustaining capital expenditures including capitalized repairs and purchase of equipment.

RECONCILIATION OF THE NET WORKING CAPITAL CHANGES BETWEEN THE BALANCE SHEET AND CASH FLOW STATEMENT (USD MILLION)

Index	2020	2019
Change of the net working capital in the balance sheet	**273**	**(118)**
Foreign exchange differences	(290)	112
Change in income tax payable	(359)	(26)
Change of long term components of working capital included in CFS	(95)	(158)
Other changes including reserves	(191)	(117)
Change of working capital per cash flow	**(662)**	**(307)**

CAPITAL INVESTMENTS BREAKDOWN BY PROJECT (USD MILLION)

Index	2020	2019	Change,%
Polar Division, including:	665	478	39%
Skalisty mine	109	58	88%
Taymirsky mine	97	67	45%
Komsomolsky mine	51	54	(6%)
Oktyabrsky mine	16	27	(41%)
Talnakh Concentrator	38	14	3x
Other Polar Division projects	354	258	37%
Kola MMC	155	221	(30%)
Sulfur project	154	24	6x
South cluster	114	76	50%
Chita (Bystrinsky) project	98	103	(5%)
Other operating projects	563	413	36%
Other non-operating projects	11	9	22%
Total	1,760	1,324	33%

DEBT AND LIQUIDITY MANAGEMENT

As of December 31, 2020, the Company's total debt slightly increased, as compared to this as of December 31, 2019, while the share of current loans and borrowings in the Company's total debt decreased from 11% as of December 31, 2019 to 0.12% as of December 31, 2020. The key factors behind significant reduction in the share of current loans and borrowings in the reporting period were redemption of USD 1 billion Eurobonds in October 2020, early repayment of RUB 60 billion loan in November 2020, and drawing of long-term funds totaling USD 1,565 million from a syndicated loan facility, funding limit of which was increased in February 2020 from USD 2,500 million to USD 4,150 million. This effect was also reinforced with a long-term borrowing in the total amount of USD 500 million by way of issuing five-year Eurobonds in September 2020 maturing on September 2025.

The Company's net debt as of December 31, 2020 decreased 33%, as compared to this as of December 31, 2019 due to the increase in cash and cash equivalents by 86% (or +USD 2,407 million) during the reporting period. This is primarily due to the increase in cash generated from operating activities which had a positive impact on Net debt / 12M EBITDA as of the end of 2020, that decreased by 0.3x compared to this as of December 31, 2019 and amounted to 0.6x.

As of December 31, 2020, all three international rating agencies Fitch, Moody’s and S&P Global, and Russian rating agency “Expert RA” assigned investment grade credit rating to the Company.

DEBT AND LIQUIDITY (USD MILLION)

Index	As of 31 December 2020	As of 31 December 2019	Change, USD million	Change,%
Non-current loans and borrowings	9,622	8,533	1,089	13%
Current loans and borrowings	12	1,087	(1,075)	(99%)
Lease liabilities	262	224	38	17%
Total debt	**9,896**	**9,844**	**52**	**1%**
Cash and cash equivalents	5,191	2,784	2,407	86%
Net debt	**4,705**	**7,060**	**(2,355)**	**(33%)**
Net debt /12M EBITDA	0.6x	0.9x	(0.3x)	

THE VISION OF A GREEN ARCTIC

//photo: The final point of the route of the "The Great Norilsk Expedition" on the lake Pyasino

FOR MORE DETAIL
SEE ON THE WEB-SITE

//NORNICKEL.COM

> “Nornickel is a leading industrial company in the Russian Arctic. The Company’s tactical and strategic plans are linked to the region’s development, but further activities require an in-depth study of the Arctic and reliable up-to-date scientific knowledge.

Vladimir Potanin
President, Chairman of the Management Board MMC Norilsk Nickel

Introduction

GREAT NORILSK EXPEDITION

In July 2020, Nornickel initiated the Great Norilsk Expedition. A group of scientists from 14 research institutes of the Siberian Branch of the Russian Academy of Sciences was to study in detail the environment of the Taimyr Peninsula and develop proposals and recommendations that would help implement the best nature conservation solutions for industrial companies operating in the Arctic region.

Nornickel is a leading industrial company in the Russian Arctic. The Company's tactical and strategic plans are linked to the region's development, but further activities require an in-depth study of the Arctic and reliable up-to-date scientific knowledge. This statement was made by Vladimir Potanin, Nornickel's President. Any development of northern territories requires an understanding of natural and anthropogenic changes in the natural environment and their impacts on geological and biological processes.

Nornickel and the Siberian Branch of the Russian Academy of Sciences organised the Great Norilsk Expedition to gather this research. The expedition included specialists in various disciplines from botany to petrochemicals from the leading scientific institutions of Novosibirsk, Yakutsk, Krasnoyarsk, Tomsk, Norilsk and Barnaul.

The expedition's priority was an objective and high-quality study producing reliable results.

The scientists were to determine the outline of the Norilsk CHPP-3 spill and the timeline of anthropogenic pollution of the Taimyr Peninsula, and identify changes in biocoenoses and permafrost. An extremely large scope of work to be done in the harsh arctic climate required that special care be given to designing the expedition schedule and route. Feedback from the participants suggests that this was a job well done. The studies requiring special conditions, such as absence of snow or ice cover, were scheduled for the most suitable periods. Zoologists, botanists and hydrobiologists were the first to start work, with geochronologists being the last in the field.

The best possible conditions were provided for the expedition participants. All expedition members working in the field were reliably provided with transport, fuel and proper equipment. About two thousand samples of water, soils, bottom sediments, and living organisms have been taken and supplemented with permafrost measurements. This was followed up by laboratory analysis of the samples.

A report with the expedition data was released towards the end of 2020. The scientists confirmed the unsatisfactory condition of terrestrial ecosystems near Norilsk, noting that it improves gradually further away from the city.

Hydrobiologists concluded that the microflora of Taimyr water bodies polluted with petroleum products had adapted to the new conditions, enabling the self-purification of the water bodies by the microorganisms. The self-purification ability of the water bodies is also confirmed by studies of bottom sediments, bacteria and animals, as the presence of certain species in the samples proves that the rivers and lakes are not heavily polluted now.

The scientists have collected an herbarium of plants, mosses and lichens to get a better understanding of species present in the arctic flora. Minor reduction of biodiversity observed in some areas was not linked by the specialists to anthropogenic pollution. Elsewhere, vegetation was more diverse than expected. Abundance of mosses, which are sensitive to the environment quality, is another proof of low pollution.

The region's fauna was also not affected by anthropogenic influence. Its diversity was low, as expected, but no changes that could be caused by petroleum product pollution were identified in caught mammals.

The specialists also examined soil conditions to evaluate the current condition of permafrost. The study identified the most probable cause of the tank failure at CHPP-3: subsidence of its pile foundation due to underground thawing. An analysis of the complete body of collected data ruled out the hypothesis that large volumes of petroleum products had reached the Artic Ocean.

Upon completion of a review of the expedition data, Nornickel and the Siberian Branch of the Russian Academy of Sciences designed a long-term programme to eliminate the consequences of the petroleum product spill.

The Company intends to continue collaboration with institutions engaged in fundamental research. The results of this research will lay a foundation for a new approach to operations in the Arctic. One of its key features will be conformity to sustainability principles and active deployment of green technologies, which is especially important given the fragility of northern ecosystems.

The results of the Great Norilsk Expedition will be used to develop rules for business activities in the Arctic. Andrei Bougrov, Senior Vice President of Nornickel, said these rules might be formalised as relevant governmental regulations.

CERTIFICATES

MMC NORILSK NICKEL

Certificate:
- *ISO 9001*
- *ISO 14001*

Audit frequency:
- *Surveillance audit – annually,*
- *recertification audit – every three years*

Date of last audit:
- *December 2020: recertification audit (Desk Audit phase, remote)*
- *October–November 2020*

Auditor:
Bureau Veritas Certification

KOLA MMC

Certificate:
- *ISO 9001*
- *ISO 14001*
- *OHSAS 18001*

Audit frequency:
- *Surveillance audit – annually,*
- *recertification audit – every three years*

Date of last audit:
- *August–September 2020*

Auditor:
Bureau Veritas Certification

GIPRONICKEL INSTITUTE

Certificate:
- *ISO 9001*

Audit frequency:
- *Surveillance audit – annually,*
- *recertification audit – every three years*

Date of last audit:
- *October 2020*

Auditor:
Societe Generale de Surveillance (SGS)

NORILSK NICKEL HARJAVALTA

Certificate:
- *ISO 9001*
- *ISO 14001*
- *ISO 45001*

Audit frequency:
- *Surveillance audit – annually,*
- *recertification audit – every three years*

Date of last audit:
- *September 2020*

Auditor:
British Standards Institution

NKOMATI

Certificate:
- *ISO 9001*
- *ISO 14001*
- *OHSAS 18001*

Audit frequency:
- *recertification audit – every three years*

Date of last audit:
- *September 2018*

Auditor:
DQS

MMC NORILSK NICKEL (Murmansk Transport Division, Nadezhda Metallurgical Plant, Copper Plant)

Certificate:
- *ISO/IEC 27001:2013*

Audit frequency:
- *Surveillance audit – twice a year,*
- *recertification audit – every three years*

Date of last audit:
- *February–September 2020*

Auditor:
British Standards Institution

ENVIRONMENTAL PROTECTION AND CLIMATE CHANGE

IMPROVEMENT OF SUSTAINABILITY-RELATED CORPORATE GOVERNANCE

During the year, Nornickel focused on strengthening its corporate governance to improve sustainability performance. The Environmental Task Team was set up at the Board level, chaired by Gareth Penny, the independent Chairman of the Board of Directors, and is comprised solely of independent directors. The new team was set up primarily in response to the Board of Directors' desire to pay closer attention to sustainability in general, and environment in particular.

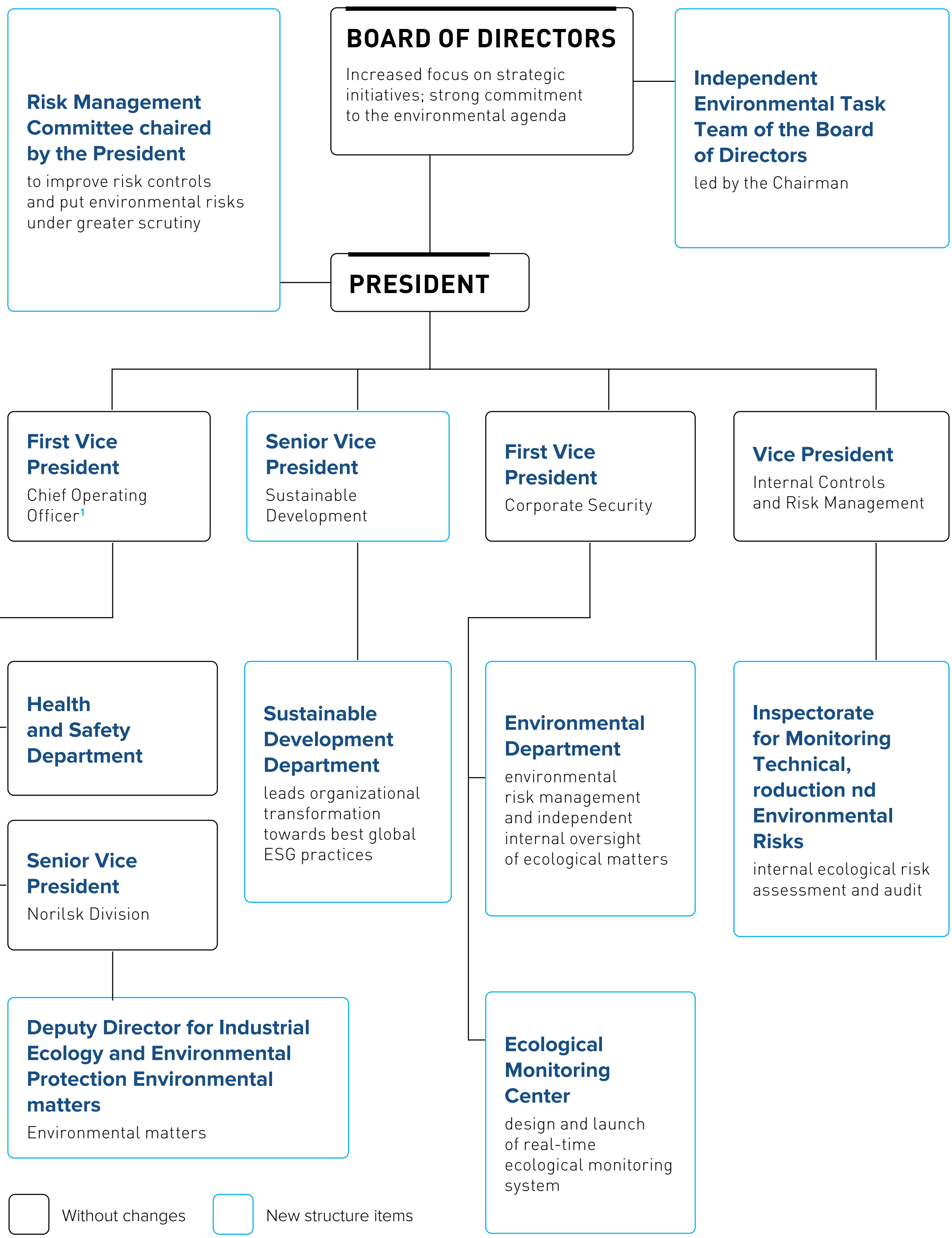
Significant organisational changes were made at the management level within the Company. Thus, to improve the efficiency of risk management and supplement the existing system of industry committees, was set up a new Risk Committee headed by the President of the Company. The creation of the Committee marks the completion of a vertical risk management structure fully penetrating the Company from the level of blue-collar workers to its President, Management Board and Board of Directors.

The Ecology Department and the Inspectorate for Monitoring Technical, Production and Environmental Risks were also established in 2020 to enable more efficient management of the risks of negative environmental impact, and enhance environment-related industrial safety. We set up the Ecological Monitoring Centre which will create an ecology monitoring system in line with best practices. The Ecology Department cooperates with all units across the Company, being responsible for implementing the strategy aimed at assessing environmental risks and minimising the Company's adverse environmental impacts, as well as restoring ecosystems in Nornickel's regions of operation.

Last year, a new position of Senior Vice President for Sustainable Development was created (filled by Andrei Bougrov), and the Sustainable Development Department was set up. The key tasks of the new department are to improve sustainability performance and coordinate the Company's units in order to bring internal processes and regulations in line with the best international standards, such as ICMM and IRMA. Senior Vice President for Sustainable Development will focus on relationships with all stakeholders and support the Environmental Task Team of the Board of Directors.

In 2021, senior management's KPIs will include the Zero Environmental Incidents indicator with a weight of 20% (of team KPIs) to ensure a clear link between the implementation of the Company's environmental strategic priorities and the level of remuneration.

UPDATED STRUCTURE OF CORPORATE GOVERNANCE IN THE FIELD OF SUSTAINABLE DEVELOPMENT AND THE ENVIRONMENT



[1] On 1 March 2021, the position of First Vice President – Operations Director was removed from the Company's organisational structure, with Senior Vice President of the Norilsk Division now reporting directly to the Company's President, while the Health and Safety Department became part of the Strategy, Strategic Projects, Logistics and Procurement function.

ENVIRONMENTAL STRATEGY

In 2020, the Company completed the development of its Holistic Environmental Strategy in key areas: air, water, land, tailings and waste, biodiversity, and climate change. All six areas of the Strategy follow a single logic in developing a set of initiatives designed to achieve the respective goals.

Nornickel focused on developing modern, efficient, environmentally friendly production with strategic priorities including sustainable development and unlocking the Company's potential in the medium and long term, taking into account the expanded environmental and climate agenda. The key element of the environmentally friendly growth strategy remains the Sulphur Programme 2.0, which implies dramatic reduction of sulphur dioxide emissions in the Norilsk industrial region and complete elimination of emissions along the Russian border on the Kola Peninsula. The expansion of environmental initiatives aimed at reducing negative environmental impact and mitigating production risks covers water resources (maintaining recycled water ratio and reducing industrial effluent pollution), tailings and waste (ensuring safe operation of tailings facilities and minimising the environmental impact of mineral and non-mineral waste), rehabilitating legacy damage (waste collection and land reclamation), and restoring biodiversity. The Climate Change Strategy is primarily aimed at mitigating physical climate-related risks, improving energy efficiency, and ensuring the long-term competitiveness of products by maintaining the GHG emission intensity index in the bottom quartile of global metals and mining industry GHG intensity curve.

HOLISTIC ENVIRONMENTAL STRATEGY

CLIMATE CHANGE

AIR

WATER

STRONG PERFORMANCE

NN vs. Peer avg.[1]

Climate change

- **–38%** Absolute emissions, Scope 1+2, Mt CO_2e.
- **–138x** Absolute emissions, Scope 3, Mt CO_2e[2]
- **1.0x** Renewable electricity share[3], %

Air

- **–80%** NOx emissions, K tonnes
- **–65%** Solids / Dust, tonnes

Water

- **–51%** Total water withdrawal, M m^3
- **–14%** Total water discharge, M m^3
- **1.5x** Water recycled and reused ratio, %

TARGETS

Climate change

MINIMIZE IMPACT ON CLIMATE CHANGE (REDUCE CO_2 INTENSITY EMISSIONS) AND MITIGATE PHYSICAL CLIMATE-RELATED RISKS

Key next steps:
Delivery on energy efficiency, CO_2 reduction and physical risks mitigation initiatives

Air

IMPROVE AIR QUALITY (REDUCE SO_2 EMISSIONS) IN THE AREAS OF OPERATIONS (NORILSK INDUSTRIAL AREA AND KOLA PENINSULA)

Key next steps:
Execute on Sulphur Programme 2.0 and other air emissions reduction projects

Water

MAINTAIN RECYCLED WATER RATIO AND REDUCE POLLUTION; CONTINUE PROVIDING CLEAR WATER TO LOCAL COMMUNITIES

Key next steps:
Build and run new water treatment facilities, adopt new technical solutions, remediate pollution from environmental incidents in line with GNE recommendations4

[1] Peers include Anglo America , BHP Billiton, Vale, Rio Tinto, Freeport where public data is available;
[2] Incl. only downstream part of the supply chain;
[3] Of total electricity;
[4] Great Norilsk Expedition

TAILINGS & WASTE

LAND

BIODIVERSITY

STRONG PERFORMANCE

NN vs. Peer avg.[1]

TAILINGS & WASTE

–138x

Non-mineral waste recycled and reused ratio, %

LAND

–80%

Total land disturbed, K hectares

BIODIVERSITY

Legacy focus:

- Supporting of several nature reserves (Taimyrsky, Putoransky, Pasvik, Laplandsky and other Nature Reserves)
- Protection of rare animal species and support of the reproduction of aquatic bioresources

TARGETS

TAILINGS & WASTE

MAINTAIN SAFE OPERATION OF TAILINGS FACILITIES AND MINIMIZE ENVIRONMENTAL IMPACT OF MINERAL AND NON-MINERAL WASTE

Key next steps:
Build mass balance model for waste management and prepare for the self-assessment under Global Tailings Standard

LAND

REHABILITATE LEGACY DAMAGE AND UPGRADE MINE AND PLANT CLOSURE PLANS

Key next steps:
Review asset closure plans in all divisions; follow GNE(4) recommendations in soil recovery; waste collection and land reclamation at Norilsk area

BIODIVERSITY

STRENGTHEN BIODIVERSITY PROGRAM

Key next steps:
Biodiversity remediation following recent environmental incidents, launch regular monitoring of impacts on biodiversity and continue support of nature reserves

ENVIRONMENTAL MANAGEMENT SYSTEM

In 2020, the Environmental Management System[1] (EMS) continued to operate as part of the Corporate Integrated Quality and Environmental Management System (CIMS) providing an opportunity to coordinate environmental and quality initiatives with other initiatives. This approach improves both overall and environmental performance of the Company.

SYSTEM AUDIT

In line with ISO 14001:2015 and ISO 9001:2015, the Company confirms the EMS compliance with the standard by engaging Bureau Veritas Certification (BVC) to conduct surveillance audits once a year and recertification audits every three years. In December 2020, BVC auditors conducted a desk audit of the Corporate Integrated Quality and Environmental Management System and the Environmental Management System of PJSC MMC NORILSK NICKEL as part of a recertification audit, which confirmed the Company's compliance with ISO 14001:2015 and ISO 9001:2015. The field recertification audit to be conducted at the Company's facilities is scheduled for March–April 2021. During 2020, Nornickel also conducted internal and corporate audits involving specially trained and competent personnel. As a result, audits were conducted at the following sites of the Company:

- Head Office – 19 audits
- Polar Division – 20 audits
- Polar Transport Division –38 audits
- Murmansk Transport Division – 3 audits
- Kola MMC – 25 audits

CLIMATE CHANGE

46% SHARE OF RENEWABLES IN THE GROUP'S ENERGY CONSUMPTION IN 2020

9.7 mln t BCO2 EMISSIONS (SCOPE 1 AND 2) – THE LOWEST LEVEL AMONG GLOBAL PEERS

TARGETS TO 2030:

- Maintain GHG emissions (Scope 1 and 2) in absolute terms not higher than 10 mln t CO_2 equivalent from operations with a 30–40% increase in metal production (compared to 2017)
- Maintain GHG emissions (Scope 1 and 2) per tonne of Ni equivalent in the bottom quartile of the global GHG intensity curve for the nickel industry[2]
- Strive to increase low-carbon energy usage
- Manage climate-related risks by building resilience strategies and helping communities in the Norilsk industrial region and Murmansk region
- Encourage the shift to a low carbon future by using R&D to help develop new solutions and by engaging in cross-industry climate dialogue

STRATEGY HIGHLIGHTS:

- Adoption of a programme to assess physical risks related to climate change and large site monitoring
- Implementation of energy efficiency initiatives and increased consumption of low-carbon energy
- Reduction of CO_2 emissions

In 2020, GHG emission targets to 2030 were set and a physical risk assessment was conducted.

In 2020, the Company implemented the following climate change initiatives:

- Made its first disclosures on GHG emissions and water discharges via the Carbon Disclosure Project questionnaire
- Disclosed its Scope 3 GHG emissions
- Set long-term climate change targets (until 2030)
- Assessed climate risks for the Company's product portfolio
- Started developing a monitoring system for buildings and structures located in permafrost areas and other initiatives to minimise the physical risks related to climate change.

Nornickel's Board of Directors considers the Company's climate change strategy as a matter of priority and is responsible for its review and approval.

[1] Based on the global GHG intensity curve for the nickel industry by Wood MacKenzie Group (CO2 per tonne of Ni equivalent).

CLIMATE RISK MANAGEMENT

Repercussions of climate change, including abnormal weather or lasting changes in weather patterns, may affect Nornickel's operations in the longer run. Physical consequences of climate change can include soil thawing, changes in water levels in water bodies, precipitation amounts and wind loads, which can have a material adverse effect on Nornickel's operations. As part of its Risk Management Strategy, Nornickel implements a full range of measures to monitor and control these risks, including the introduction of a system to monitor buildings and structures in the Norilsk Industrial District, and is engaged in:

- monitoring permafrost-based structures using satellite images and early detection of any possible deformations under an agreement with SOVZOND, the leading Russian space monitoring company
- evaluating supporting piles deformation and soil temperature by means of confirmative geological drilling
- installing strain gauges and temperature sensors
- upgrading the Polar Division's Diagnostic Centre and the permafrost laboratory.

Climate-related risks may also unlock additional opportunities for Nornickel driven by the strong demand for metals required in a future low-carbon economy. For example, nickel is a key component in EV batteries, and copper is used in EV charging infrastructure.

Key climate change risks

Insufficient water resources: water shortages in storage reservoirs of Nornickel's hydropower facilities may result in insufficient water head at HPP turbines leading to lower power output as well as drinking water shortages in Norilsk.

Key risk factors: abnormal natural phenomena (drought) caused by climate change.

Impact on Nornickel's development goal and strategy:

- Efficient delivery of finished products (metals) in line with the production programme
- Timely supply of products to consumers
- Social responsibility: comfort and safety of people living in Nornickel's regions of operation

Risk assessment:

- Impact on goals: medium
- Source of risk: external
- Year-on-year change in risk: stable

To manage this risk, Nornickel:

- implements a closed water circuit to reduce water withdrawal from external sources
- carries out regular hydrological observations to forecast water levels in rivers and other water bodies
- cooperates with the Federal Service for Hydrometeorology and Environmental Monitoring (Rosgidromet) on setting up permanent hydrological and meteorological monitoring stations in order to improve the accuracy of water level forecasts for major rivers across Nornickel's regions of operation
- dredges the Norilskaya River and prepares its production facilities for reducing their energy consumption in case of risk occurrence
- refurbishes its hydropower plants to increase power output through improving the hydroelectric units' performance (implementation period: 2012–2021).

Permafrost thawing: loss of bearing capacity by pile foundation beds may lead to deformation and collapse of buildings and structures.

Key risk factors: climate changes, average annual temperature increase over the last 15 to 20 years, increased depth of seasonal permafrost thawing.

Impact on Nornickel's development goal and strategy:

- Efficient delivery of finished products (metals) in line with the production programme
- Social responsibility: comfort and safety of people living in Nornickel's regions of operation

Risk assessment:

- Impact on goals: medium
- Source of risk: external
- Year-on-year change in risk: stable

To manage this risk, Nornickel:

- regularly monitors the condition of foundation beds underneath buildings and structures built on permafrost
- performs geodetic monitoring of the movement of buildings
- uses satellite technology to monitor Nornickel's assets and further analyse the data
- regularly monitors the condition of Nornickel's buildings and structures via an information system for conducting geotechnical surveys
- monitors soil temperature in buildings' foundations
- monitors the compliance of its facilities with operational requirements for crawl spaces
- takes corrective actions to ensure safe operating conditions for buildings and structures.

GHG EMISSIONS

In 2020, GHG emissions (Scope 1 and 2) totalled about 9.7 mln t. GHG emissions decreased in 2020 on the back of lower production volumes at the Polar Division, reduced fuel consumption by the Company's own air carriers as a result of restrictions imposed due to the COVID-19 pandemic, and the shutdown of metallurgical production at Kola MMC.

Nornickel's key production facilities are located in the Norilsk Industrial District, beyond the Arctic Circle, and operate in sub-zero temperatures for about eight months of the year. Since the Norilsk Industrial District is isolated from the federal energy infrastructure, Nornickel generates electricity and heat locally at its own generating facilities (100% owned by the Group). As a result, the bulk of GHG emissions comes from the Company's energy assets. At the same time, as Nornickel is the only producer of electricity and heat in the Norilsk Industrial District, the Company also fully meets the demand for energy resources and heat from social infrastructure facilities and the local population. The share of GHG emissions generated by infrastructure facilities and households in Nornickel's regions of operation is on average 8% of the total Scope 1 and 2 GHG emissions.

The goal by 2030 is to retain GHG emissions (Scope 1 and 2) from production below 10 mln t of CO2 equivalent despite production growth and the launch of Sulphur Programme 2.0.

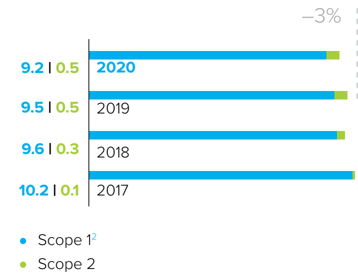
In 2020, the Company quantified indirect GHG emissions (Scope 3) in accordance with the GHG Protocol, including emissions associated with product transportation from the Company's production assets to the customer and first use of the product. Total Scope 3 downstream GHG emissions in 2020 amounted to 2.6 mln t. Indirect GHG emissions (Scope 3) increased in 2020 due to the ramp-up to design capacity of Bystrinsky GOK, which boosted the production and sales of iron ore concentrate with its relatively high carbon footprint from first use.

RENEWABLES AND ENERGY EFFICIENCY

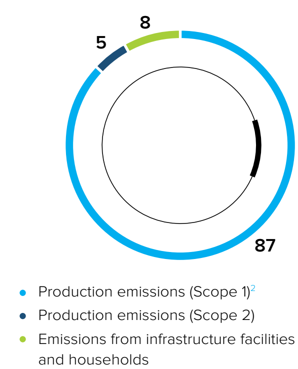
Since its inception in 1935, the Company has been developing in a harsh climate, given that its major production asset, the Polar Division, is located in the Norilsk Industrial District beyond the Arctic Circle. As such, this remote region has never been connected to Russia's energy and transport infrastructure. Therefore, the Company has historically been self-sufficient in building its operations, including in terms of electricity/energy generation and transmission. Natural gas is the core low-carbon source for power generation in our largest Norilsk Division, which is used to generate about 76.5% of electricity consumed, with hydro power accounting for close to 23.5%. Diesel fuel, fuel oil, petrol and jet fuel are used by Nornickel's transport assets. Use of high-carbon fuel by energy assets is minimised. Only small amounts of coal are used in certain production processes.

The Company's key renewable energy source is hydropower generated by the Group's Ust-Khantayskaya and Kureyskaya HPPs. In 2020, renewables accounted for 46% of total

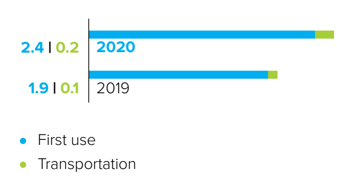
GHG EMISSIONS (MLN T CO_2 EQUIVALENT)[1]



GHG EMISSIONS BROKEN DOWN BY SOURCE IN 2020 (%)



SCOPE 3 DOWNSTREAM GHG EMISSIONS ESTIMATE (MLN T)



FOR MORE DETAILS, PLEASE SEE NORNICKEL'S THE SCOPE 3 DOWNSTREAM GHG EMISSIONS REPORT

[1] GHG emissions were calculated as per the GHG Protocol Guidelines. When calculating GHG emissions across the Group, the following greenhouse gases were taken into account: carbon oxide (CO_2), nitrogen oxide (N_2O) and methane (CH_4). Direct methane emissions (coming mostly from gas transportation units) represent a small share of total emissions and amount to about 150 ktpa of CO_2 equivalent. Based on the inventory results, the data for 2018 and 2019 were recalculated in 2020.

[2] Nornickel's GHG emissions include emissions from supplying electricity to Norilsk through NTEK, along with potential CO_2 emissions from Sulphur Programme 2.0.

electricity consumed by the Group and 55% of total electricity consumption within the Norilsk Industrial District.

The use of other renewables, such as solar, geothermal and wind energy, is impracticable as Nornickel's core production assets are located beyond the Arctic Circle in the Norilsk Industrial District, in harsh climatic conditions. Overall, the Group's own energy assets (including Kola MMC and other assets that mainly purchase electricity from third parties) generate about 84% of total electricity consumed by the Group. The Group also supplies electricity and heat to external consumers, primarily local social infrastructure and communities in the Norilsk Industrial District.

Nornickel is committed to the responsible use of heat and electricity. In 2020, our electricity and fuel consumption decreased due to lower metal production by the Norilsk Division, discontinued metallurgical operations at Kola MMC and reduced air transportation by the Group's own air fleet due to transportation restrictions caused by the COVID-19 pandemic.

CLIMATE IMPACT ON THE USE OF RENEWABLES BEYOND THE ARCTIC CIRCLE

Air temperatures stay below freezing point for about eight months a year

Strong gusts of wind with speeds of up to 50 m/s are followed by dead calms lasting for weeks

Polar nights and twilights last for more than 100 days

On average, there are no more than 70 sunny days per year

Permafrost is 300 to 500 metres deep

Soils and ice are prone to seasonal thawing

ENERGY GENERATION AND CONSUMPTION BY THE GROUP (TJ)[3]

No.	Indicator	2016	2017	2018	2019	2020
1	Fuel consumption by the Company[4]	172,425	156,569	148,910	144,772	141,237
	• natural gas	151,081	134,709	129,335	125,329	122,216
	• diesel fuel and fuel oil	15,423	15,221	13,788	13,535	13 939[5]
	• petrol and jet fuel	3,789	5,178	4,127	3,820	2,902
	• coal[6]	2,132	1,460	1,660	2,087	2,180
2	Electricity and heat from own renewable sources (HPPs)		12,414	14,877	15,058	15,310
3	Electricity and heat purchased from third parties		10,483	10,931	11,331	11,200
4	Sales of electricity and heat to third parties		19,503	18,926	18,766	17,254
5	**Total consumption of electricity and fuel (1 + 2 + 3–4)**		**159,962**	**155,792**	**152,395**	**150,493**

[3] For a detailed breakdown of the Group's energy consumption by company, please see the 2020 Sustainability Report.

[4] Including the fuel used to generate electricity for Norilsk.

[5] Including the diesel fuel spill in May 2020.

[6] Coal is only used in production processes, with Kola MMC accounting for 46% of total consumption, GRK Bystrinskoye 25%, the Polar Division 15%, Norilsk Production Support Complex 10%, and other subsidiaries 4%.

The Group attaches great importance to improving the energy efficiency of its existing and future production sites, focusing on retaining GHG emissions within the declared targets under its comprehensive environmental programme. The programme provides for investing close to USD 4 billion in upgrading and boosting the safety of the energy infrastructure on the Taimyr Peninsula in 2021–2025. The investments will cover a wide range of projects related to equipment replacement at thermal and hydropower plants, and upgrade of fuel tank storage facilities, power grids and gas pipelines.

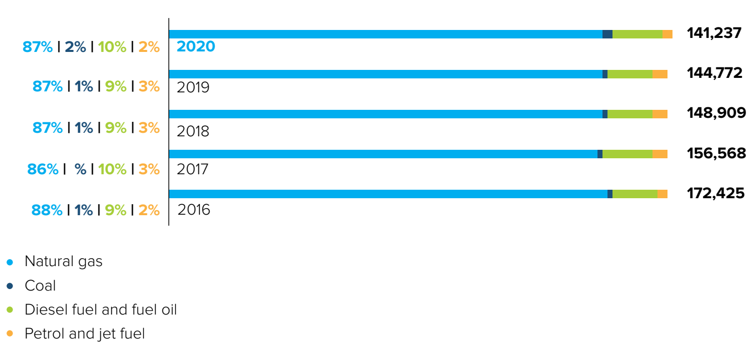
Major projects completed in 2020 include:

- replacement of a turbine at Ust-Khantaiskaya HPP
- replacement of the main step-down substation supplying electricity to the South Cluster.

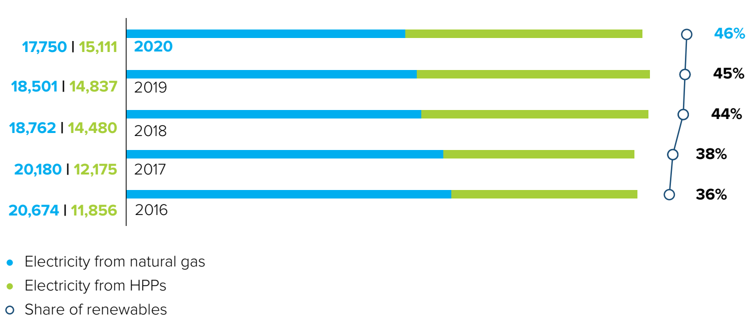
Fuel equivalent savings in 2020 totalled 10,778 t of fuel equivalent, and 7,879 thousand kWh of electricity, with 40 energy saving initiatives implemented.

In 2020, fuel consumption per unit of electricity supplied by CHPPs was 284 g/kWh, that is 7.8 g/kWh lower than the target level.

FUEL CONSUMPTION BY THE COMPANY (TJ)



ELECTRICITY CONSUMPTION (TJ)



AIR

Target: improve air quality (reduce SO2 emissions) in the areas of operation.

Key next steps: execute on Sulphur Programme 2.0 and other air emission reduction projects.

High sulphur dioxide emissions from the smelting of sulphide concentrates with high sulphur content are a key environmental issue for the Company. Nornickel's strategic plan is to transform the Company into an environmentally clean and safe business by implementing Sulphur Programme 2.0 at the Polar Division and Kola MMC.

Sulphur Programme 2.0 in the Polar Division is expected to reduce sulphur dioxide emissions in the Norilsk Industrial District by 45% in 2023 and by 90% in 2025 (2015: baseline). The project is phased in at the Nornickel's two core downstream facilities: Nadezhda Metallurgical Plant and Copper Plant.

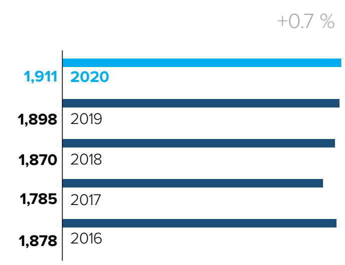
SULPHUR PROGRAMME 2.0 AT KOLA MMC

The environmental project at Kola MMC provides for the complete shutdown of smelting operations in Nikel, upgrade of the beneficiation plant in Zapolyarny, and shutdown of the copper refining facility in Monchegorsk.

The upgrade of the beneficiation plant was completed in 2019. The shutdown of Nornickel's smelting shop in Nikel in late 2020 helped reduce sulphur dioxide emissions by 71% in Nikel and Zapolyarny and by 58% in 2020 (from a 2015 baseline) in the Russia–Norway border area. The copper refining facility in Monchegorsk was closed in March 2021, which will help reduce emissions at Kola MMC by another 85% (2015: baseline).

In 2020, emissions from Nornickel's Russian operations totalled 1,968 kt, up 0.8% y-o-y. The increase was driven by a temporary growth in sulphur dioxide emissions from the Polar Division due to increased production and processing of sulphur-containing feedstock. Despite the increase, emissions did not exceed the Company's set limits.

SULPHUR DIOXIDE EMISSIONS (KT)



During adverse weather conditions, the Company took extra measures to control pollutant emissions in residential areas. Production process at metallurgical plants was stopped for this reason 205 times in 2020.

Norilsk maintains an automatic toll-free enquiry service line offering forecasts on the impact of metallurgical operations on the city air quality to anyone dialling +7,391,942 0007.

AIR POLLUTANT EMISSIONS ACROSS THE GROUP (KT)

Indicator	2016	2017	2018	2019	2020
Across Norilsk Nickel Group	**1,936.4**	**1,845.8**	**1,926.6**	**1,952.7**	**1,968.1**
Sulphur dioxide (SO_2)	1,878.0	1,785.0	1,869.6	1,898.1	1,910.8
Nitrogen oxide (NO_x)	10.1	11.5	11.2	10.3	10.0
Particulate matter	14.3	14.0	14.5	13.3	14.6
Other pollutants	34.1	35.3	31.3	30.9	32.8
Polar Division	**1,787.6**	**1,705.0**	**1,789.0**	**1,819.2**	**1,857.5**
Sulphur dioxide (SO_2)	1,758.2	1,675.9	1,764.7	1,798.6	1,836.9
Nitrogen oxide (NO_x)	1.5	1.6	0.6	0.5	0.6
Particulate matter	6.2	6.1	5.5	4.2	4.1
Other pollutants	21.7	21.5	18.2	15.8	16.0
Kola MMC	**132.9**	**121.9**	**117.5**	**110.8**	**83.4**
Sulphur dioxide (SO_2)	119.7	109.1	104.8	99.4	73.2
Nitrogen oxide (NO_x)	1.1	1.2	1.8	1.8	1.6
Particulate matter	7.4	6.9	7.6	7.0	6.1
Other pollutants	4.7	4.7	3.3	2.7	2.4

WATER

Targets: maintain recycled water ratio and reduce pollution; continue providing clear water to local communities.

Key next steps: build and run new treatment facilities, adopt new technical solutions, remediate pollution from environmental accidents in line with the Great Norilsk Expedition recommendations.

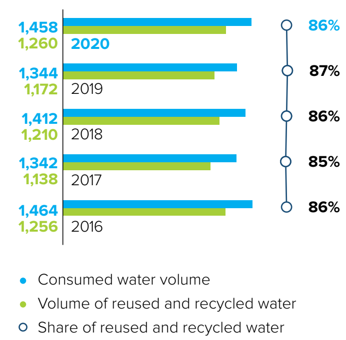
The Company's major production assets are located in regions with sufficient water resources. Nonetheless, the Company is extremely careful about its use of fresh water and strictly complies with restrictions applicable to industrial water withdrawal. **The Company is committed to sustainable use of water resources and prevention of water body pollution.**

Nornickel's key production facilities use closed water circuits to maintain water withdrawal on a relatively low level. Furthermore, the Company never withdraws water from protected natural areas. In 2020, 86% of all water used by the Company was recycled or reused. Water is mostly withdrawn from surface and underground water bodies as well as from wastewater of other companies and natural water inflow. Natural water inflow and meltwater accounted for 12% of the total water withdrawal in 2020. All facilities using water have programmes in place to monitor water bodies and water protection areas.

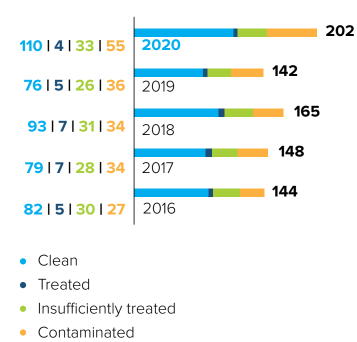
Wastewater discharge also does not exceed the approved limits or have any major impact on biodiversity of water bodies and related habitats.

The year-on-year increase in discharge can be explained by the fact that, as of 2020, the Report discloses wastewater discharge to municipal sewage networks.

WATER CONSUMPTION (MCM)



WASTEWATER DISCHARGE (MCM)



WATER CONSUMPTION AND DISCHARGE

WATER WITHDRAWAL

375 Mcm

Surface sources – 260 Mcm

Underground sources – 31 Mcm

Wastewater – 29 Mcm

Natural water inflow – 47 Mcm

Other – 8 Mcm

WATER CONSUMPTION

1,458 Mcm =

198 (new) +1,260 (reused and recycled water)

31 Mcm – water reused in other production processes (2%)

1,229 Mcm recycled water (84%)

WASTEWATER DISCHARGE

202 Mcm

Clean – 110 Mcm

Treated – 4 Mcm

Insufficiently treated – 33 Mcm

Contaminated – 55 Mcm

WATER RISK MANAGEMENT

The Company also conducts assessments of impact on water resources on an ongoing basis.
The impact on water resources can materially affect the Company's financial performance.

Procedures used by Nornickel to identify and assess the risks of its impact on water resources include:

- wastewater inventory
- monitoring of wastewater discharge volume and quality at discharge sites
- observation of surface water bodies at control points upstream and downstream of discharge sites
- investments in improving the performance of water treatment systems and building new systems
- we also monitor wastewater treatment processes at treatment facilities and take organisational and technical measures to improve treatment effectiveness.
- Tailings and waste

TAILINGS AND WASTE

Targets: maintain safe operation of tailings facilities and minimise environmental impact of mineral and non-mineral waste.

Key next steps: build mass balance model for waste management and prepare for the self-assessment under Global Tailings Standard.

WASTE

The Company reuses most of its industrial waste as approximately 99% of the waste generated are hazard class 5, i.e. non-hazardous waste. This is mostly waste from the mining and smelting operations, including rock and overburden, tailings, and metallurgical slags. Ore extraction waste is used as backfill for underground workings and open pits, road fill, or for tailings dam reinforcement. The increase in waste generation in 2020 was attributed to the commissioning of Bystrinsky GOK.

TAILINGS

Nornickel currently operates six tailing dumps: four in the Norilsk Division, taking tailings from Talnakh and Norilsk concentrators and Nadezhda Metallurgical Plant; one at Kola MMC, storing tailings from Zapolyarny Concentrator; and Bystrinsky GOK tailing dump.

WASTE GENERATION BY HAZARD CLASS (KT)

Hazard class	2016	2017	2018	2019	2020
V	32,118	30,722	29,517	35,300	144,052
IV	1,114	1,190	1,191	1,115	1,175
III	30	12	15	5	7
II	5.8	2.4	1.1	0.03	0.05
I	0.1	0.1	0.1	0.04	0.04
Total	33,267	31,926	30,725	36,420	145,234

BIODIVERSITY

In 2020, the Company developed its Biodiversity Strategy and set an ambitious goal to care about nature reserves and protect biodiversity across its operating regions.

Target: strengthen biodiversity programmes.

Key next steps: remediate biodiversity following recent environmental incidents, launch regular monitoring of impacts on biodiversity and continue support of nature reserves.

COOPERATION WITH NATURE RESERVES

In the Murmansk Region, the Pasvik and the Lapland nature reserves are 10 to 15 km away from Kola MMC's production sites. In the Krasnoyarsk Region, the boundaries of the Putoransky Reserve buffer zone are at a distance of between 80 km and 100 km from the Polar Division's production sites.

To help protect the unique arctic nature, the Company has been providing support to nature reserves for more than 10 years now, with its total annual value running into hundreds of millions of roubles. These efforts are in line with Nornickel's environmental strategy, which incorporates a large-scale investment programme.

In the Zabaykalsky Region, the Company supports the development of research capabilities and environmental awareness programmes of the Relict Oaks State Nature Reserve.

ENVIRONMENTAL INCIDENT

On 29 May 2020, an accidental damage to a diesel fuel storage tank caused by a sinking of piles and depressurisation of the emergency fuel storage tank at CHPP-3 in the Kayerkan District of the city of Norilsk resulted in a spill of 21 thousand tonnes of diesel fuel. Since CHPP-3 is located in a remote area, the city was not impacted by the spill. The Company immediately initiated a response to the fuel spill, completing the first and second phases of clean-up by end-2020:

- Over 90% of spilled fuel was collected
- River shores were treated with sorbents and washed off
- The collected water/fuel mixture was transported to an industrial site near Nadezhda Metallurgical Plant where fuel was separated from water
- About 190 thousand tonnes of contaminated soil was collected, removed and placed in special storage facilities pending disposal

Following the incident, a number of independent studies were carried out to identify its causes and impact on the environment and local communities, in particular:

- a technical investigation by Environmental Resources Management Limited (ERM) at the request of Nornickel's Board of Directors. The investigation resulted in a report assessing the causes of the incident
- The Great Norilsk Expedition of the Siberian branch of the Russian Academy of Sciences (RAS) comprised of 30 scientists from 14 RAS research institutes. The objective of the Great Norilsk Expedition was to study the environment, biodiversity and permafrost in the Norilsk area, as well as to assess the consequences of the fuel spill. A report on the expedition's findings was published
- an ethnographic expedition that included interviews with 100 representatives of indigenous peoples of the North living in Taimyr to assess the impact of the fuel spill incident on indigenous peoples of the North, as well as to prepare proposals for a new long-term agreement between Nornickel and indigenous peoples of the North.

THE INVESTIGATION RESULTED IN

THE EXPEDITION'S FINDINGS WAS PUBLISHED

Immediately after the incident, the Company launched a dedicated programme to improve industrial safety and minimise the risk of similar incidents in the future, which included:

- emergency inspection of fuel storage facilities
- phasing out "at risk" fuel storage facilities
- designing alternative fuel storages
- accelerating the infrastructure repair and upgrade programme, including the fuel and energy complex
- updating the permafrost monitoring system
- developing a monitoring system for foundations built on permafrost
- updating the environmental risk assessment system: controls, procedures, maps
- upgrading fuel storage embanking
- upgrading emergency response plans and response services.

At the end of 2020, the Company signed a contract with Hydrotechnologies – Siberia engaging it to clean up contaminated soil using microbiological remediation. Special bacteria that oxidise oil will be introduced into the soil. Rehabilitated soil will be suitable for industrial and construction use.

Nornickel plans to completely eliminate the consequences of the fuel spill. Throughout 2021–2022, remediation and environmental clean-up efforts will continue, a programme to monitor water bodies and soils and a plan to restore contaminated land and shoreline will be developed, separated water will be disposed of, and contaminated soil will be remediated.

Specifically, the following initiatives are planned for 2021:

- Installation of protective and sorbent barriers in water bodies before the snow melts
- Monitoring the contaminated area to determine the volume of residual contamination and using probes to check the level of contamination
- Restoring the shoreline
- Treating residual soil contamination with sorbents
- Collecting diesel fuel residues
- Soil remediation
- Soil replacement in severely damaged areas
- Planting vegetation to restore damaged soil

On 12 February 2021, the Krasnoyarsk Region Arbitration Court ruled that the Company should pay environmental damages in the amount of RUB 146.2 billion (approximately USD 1.9 billion). Upon thorough consideration of the court ruling and assessment of the prospects for an appeal, Nornickel decided to pay the damages. The Company made a provision for the damages in its 2020 financial statements; the damages were paid in March 2021.

CLEAN-UP PROGRAMME

Our clean-up programme and efforts to address historical pollution (including the demolition of abandoned buildings and scrap collection and recycling) are two other extremely important priorities under the Environmental strategy.

Our objective is to clean up unused facilities:

- 467 abandoned buildings and structures
- > 1.3 mln t of industrial waste
- > 2 mln t of rubbish
- > 600 kt of scrap

Planned activities:

- Collecting and disposing of stainless steel and other metal scrap
- Recycling scrap
- Disassembling buildings and disposing of waste
- Cleaning up the territory.

ENVIRONMENTAL PERFORMANCE OF THE COMPANY'S FOREIGN ASSETS

NORILSK NICKEL HARJAVALTA

The company is fully environmentally permitted and operates a certified integrated management system compliant with ISO 9001 and ISO 14001.

Norilsk Nickel Harjavalta's main environmental impact comes from air emissions of ammonia (NH_3) and nickel (Ni), and water discharges of nickel, sulphates (SO_4) and ammonium ions (NH_4^+). In 2020, Norilsk Nickel Harjavalta met all permit requirements for emissions, discharges and waste disposal volumes.

ENVIRONMENTAL INDICATORS

Indicator	2016	2017	2018	2019	2020
Air pollutant emissions					
Ni	72	71	85	40	34
NH_3	1.6	1.7	1.2	1.6	1.3
Water (Mcm)	70	69	84	38	33
Wastewater					
Water consumption	0.8	0.9	1.0	1.0	1.0
Waste (kt)	10.9	11.1	11.8	11.5	11.4
Generation					
Generation	7.0	5.5	2.8	5.7	5.1
Disposal	0.8	0.8	1.1	1.3	1.2

Norilsk Nickel Harjavalta

NKOMATI

The company operates in accordance with both local environmental protection regulations and Nornickel corporate standards. Nkomati pays close attention to environmental safety, is certified and regularly audited for compliance with ISO 14001 and ISO 9001.

ENVIRONMENTAL INDICATORS

Indicator	2020
Water consumption (Mcm)	0.1
Waste generation (t)	1,647
Waste disposal (t)	1,598
Environmental protection expenditures (USD mln)	0.6

Nkomati

HUMAN RESOURCES

AWARDS AND INDUSTRY RECOGNITION

In 2020, Nornickel entered a number of best employers lists:
- The World's Most Attractive Employers by Universum and Ranstad Award: No. 1 among students and professionals in the Metals & Mining category
- The Best Company Award by Changellenge: No. 1 among students and young professionals in the Metals & Mining category
- HeadHunter's Russian Employers Rating: No. 12 among Top 100 employers
- Ranking by FutureToday based on students' opinions across Russian universities
- Top 3 employers in the metals and mining industry

One of the Company's focus areas is to nurture corporate culture aimed at boosting employee performance and commitment to delivering against targets. Nornickel views its employees as its key asset and invests in their professional and personal development while creating an environment promoting employee performance and engagement.

The Company makes sure all employees enjoy equal rights and treatment regardless of gender, age, race, nationality, and origin. Nornickel provides all its talent with the same opportunities to unlock their potential, and promotes them solely on the basis of professional competencies.

Respect for each employee and their rights lies at the heart of Nornickel's business. The protection of human rights is reflected in a number of internal documents, including the Company's Code of Business Ethics, Personal Data Policy, Regulations on Anti-Embezzlement, and Human Rights Policy. The Company does not use child labour.

Nornickel is committed to achieving operational excellence, implements standard approaches to developing its business unit structures, and has put together a list of job titles to standardise job creation.

PREVENTING THE SPREAD OF COVID-19

In 2020, Nornickel topped the rating of Russian metals companies that provided the most comprehensive response to the pandemic COVID-19.

In combating the pandemic in close cooperation with federal and municipal authorities, the Company focuses on employee health and safety, and business continuity as well as on preventing the spread of the virus across local cities. Nornickel spent about RUB 12 billion (USD 157 million) to fight the pandemic and support not only its employees, but also the healthcare system across its footprint. In the early months of the pandemic, additional payments were set for employees who remained at their stationary workplaces. The Company upgraded a number of healthcare centres by supplying 412 ventilators, 7 critical care vehicles, 15 mobile and 2 stationary research laboratories, as well as hundreds of thousands of COVID-19 tests.

During the pandemic, the Company implemented a set of support measures for SMEs affected by the lockdown. Small businesses leasing the Company's facilities in Norilsk were granted rent holidays. Social entrepreneurs and participants of the World of New Opportunities corporate charity programme, who had previously received loans from Nornickel for social business development were granted credit holidays.

Nornickel continued recruitment as none of its investment projects was closed. Overall, the coronavirus pandemic made no material impact on the Company's operations.

STAFF COMPOSITION

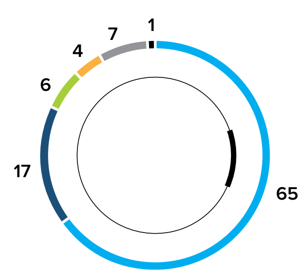
In 2020, the Group's average headcount totalled 72,319 people.

The decrease in the average headcount in 2020 was driven by the continued implementation of a programme to improve labour productivity and reduce costs.

Nornickel is among the main employers in the Norilsk Industrial District and Kola Peninsula, hiring 65% and 17% employees, respectively. Local population accounts for 99.7% of the headcount.

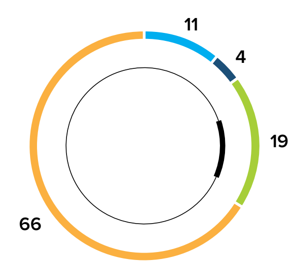
Local population accounts for
99.7%

HEADCOUNT BY REGION (%)



- Norilsk Industrial District
- Murmansk Region
- Krasnoyarsk Region (except the Norilsk Industrial District)
- Zabaykalsky Region
- Moscow and other Russian regions
- Foreign operations

HEADCOUNT BREAKDOWN BY CATEGORY (%)[1]



- Male managers
- Female managers
- White-collar employees
- Blue-collar employees

HEADCOUNT BREAKDOWN BY AGE AND GENDER (%)[1]

- Male (71%)
- Female (29%)

THE GROUP'S AVERAGE HEADCOUNT (PEOPLE)

Location	2016	2017	2018	2019	2020
Russia	81,081	77,991	74,926	72,782	71,447
Africa	586	605	617	577	519
Europe	311	326	330	326	323
Asia	13	13	13	16	15
USA	10	10	10	9	10
Australia	5	5	5	5	5
Total	82,006	78,950	75,901	73,715	72,319

[1] Russian operations.

RECRUITMENT

PARTNERSHIPS WITH UNIVERSITIES

To spark the interest of young people in professions of mining and metallurgical engineers and the industry on the whole, the Company has launched programmes for undergraduate and graduate students of Russian industry-specific universities.

The Company focuses on training and upskilling students majoring in professions that are highly valued at Nornickel. For example, our standard format of the Conquerors of the North educational programme moved online and became available to a wider audience of students from Russian universities involved in the industry. In 2020, 1,602 students applied for participation while 323 participants completed the course.

The Conquerors of the North online academy has served as a tremendous library of knowledge for students. The participants listened to 23 video lectures and discussed a case study to consolidate their knowledge. Nornickel was the first Russian mining company to engage undergraduates and graduates in addressing real business challenges and promptly move the programme online in response to the pandemic spread in Russia.

In 2020, an online apprenticeship programme kicked off for the first time in the Head Office in Moscow. The best graduates of the leading Moscow universities took part in the programme.

The Company continues to support talented students from the industry's universities, with Nornickel's corporate scholarship awarded to 90 students in 2020.

ASSISTANCE PROGRAMME

Since the Company's production sites are located in remote areas, Nornickel actively sources personnel for its production facilities from other regions of Russia. The Assistance Programme helps new hires adapt to their new environment and settle in at their new places of residence in the Taimyr Peninsula. The programme targets not only highly qualified specialists and managers, but also young talent and workers with hard-to-find skills.

Today, it covers 829 of the Company's employees, including 364 new participants, who joined in 2020. With this programme, the Company seeks to provide the participants with comfortable living conditions and reimburse them for relocation and resettlement costs.

FINANCING UNDER THE ASSISTANCE PROGRAMME (USD MLN)

ENGAGEMENT

Nornickel goes through the engagement management cycle every year to maintain an environment conducive to integration.
This cycle includes three phases:
- Conducting the "Let Everyone Be Heard. What Do You Think?" survey
- Analysing survey findings
- Developing and implementing resulting solutions

In 2020, the engagement index grew by 10 p. p. from 2018, in particular, in the following categories:
- **Senior Management: +14 p. p.**
- **Respect and Acceptance: +11 p. p.**
- **Compensation and Recognition: +9 p. p.**
- **Conditions for Success: +9 p. p.**
- **Career Opportunities: +9 p. p.**
- **Performance Management: +9 p. p.**

The survey includes focus group polling among 73 thousand employees from 32 Nornickel's entities. In 2020, 42 thousand employees were involved in the survey, up 27% y-o-y.

All governance levels, from units of individual entities to the Group as a whole, are involved in both survey data analysis and development and implementation of improvements.

CORPORATE DIALOGUES AND FORUMS

A project to enhance dialogue between senior management and regular employees has been underway for the second year now to promote employee awareness, gain ownership of the Company's goals and values, and develop trust between labour and management. In 2020, the project included 32 corporate dialogues, the Nornickel Live video conference with the Company's vice presidents, and the "Challenges 2020: Environment, Pandemic, Safety" video conference, a video conference with engagement experts and internal value coaches, and six forums. A total of over 30 thousand Nornickel employees participated in these initiatives.

INTERNAL COMMUNICATIONS

Improvement of internal communications was focused on the coverage of engagement and corporate culture events by the corporate media and web portal. A total of four video courses on employee engagement, three video courses for enterprise managers on effective communications, and one e-course on the Company's corporate values for blue-collar employees were created in 2020. All materials were posted on the Nornickel Academy platform, and handouts on the programmes and information videos on the changes and initiatives implemented in the Company were produced.

DEVELOPMENT PROGRAMMES

PROJECT ENVIRONMENT PROGRAMME

The Company has launched the Project Environment development programme to develop a knowledge base and project management tools for employees involved in the implementation of capital construction investment projects. The Project Environment programme comprises two levels: Project Management (PM) for project office managers, and Professional for line managers and specialists.

From August to December 2020, training sessions within the "Project Environment. Professional" programme were held, broken down into eight modules aimed at employee upskilling in relevant functional areas. More than 114 project office employees took part in the programme. An individual development track was designed for each employee depending on their position and functional area. The training sessions were held online.

In September 2020, the "Design Environment. PM" programme was launched, involving 47 Group managers. The programme comprises six modules covering the entire life cycle of a capital construction investment project, and aims to develop both engineering competencies and soft skills in HR management and contractor management. During the training sessions the participants get acquainted with best practices in project management, development of leadership skills, and work in project teams. Any participant in the programme may propose project topics.

Training within the programme will continue in 2021 with the involvement of leading Russian and foreign experts. Participants will review global trends and practices in project management, as well as modern project management tools, such as cost engineering, planning and technical support of inventory supply, construction planning and quality control, risk management, contract management, etc.

ENHANCING PROFESSIONAL EXCELLENCE

In 2020, the Company continued its efforts to educate and upskill its employees. A total of 70.9 thousand person-events were held as part of training and retraining programmes, covering 36.7 thousand employees. A total of 3,462 thousand person-hours of training were delivered to 17.4 thousand employees in corporate training centres (38.3 thousand person-events). Due to the restrictions imposed in Russia, which preclude face-to-face training, the Company actively switched to distance learning formats for employees.

Particular attention is paid to using advanced technologies to train various categories of personnel. The launch of Nornickel Academy, a corporate training platform available to all Company employees, in 2020 expanded distance learning opportunities. More than 5,000 employees are active users of the platform.

Over 65 training courses are publicly available on the Nornickel Academy platform. The catalogue includes courses aimed at developing management and digital skills, job-specific courses, compulsory trainings and briefings. Management skills development comprises 22 courses, six of which focus on enhancing the effectiveness of work from home. 1,868 employees completed training courses to develop management skills. The Nornickel Academy platform offers 26 training courses aimed at developing digital skills, completed by more than 1,500 employees.

In 2020, 50 employees of the Company completed face-to-face training based on the results of their professional competency assessment. Due to the epidemiological situation, there has been no face-to-face training since Q2 2020. In 2020, the Company continued implementing professional standards. 60 professions were analysed against 14 professional standards, covering about 5,000 employees. The Company is represented on, and actively participates in the activities of, the Board for Professional Competencies in Mining and Metals and the Board for Professional Competencies in HR Management.

In 2020, the Digital Nornickel training programme scheduled for two years was developed to improve the digital literacy of all Company employees. Training under the Digital Nornickel programme is conducted online, using the Tsifronikel mobile app. The app enables users to take a training course broken down into blocks, test their knowledge in a game test, and take part in various contests and tournaments, individually or within a team. More than 4,000 employees completed training between October and December.

360-DEGREE MANAGEMENT

In August 2020, training within the 360-Degree Management programme was completed for executives who had been assessed via the 360-degree competency review. The programme focused on development of corporate and management skills. Training was offered on six topics:

- HR management
- Execution management
- Corporate skills development
- Communications
- Systems thinking
- Partner relations

Company employees submitted 176 applications to participate in the 360-Degree Management programme. A total of 124 managers, the Group’s Russian companies, and the Head Office completed the training..

TALENT POOL

In 2020, the Company kept developing the talent pool system at its production facilities to cover recruiting of lower and middle line managers. Due to the pandemic-related restrictions, training of pool members in the Corporate University was conducted online, and more attention was paid to mastering the required management skills in practice, on the job. Short reminders (“navigators”) were developed for new project participants.

In addition, the Company is actively building up a talent pool to fill top management positions. In 2020, HR committees held 40 meetings devoted to key functional areas. One of the main topics discussed at the meetings of HR committees was the security of top positions and readiness of candidates for succession. Developing the talent pool using various methods, from designing an individual development plan to temporary work in a higher position, is a priority task for Nornickel.

REMUNERATION FRAMEWORK AND PAY

Nornickel's remuneration framework is linked to key performance indicators (KPIs) for different job grades, with assessment reliant on KPIs covering social responsibility, occupational safety, environmental safety, operating efficiency and capital management, and responding to cross-functional interests of stakeholders. In 2020, 12,045 employees of the Group were assessed against its KPIs. The framework is instrumental in streamlining performance assessment criteria and enabling the management and employees to align the current year's priorities with the Company's strategy and link an employee's pay level to their performance.

Automation of the KPI-based employee assessment commenced in 2018. The automated system helped standardise talent pool management methods across the Group, consolidate relevant data into a shared database, and provide access to the assessment process through personal accounts for each employee. Starting from 2020, the framework covers virtually all units within the Company.

The Company put in place the procedure for performance evaluation whereby performance is managed by setting KPI targets and evaluating achievements against these targets. In 2020, a new incentive system was introduced for all employees of capital construction project offices: project bonuses and traditional annual bonus were replaced with a project bonus. Bonuses are paid for the achievement of key project parameters and are aimed at motivating and retaining key project employees until project completion.

Nornickel employees' pay depends on the work complexity, individual expertise and skills, and their personal contribution to the Company's performance. The collective bargaining agreement prohibits any discrimination by setting and changing wages based on gender, age, race, nationality or origin.

Principles of remuneration:

- Internal equity – remuneration management is based on the job description and grading methodology. The Company has a unified grading system across all functions
- External competitiveness – remuneration is based on the labour market data, with adjustments made for a company's focus, business location, and job grades
- Performance-based incentives – pay level is reviewed subject to the annual performance evaluation outcome
- Simplicity of the remuneration framework – pay level calculation and review procedures are transparent, and employees know how they can improve their pay levels

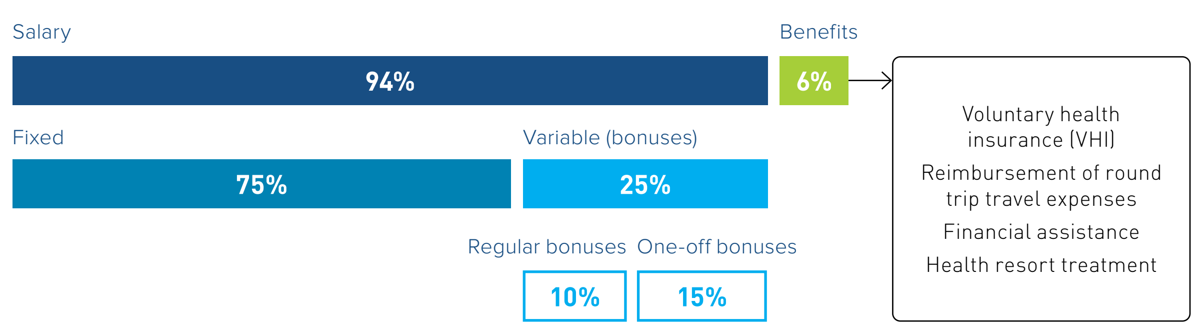
The compensation package comprises salary (94%) and benefits (6%). The salary consists of fixed and variable components (75% and 25%, respectively), with the latter linked to the Company's operating performance and achievement of relevant KPIs.

The social package includes the following:

- Voluntary health insurance and major accident insurance coverage
- Discounted tours for health resort treatment and recreation of employees and their families
- Reimbursements of round trip travel expenses and baggage fees for employees and their families living in the Far North and territories equated thereto
- One-off financial assistance to employees at different life stages or in difficult life situations
- Complementary corporate pension plan
- Other types of social benefits under the existing collective bargaining agreements and local regulations

Average monthly salaries of Nornickel employees are much higher than the minimum living wage in the Company's operating regions.

REMUNERATION PACKAGE ACROSS THE GROUP'S RUSSIAN OPERATIONS



NORNICKEL'S EMPLOYEE BENEFIT EXPENSES (PER YEAR)

Costs	2016	2017	2018	2019	2020
Total costs (USD mln)	103	123	128	147	99
Cost per employee (USD thousand)	1.3	1.6	1.7	2.0	1.4

MINIMUM LIVING WAGE IN NORNICKEL'S OPERATING REGIONS

Region	RUB thousand	USD
Murmansk Region	27.9	386
Norilsk Industrial District (NID)	31.5	437
Krasnoyarsk Region (excluding NID)	12.1	168
Moscow	20.2	279
Zabaykalsky Region	18.2	252

AVERAGE MONTHLY SALARIES OF NORNICKEL EMPLOYEES[1]

Currency	2016	2017	2018	2019	2020
USD[2]	1,405	1,784	1,780	1,835	1,827
RUB thousand	94	104	112	119	132

REWARDING PERFORMANCE

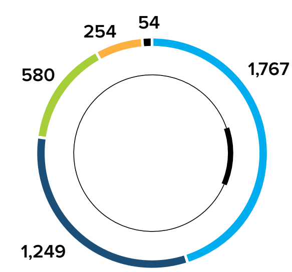
The Award Policy is closely linked to Nornickel's values and strategic priorities. The Company rewards its employees for outstanding professional achievements and contribution, innovations that drive growth and add value, efforts going beyond formal agreements with Nornickel and contributing to overall performance of the business.

There are several categories of awards and incentives. Nornickel welcomes agency and state recognition of its employees and nominates those who achieved prodigious results in operations and management and made significant contributions to production development.

Corporate incentives are Company-level awards.

Resolutions on corporate incentives are passed by the President of the Company. There are also internal incentives that are initiated and awarded to employees on behalf of the enterprise where they work.

EMPLOYEE AWARDS IN 2020 (PS)



- Internal awards from the Group's enterprises
- Awards from regional and municipal authorities
- Corporate awards
- Ministerial and agency awards
- State awards

Categories of awards and incentives

1 STATE, AGENCY AND REGIONAL AWARDS

- State awards
- Awards from industry ministries
- Awards from regional and municipal authorities

2 CORPORATE INCENTIVES

- Badge of honour,
- Honorary titles, special honorary titles of MMC Norilsk Nickel

3 INTERNAL INCENTIVES AT ENTERPRISES

- Honorary titles of NN RBUs[3], Nornickel's branches and Head Office
- Certificates of merit and letters of acknowledgement from NN RBUs[3], Nornickel's branches and Head Office

[1] Russian operations.

[2] Based on the average annual RUB/USD exchange rate given in the end of the Report.

[3] Russian subsidiaries of Nornickel.

SOCIAL PARTNERSHIP

SOCIAL PARTNERSHIP FRAMEWORK

EMPLOYER

SOCIAL PARTNERSHIP

Trade union organisations
8.4%

Social and labour councils
78%

Collective bargaining agreements
93.7%

Interregional cross-industry agreement
88.5%

The Group companies have in place a social partnership framework aimed at aligning the interests of employees and employers in the regulation of social and labour relations. Nornickel meets all its obligations under the Labour Code of the Russian Federation, collective bargaining agreements, and joint resolutions.

Key tasks of employee representatives in a social partnership are to represent employee's rights and protect their interests when holding collective bargaining negotiations, signing or amending a collective bargaining agreement, overseeing its performance, and resolving labour disputes.

Within the current social partnership framework, employee representatives are involved in resolving issues relating to the regulation of social and labour relations, conducting special assessments of working conditions, and implementing measures to prevent work-related injuries and occupational diseases.

In line with the requirements of the labour law, the opinion of employee representatives is taken into account when adopting local regulations on social and labour relations, compensation, work hours, labour standards, provision of guarantees and allowances, occupational health, etc.

TRADE UNION ORGANISATIONS

The Group has 58 primary trade unions united into local trade union organisations of the Norilsk Industrial District and Murmansk Region, which are part of the Trade Union of MMC Norilsk Nickel Employees, an interregional public organisation.

The trade unions of transport and logistics divisions are members of the Yenisey Basin Trade Union of Russia's Water Transport Workers headquartered in Krasnoyarsk.

IIn 2020, trade unions contributed to:
- additional social support for current and former employees during the COVID-19 pandemic
- the increase in the minimum standards of financial assistance to employees
- the increase in reimbursements of round trip travel expenses and baggage fees for employees and their families living in the Far North and territories equated thereto
- collective bargaining to discuss, negotiate and conclude the first collective bargaining agreement between Nornickel – Shared Services Centre and GRK Bystrinskoye.

A total of 8.4% of employees of the Group's Russian entities were members of trade unions organisations at end-2020. In 2020, the relations between Nornickel and the Trade Union of MMC Norilsk Nickel Employees were governed by the social partnership agreement signed in 2014. In December 2020, Nornickel and its Trade Union concluded another social partnership agreement.

SOCIAL AND LABOUR COUNCILS

Group enterprises located in the Norilsk Industrial District and in the Murmansk Region established social and labour councils back in 2006 to represent the interests of all employees within the framework of social partnership at the local level. Social and labour councils are authorised to raise matters relating to health resort treatment, recreation and leisure programmes for employees, disease prevention, catering and workplace arrangements, and provision of personal protective equipment.

In 2020, the percentage of employees represented by social and labour councils was 78% of the total headcount across the Group's Russian entities.

OFFICES FOR OPERATIONAL, SOCIAL AND LABOUR MATTERS

In addition to the Corporate Trust Service speak-up programme, the Group launched offices for operational, social and labour matters back in 2003. They are primarily tasked with response to employee queries, follow-up, and prompt resolution of conflicts. On a regular basis, the offices monitor social environment across operations, enabling timely responses to reported issues.

Queries submitted to offices are reviewed by relevant specialists or are forwarded to functional or industrial units to be handled in accordance with the topics raised. The timing and quality of the responses are monitored by the offices. When handling complaints, the offices adhere to the principle that precludes sending complaints to the managers whose actions are being challenged. In 2020, Group enterprises in the Norilsk Industrial District operated 24 offices which received about 40 thousand queries and requests from employees (81%), former employees (18%), and other individuals (1%).

COLLECTIVE BARGAINING AGREEMENTS

Collective bargaining agreements at the Group's Russian entities comply with the applicable laws and mostly meet employee expectations.

In 2020, Group entities signed eight collective bargaining agreements for a term of three years, including two entities that signed these agreements for the first time.

Thus, by end-2020, all collective bargaining agreements of the Group's Russian entities were signed based on unified approaches to regulating social and labour relations within the social partnership framework.

The percentage of employees covered by collective bargaining agreements stood at 93.7% in 2020.

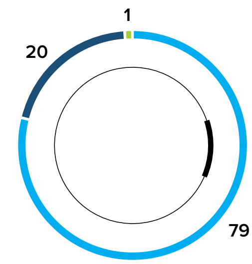
Collective bargaining commissions perform ongoing monitoring of the performance of obligations under collective bargaining agreements by the parties. The Group entities have also set up labour dispute commissions, social benefits commissions/committees, social insurance commissions, occupational safety commissions/committees, social and labour relations commissions, etc.

No breaches of collective bargaining agreements, and no strikes or mass layoffs were recorded across the Group entities in 2020.

INTERREGIONAL CROSS-INDUSTRY AGREEMENT

The Interregional Cross-Industry Association of Employers "Union of Copper and Nickel Producers and Production Support Providers" (the "Association") was registered in 2018 at the initiative of two regional associations established by the Group's Russian entities located in the Krasnoyarsk Region and Murmansk Region.

MAIN TOPICS OF QUERIES AND REQUESTS (%)



- Social welfare matters
- Legal matters
- Other matters

Based on the collective bargaining process in 2019, the interregional cross-industry agreement on copper and nickel producers and production support providers for 2019–2022 was signed. The agreement governs social and labour relations between the Association member employers and their employees, and defines uniform corporate approaches to compensation, provision of guarantees, allowances and benefits to employees, work and rest hours, occupational health, and other matters.

In 2020, a number of changes were made to the agreement to bring it in line with the amended labour law.

OUTPLACEMENT FOLLOWING THE CLOSURE OF THE SMELTING SHOP IN NIKEL

By discontinuing the smelting operations in December 2020, Nornickel completely eliminated sulphur dioxide emissions in the Russia–Norway border area and improved the environment in the Pechengsky District.

Nornickel decided to shut down the smelting shop in Nikel in November 2019 and immediately developed an outplacement programme for the affected employees. The programme was agreed with the social and labour council and primary trade union organisations of Kola MMC and Pechengastroy. Nornickel provided a comprehensive outplacement programme for the shop's employees who lost their job, making it easy for them to transfer to other operations of the Company, as well as setting up a retraining programme and a pension plan. Of the 660 employees of the smelting shop, 72% chose to continue working at the Company.

In 2020, Nornickel launched a dedicated Employment Centre to provide all-round support to employees affected by the shutdown of the smelting operations (including by providing information, advice and career guidance) and to partner with other Group entities, the government of the Murmansk Region and local employers on job opportunities for redundant employees. All staff-related decisions and actions complied with the Russian labour and employment laws and Nornickel's social support programme. Total expenses under this programme in 2020 exceeded RUB 478 million, including RUB 402 million paid to 241 dismissed employees as compensation, severance pay or financial assistance. In addition, 265 employees were re-employed within the Group, retaining their salaries and obtaining compensation for living expenses and financial assistance for home purchase. These initiatives have been ongoing for several years.

KEY PROVISIONS OF THE SOCIAL SUPPORT PROGRAMME

When employees are re-employed within Norilsk Nickel Group, they are offered:

- housing rent reimbursement in case of relocation
- same salary for one calendar year
- compensation for travel expenses of employees and their families
- reimbursement of baggage fees
- preemptive right to participate in corporate programmes to purchase housing at the new location
- training/retraining/certification in a new trade/job with all costs paid by the Company.

In case of redundancy:

- Severance pay in the amount of at least six months' average salaries (as well as additional payments for retirees, socially vulnerable groups and participants of the Succession programme)
- Early provision of a corporate pension to participants of corporate pension plans who are eligible for a superannuation, disability or long service pension
- Compensation for travel expenses of employees and their families
- Reimbursement of baggage fees
- Financial assistance for housing purchase under the Our Home/My Home and Your Home programmes
- Voluntary health insurance policy maintained for one calendar year from the termination date

The Succession programme provides for training of an affected employee by another Nornickel employee (above the retirement age) with a severance pay to the mentor upon completion.

Currently, the Association of Employers comprises 22 entities. The agreement covers 88.5% of employees of the Group entities.

In March 2021, the Company closed its copper refining operations in Monchegorsk, which will affect a total of 701 employees. The Company plans to apply the approved employee social support programme to employees of its metallurgical operations.

HEALTH AND SAFETY

STRATEGIC GOALS

Continuous reduction in injury rates → Decrease in lost time injuries to the level of 2013

Zero fatalities → Zero-tolerance policy on work-related fatalities

The health and safety of our people as well as mitigation of ore mining and processing risks is a top priority in Nornickel's operations.

OCCUPATIONAL HEALTH KPIS

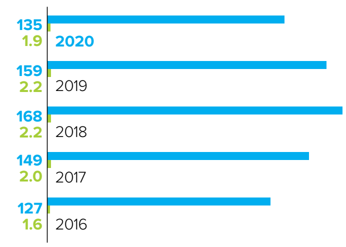
20% OF KPIS

- Linked to total recordable injuries (TRI)

12% TO 28% OF KPIS

- In KPI scorecards of heads of production units.
- A failure to prevent a fatality blocks them from receiving a performance bonus.

EXPENSES FOR IMPROVING WORKING CONDITIONS AND LABOR PROTECTION



- Total cost (USD mln)
- Cost per employee (USD thousand)

CERTIFICATION

In 2020, Nornickel approved and implemented the new Regulations on the Occupational Health Management System compliant with ISO 45001:2018 in line with its plans. As part of the preparations for certification of the existing occupational health management system to ISO 45001:2018, the Company passed an internal pre-certification audit and an external certification audit. As a result of the certification audit, the Company was certified to ISO 45001:2018.

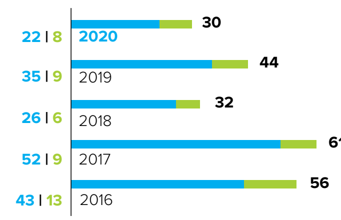
At end-2020, all key production enterprises of the Group had health and safety certification:

- MMC Norilsk Nickel to ISO 45001
- Kola MMC to OHSAS 18001
- Norilsk Nickel Harjavalta to ISO 45001

INJURY RATES

In 2020, the lost time injury frequency rate (LTIFR) decreased by 34% to 0.21 (0.32 in 2019), hitting all-time lows within the observation period while remaining below the industry average. Due to measures taken to comply with basic industrial safety standards and improve the safety standards management system, the number of lost time injuries decreased by 32% (from 44 to 30 incidents) while the number of fatalities decreased by 11% (from nine to eight incidents). All fatalities were reported to the Board of Directors and thoroughly investigated to avoid similar injuries in the future. Nornickel's management views safety and zero work-related fatalities as its key strategic priorities and continues dedicated programmes to prevent and avoid accidents and work-related injuries.

WORK-RELATED INJURIES
(PEOPLE)



INJURY RATES

Indicator	2016	2017	2018	2019	2020
FIFR	0.11	0.08	0.05	0.08	0.08
LTIFR	0.35	0.44	0.23	0.32	0.21
Contractors' work-related injuries	10	16	19	9	15
Including fatalities	7	1	2	1	3

MAIN CAUSES OF FATALITIES

Indicator	2016	2017	2018	2019	2020
Fall from height	3	0	1	1	0
Falling objects	0	1	0	0	2
Moving objects/parts	1	1	0	2	1
Rock fall	2	0	1	0	2
Road traffic accident (RTA)	4	0	1	0	0
Electrocution	2	1	0	0	3
Exposure to extreme temperatures	1	0	0	1	0
Explosion	0	4	0	1	0
Other	0	2	3	4	0
Total	13	9	6	9	8

RESPONSIBILITY AND ACCOUNTABILITY

The Audit and Sustainable Development Committee deals with industrial safety matters. The Committee reviews management reports on industrial safety performance every quarter, with management participating in the Committee's meetings required to provide detailed account of causes of injuries, measures taken to prevent similar injuries occurring in the future and disciplinary actions taken against the employees at fault.

Remuneration payable to all heads of production units is linked to their industrial safety performance. They are personally responsible for the life and health of each of their subordinates. In addition, team KPIs for all employees include injury rate reduction across the Group enterprises (20% of team KPIs). Industrial safety targets weigh between 12% and 28% of the overall KPI (including individual KPIs). A failure to prevent a fatality reduces to zero the health and safety indicator in the KPI scorecard (injury rate reduction), hence the amount of remuneration is also reduced.

The Company also has a dedicated Health, Safety and Environment Committee, which is focused on improving efficiency and accountability in industrial safety. The Committee meets quarterly at the Group's various production sites of branches and Russian companies of the Group to discuss improvements to industrial safety management, including:

- analysis of the circumstances and causes of severe and fatal work-related injuries
- status of measures planned and implemented to prevent similar injuries across the Company's enterprises
- programmes of organisational and technical measures to improve health and safety.

MANAGEMENT'S COMMITMENT AND LEADERSHIP

In 2020, the Group adopted a corporate standard for the management's health and safety commitment. In line with the standard, managers prepare annual plans of personal health and safety commitments, which include personal and group meetings with employees at production units, participation in audits of the occupational health management system, as well as Engineers and Technicians Days conducted with line managers (pre-shift briefings, workplace visits, discussions and recommendations to managers). Performance against personal commitments is included in each manager's individual KPIs.

ENGAGEMENT WITH ORGANISATIONS REPRESENTING

Engagement with organisations representing

The Group's collective bargaining agreements have health and safety provisions. At the end of 2018, companies of the copper and nickel and supporting industries developed and signed an interregional cross-industry agreement setting out, among other things, the obligations and commitments of the parties in relation to health and safety.

The Company and most of its subsidiaries have joint health and safety committees made up of management, employee and trade union representatives.

CONTRACTORS

As all maintenance and construction operations at the existing production facilities are classified as high-hazard, contractor personnel is required to attend induction and target briefings on occupational health prior to the commencement of any work. Work permits also include occupational health requirements to be observed during work preparation and performance.

A special standard setting requirements for contractors at the contractor selection phase was developed and implemented in 2018 to better monitor and promote the safety of work performed by contractors on the sites of Nornickel enterprises. In 2020, Nornickel consistently monitored compliance with the standard, including through joint inspections of compliance with work safety requirements and meetings of health and safety councils (committees) involving contractor representatives. Contractors failing to comply with health and safety requirements were fined for a total of more than RUB 20 million (USD 277 thousand) in 2020.

CORPORATE STANDARDS AND SAFETY MEASURES

Nornickel's production enterprises have process-, job- and operation-specific regulations and guidelines in place containing dedicated industrial safety sections.

Nornickel has corporate industrial safety standards that apply to both the Group's employees and contractors' personnel.

The Group's production units are regularly audited for compliance with applicable industrial safety requirements. A total of 25 audits took place in 2020 in accordance with the approved schedule, with production site managers and their deputies also involved in the audits.

As part of the Implementation of the Industrial Safety Management System programme, in 2020, Nornickel continued rolling out its Control, Management, Safety Automated System (CMS AS).

CMS AS is a SAP EHSM-based information system designed to collect, process, record and analyse health and safety data.

During the year, CMS AS was launched at Norilsk Support Complex, NTEK, Norilskpromtransport, Taimyr Fuel Company, and Polar and Murmansk Transport Divisions of PJSC MMC NORILSK NICKEL. Nornickel plans to continue rolling out CMS AS across the Group's remaining subsidiaries in 2021.

Nornickel's Technology Breakthrough programme aims to improve planning processes, automated day-to-day monitoring and production safety at all of the Company's Operations units covering all production operations, from ore mining to metals production. In 2020, on completing the first basic phase of the programme, the Company:

- Introduced and launched 44 information systems with 3,195 active users
- equipped all underground mines with positioning and communication systems, created a powerful system to transmit virtually unlimited data from the surface to underground and back – in other words, built the basic infrastructure for managing mining operations
- collected and digitised all equipment data sheets, started developing process sheets for the most critical equipment, which allows effective production asset management via a unified system
- ensured real time remote control over 80% of operations (almost all key processes) from control centres at the Company's Polar Division and Kola MMC.

Further development in 2020–2024 will be guided by the Technology Breakthrough 2.0 programme (second phase), which includes 11 programmes aimed at further improvement, production excellence and safety.

As part of implementing the Concept of Rock Bolting Systems Improvement at Nornickel Mines (launched in 2017) and to promote mining safety, in particular by minimising personnel access to unsupported parts of workings (reducing the risk of rock fall), the Company held following activities in 2020:

- completed a feasibility study and ordered two roof bolters for Kola MMC
- ordered 44 units of self-propelled bolters, delivered to the Polar Division, including 3 for the Komsomolsky, Mayak and Oktyabrsky Mines using new types of binder (two-component polymer resin) and rock bolting (composite hollow self-drilling anchor bolts) (second phase of equipment procurement)
- changed standard diameters of steel-polymer anchor bolts
- drilled production wells (one per mine) at the Oktyabrsky Mine (with the acceptance of construction concrete and grouting currently underway) and the Komsomolsky Mine (perforating)
- tested a prospective type of support – yielding tendon straps, which are much less difficult to install than combined arch support
- tested mechanical wet mix shotcreting and steel fibre-reinforced shotcreting methods, which significantly increase the durability of shotcrete reinforcement
- fully switched from anchor-shotcrete to mechanical steel-polymer supports for the capital construction of underground workings by Polar Construction Company.

BUILDINGS AND STRUCTURES MONITORING SYSTEM PROJECT

The project aims to ensure safe operating conditions for buildings and structures through timely identifying loss of bearing capacity of soil, piles and foundations through geotechnical and satellite monitoring subject to the results of geological surveys.

In 2020, the following initiatives were launched under the project:

- Development of a targeted business process for supervising and monitoring the operating conditions of buildings and structures in the Norilsk Industrial District
- Primary digitisation of technical documentation for buildings and structures
- Implementation of Stage 1 of the monitoring well drilling programme
- Inspection of pile foundations

Information support systems for geotechnical monitoring (163 facilities) are scheduled for piloting by the end of 2021.

EMPLOYEE TRAINING

The Company is committed to ensuring its people have all the necessary knowledge, skills and capabilities to perform their duties in a safe and responsible manner.

Training begins immediately after an employee is hired with an induction safety briefing and subsequent on-the-job briefings. Briefings are then repeated regularly in accordance with the existing corporate programmes. There are also interactive training courses for employees in key positions.

In 2020, 9,500 employees attended online health and safety training sessions. The online courses are created by in-house resources. The Company produced 58 distance learning industrial safety courses, 33 videos and seven multimedia briefings for blue-collar professions. The Company leverages internal expertise and today's formats to quickly produce new high-quality interactive training courses to accomplish its business tasks.

PROVISION OF PERSONAL PROTECTIVE EQUIPMENT

Employees are provided with safety clothing, footwear and other personal protective equipment to mitigate the adverse impact of work-related harm and hazards. Employees working in contaminated conditions are provided with free-of-charge wash-off and decontaminating agents. In 2020, the Nornickel purchased personal protective equipment worth over RUB 3 billion (USD 42 million).

Workers with on-site production experience of less than three years wear special red helmets with the word “Caution” on them and protective clothing with “Caution” badges that make them stand out.

INDUSTRIAL SAFETY COMPLIANCE

The Company has a zero-tolerance approach to unsafe behaviours, as prevention of safety breaches plays the most important role in reducing injuries and accidents.

Nornickel has put in place an industrial safety compliance monitoring system featuring multi-tier control with ad-hoc, targeted and comprehensive industrial safety inspections. The first tier control involves the line manager (aided by designated members of the occupational health team) and focuses primarily on workplace set-up. The second and higher control tiers involve special industrial safety commissions with representatives of management and employees.

In addition to the above prevention and control initiatives, the Company regularly conducts behavioural audits in accordance with the approved schedule. The prevention and control team has identified and disciplined over 10 thousand non-compliant employees, including by partially or completely stripping them of their bonuses.

PREVENTION OF OCCUPATIONAL DISEASES

The Company promotes disease prevention and healthy lifestyle amongst its staff to minimise the risk of occupational diseases, with management focused on communicating to all employees the importance of complying with safety requirements and protecting one's own health. Nornickel also seeks to introduce meaningful occupational health initiatives taking into account both workplace and individual risk factors.

The Company offers its staff regular disease prevention screening in line with recommendations from the healthcare authorities. Employees undergo compulsory pre-employment, regular and ad-hoc medical examinations at the Company's expense. Special medical examinations at occupational pathology centres are provided to employees exposed to hazardous substances.

Production enterprises have dedicated medical aid posts to perform pre-shift health checks and provide medical assistance on request during working hours.

Depending on their respective workplace hazards, employees are provided free-of-charge with personal protective equipment (PPE), including respiratory protection (respirators, gas masks), hearing protection (earmuffs, earplugs), eye protection (glasses/goggles with UV filters, visors), skin protection (gloves, protective and regenerative creams, protective outerwear).

Employees working in harmful and hazardous conditions receive free food, milk and other nutritional products for therapeutic and preventive purposes to promote health and prevent occupational diseases.

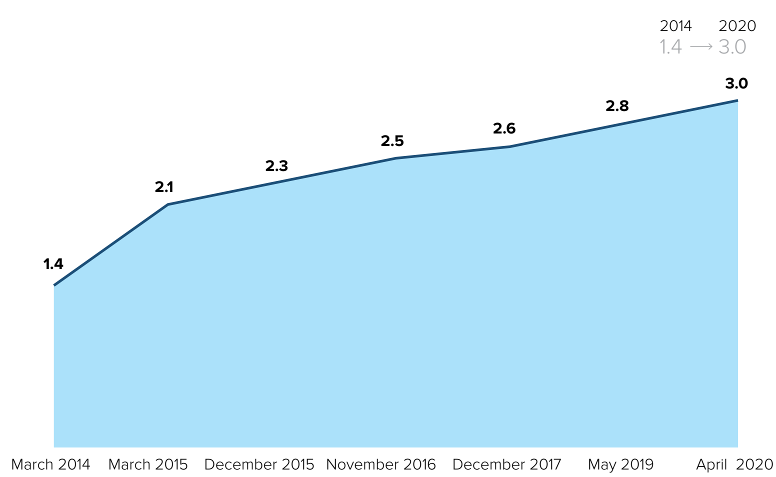
OCCUPATIONAL DISEASES

Indicator	2016	2017	2018	2019	2020
Total	339	361	318	290	235

INDEPENDENT SYSTEM ASSESSMENT

Since 2014, we engage an independent company to conduct out an annual assessment of our occupational health management system and safety culture to identify focus areas for further improvement of corporate occupational health management, and mitigate risks of injuries and accidents at the Group's major entities. Since 2014 the stable improvements in the safety culture level have been driven by increased employee engagement on health and safety matters and leadership demonstrated by senior management of entities as well as improved knowledge of risk assessment and management.

SAFETY CULTURE LEVEL ON THE BRADLEY CURVE



SOCIAL STRATEGY

Nornickel is playing an important role in the Russian economy. Due to its geography and financial strength, the Company has a strong impact on the social and economic life in the regions in which it operates. With its enterprises located mostly in single-industry towns, Nornickel seeks to maintain a favourable social climate and comfortable urban environment, providing its employees and their family members with ample opportunities for creative pursuits and self-fulfilment.

The core principle behind this social contribution is a partnership involving all stakeholders in the development and implementation of social programmes based on the balance of interests, cooperation and social consensus.

The harsh climate faced by Nornickel employees in life and at work, the remoteness of the Company's key industrial facilities, and the increasing competition for human capital across the industry call for a highly effective, human-centred social policy that would promote Nornickel's reputation as an employer of choice.

SOCIAL PROGRAMMES FOR EMPLOYEES

HEALTH IMPROVEMENT PROGRAMMES

Given the harsh climate of the Far North and the difficult working conditions at mining facilities, Nornickel has been consistently investing in health programmes for employees and their families. Health improvement and health resort treatment are among the most popular programmes offered by Nornickel as part of its social policy.

In 2020, about 11,200 thousand employees and their family members had recreation and treatment in corporate Zapolyarye Health Resort (Sochi). Over 2,000 employees spent their holidays in other health resorts. The Company compensates its employees an average of about 82% of the trip voucher cost. Due to the pandemic, the vouchers for trips to foreign countries and children health camps were not offered.

SPORTS PROGRAMMES

Given the harsh climate of the Far North, supporting healthy lifestyle behaviours is a key focus area in the personal development of Nornickel employees. Sports programmes seek to promote a healthy lifestyle, foster team spirit, improve interpersonal communication and develop corporate culture.

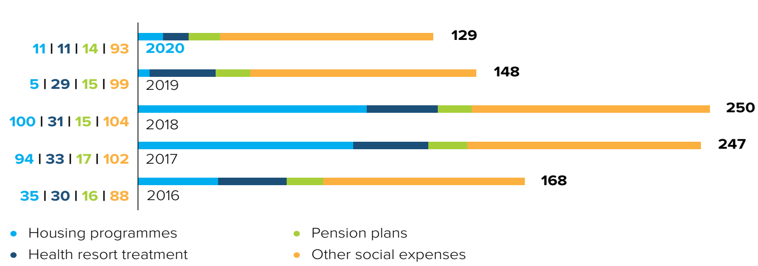
Nornickel pays special attention to corporate competitions, including the employees' popular sports such as hockey, futsal, volleyball, basketball, alpine skiing, snowboarding, and swimming. Family sports contests are yet another focus area. One of Nornickel's social policy highlights is the support of amateur sports.

In 2018, the Night Hockey League was registered in Norilsk to promote amateur hockey. The teams are made up of the Company's employees.

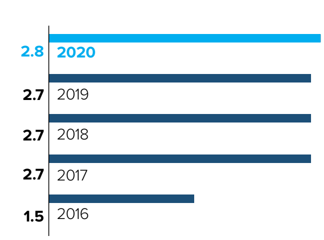
Other activities include regular Spartakiads and various mass sports events held across its footprint and involving not just Nornickel employees and their families but also local residents. In 2020, most of the activities were cancelled due to the COVID-19 pandemic.

A total of 11,098 thousand employees participated in sports and recreational activities in 2020, including 6,725 persons who took part in sports and recreational activities in Q1 2020 (prior to the introducing quarantine measures) and 4,373 persons who attended online sports and recreational activities.

SOCIAL PROGRAMMES FOR EMPLOYEES (USD MLN)



SPORTS EXPENSES (USD MLN)



HOUSING PROGRAMMES

Nornickel currently operates several housing programmes for its employees.

In 2020, Nornickel continued its consolidated housing programme, Our Home/My Home, whose members were able to purchase ready-to-move-in apartments on preferential terms across Russia, usually in the Moscow, Tver or Krasnodar Regions. Since 2010, the Company has purchased closely located properties to create a more comfortable living environment for employees by developing additional infrastructure and optimising maintenance of residential premises for the property management company. Each programme member buys an apartment through co-investment: the employer covers up to half the purchase price payable but not more than RUB 3 million (USD 41 thousand), with the rest paid by the employee.The cost of housing is fixed for the entire period of the participation. The property title is registered in the name of the employee only at the end of their participation in the programme; however, the participant may move in immediately after the apartment is purchased. Since the programme launch in 2010, the Company has purchased 3,826 ready-to-move-in apartments.

Also in 2020, Nornickel continued implementing its Your Home housing programme, which was successfully launched in 2019. It will be implemented similarly to the Our Home/My Home programme, except that the title to the apartment will be immediately registered in the name of the employee, though encumbered by a mortgage. The encumbrance is removed from the property once the employee fully repays the debt to the seller. Since the launch of the programme, the Company has purchased 1,789 ready-to-move-in apartments, with the list of regions extended to Yaroslavl.

Nornickel also operates the Corporate Social Subsidised Loan Programme offering Nornickel employees an interest-free loan to pay the initial instalment and reimbursing a certain percentage of interest paid to the bank on the mortgage loan. Overall, approximately 700 employees have already taken part in the programme.

PENSION PLANS

Nornickel offers its employees private pension plans. Under the Co-Funded Pension Plan, Nornickel and its employees make equal contributions to the plan. The Complementary Corporate Pension Plan provides incentives for pre-retirement employees with considerable job achievements and a long service record at Nornickel enterprises.

PENSION PLANS COVERAGE

Indicator	2016	2017	2018	2019	2020
Co-Funded Pension Plan					
Financing (USD mln)	7.8	8.6	7.7	7.6	7.2
Number of participants	17,322	15,700	13,916	12,304	11,519
Complementary Corporate Pension Plan					
Financing (USD mln)	6.7	8.5	6.7	6.1	5.7
Number of participants	614	718	545	525	511
Other pension plans					
Financing (USD mln)	1.0	0.1	0.9	1.0	0.9
Number of participants	1,755	1,118	1,114	1,151	1,064

ECOLOGICAL AGENDA

Introduction

NORTH FOR NORTHERNERS

In summer 2020, an ethnological expedition supported by Nornickel visited the Taimyr Peninsula. The expedition was part of a programme to support indigenous peoples of the North – a key component of the Company's social and economic policy across its footprint. Following the expedition, Nornickel signed cooperation agreements with organisations representing the interests of indigenous peoples and planned a number of initiatives to create new jobs, subsidise helicopter transportation, support targeted training for local residents, and so on.

When planning investments in the development of its operating regions, Nornickel carefully studies local economies and ways of life. In Taimyr, the support for indigenous peoples of the North inhabiting the peninsula is now an important part of the Company's social agenda.

Given the challenging local climate, these efforts are mostly focused on supporting essential services through subsidising air transportation, supplying building materials and diesel fuel, and constructing social infrastructure facilities. We place a particular emphasis on renovating existing infrastructure. In Dudinka alone, Nornickel financed the repair of an orphanage and a sports facility, construction of a new fitness centre and renovation of the Neptun swimming pool. The Russian North is unique for its rich natural resources, but also for the culture of local peoples. The Company organises events to support local customs and traditions and is committed to preserving northern languages. The indigenous ways of life among local reindeer herders and fishermen require special approaches, which are often incompatible with those of a market economy. Nornickel helps them get integrated into modern production chains and offer their products to a wider audience.

Nornickel organised the ethnological expedition to better understand the region's current agenda, as well as the contemporary cultural diversity and customs of the indigenous peoples of Taimyr. Its participants were also tasked with assessing the impact of man-made factors on the everyday life of local communities and the social and economic development of the peninsula.

The Company's specialists conducted over a hundred interviews and surveys with members of Taimyr major ethnic groups engaged in traditional crafts. A detailed ethnological map was drawn up based on the results of the research. To map the contaminated area and assess the impact of anthropogenic pollution, researchers collected and analysed soil and water samples. This is the first case in Russia when an ethnological study assessed the impact of anthropogenic pollution on traditional land use rather than planned economic activities.

Among other things, the study established that the accident at Norilsk CHPP-3 affected about 700 people using Lake Pyasino and the Pyasina River as their traditional fishing grounds. In this situation, Nornickel made a decision, unprecedented in Russia, to voluntarily compensate for the damage caused.

The list of victims has been agreed with local communities, and payments are already ongoing. A total of about RUB 174 million will be allocated for these purposes. In addition to direct payments, the Company will support land remediation, fish stocking of local water bodies as well as create new jobs and production facilities.

The local population appreciated this approach, and, according to social activists, it can serve as a benchmark for other subsoil users in the region.

Following the expedition, Nornickel also signed cooperation agreements with the Russian Association of Indigenous Peoples of the North (RAIPON), the Regional Association of Indigenous Peoples of the North of the Krasnoyarsk Region, and the Association of Indigenous Peoples of Taimyr of the Krasnoyarsk Region. Together, these organisations represent more than 90% of the indigenous peoples of the Russian North.

A comprehensive five-year plan for assisting the development of indigenous peoples was drawn up with Nornickel's contribution. The plan provides for supporting traditional crafts, financing healthcare services and home construction projects, creating infrastructure and developing tourism and culture. Specific tasks were set together with the local communities as they will be responsible for determining what needs to be done first. Tourism, reindeer husbandry, fishing and hunting have been listed among the development priorities for the region. Specifically, Nornickel plans to build fish and venison processing facilities, purchase refrigerator units and provide targeted training in professions required by the Company.

Much will also be done to preserve the indigenous culture of Taimyr. Nornickel will take part in the construction of an ethnic theme park, which will feature workshops showcasing traditional fur, leather, horn and tusk products. The Company also supports the development of local languages, which has been a focal point in recent decades. Learning aids will be developed and published with support from the Company.

SOCIAL INVESTMENTS

SUPPORT FOR INDIGENOUS PEOPLES OF THE NORTH

Indigenous peoples of the North, such as Nenets, Dolgans, Nganasans, Evenks and Enets, currently residing on the Taimyr Peninsula, count over 10 thousand persons.

Nornickel respects the rights, natural habitats, traditional culture and trades, historical heritage and interests of indigenous peoples within the Company's footprint and pursues a policy aimed at enhancing and fostering good neighbourly relations.

Recognising the rights of indigenous peoples to preserve their traditional way of life and addressing their needs for decent living standards and modern services, the Company has been engaged in philanthropy and social projects to improve the quality of life for Taimyr indigenous minorities for several decades.

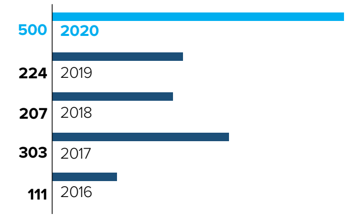
The Company's key commitments with respect to indigenous rights are set out in the relevant Policy. Nornickel complies with all applicable international codes and laws regarding the support for indigenous peoples of the North and recognises the rights of local communities to preserve their traditional lifestyle and indigenous trades. The Company's metals and mining assets are located outside indigenous territories in the Taimyrsky Dolgano-Nenetsky Municipal District, so the indigenous peoples do not have to move, and their traditional trades and cultural heritage are not affected.

The Company also offers regular assistance in response to specific requests from non-governmental organisations that represent the interests of indigenous peoples of Taimyr. For example, in October 2020, the Company was approached by the Husky Tyal (Husky Wind) indigenous community with a request to provide financial assistance for air transportation of 10 musk oxen (calves) from the Yamal-Nenets Autonomous District to the village of Volochanka. The Company allocated the necessary funds and worked out the logistics. Due to unfavourable weather conditions, the helicopter was forced to land in Norilsk where the Company provided a heated warehouse for the musk oxen to spend a day until the weather improved. At present, the calves are safely acclimatising at a musk ox farm (10 km from the village).

A good example of how Nornickel helps to preserve national traditions and culture of the indigenous peoples of Taimyr includes celebrations of professional holidays for tundra residents organised and held by the Company on an annual basis: the Reindeer Herder's Day and Fisherman Day, with valuable gifts and prizes for participants of national holiday competitions in Taimyr settlements. To that end, the Company purchases items that are most popular among local communities, including tents, petrol power generators, household equipment, outboard motors, inflatable boats, GPS navigators, sleeping bags, binoculars, etc. The Company's annual expenses for these purposes exceed RUB 5 million (USD 70 thousand).

Support and development of local communities are central to Nornickel's charity efforts and a key part of its World of New Opportunities charity programme. As part of the programme, the Company holds the annual Socially Responsible Initiatives Competition and provides grants for the winners. In 2020, seven projects by representatives of the indigenous peoples of the North received a total funding of RUB 6.8 million (USD 95 thousand).

SOCIAL EXPENSES (USD MLN)[1]



KEY OBLIGATIONS OF THE COMPANY REGARDING THE RIGHTS OF INDIGENOUS PEOPLES FIXED IN THE RELEVANT POLICY

Communities use grants to build ethnic theme parks, sports grounds, set up ethnic clubs, children's groups, ethnic sewing shops, organise celebrations of national holidays and implement projects involving elderly people, youth and children.

In 2020, implementing its Indigenous Rights Policy, Nornickel launched the Taimyr Students targeted programme to train representatives of indigenous peoples at Norilsk State Industrial Institute in courses that are most relevant for the Company. In 2020, 15 students started their studies at Norilsk State Industrial Institute under the programme, with their tuition fees fully covered by Nornickel. The Company's spending on the programme totalled RUB 1,152 thousand (USD 16 thousand).

In 2020, as part of its social and economic projects to develop infrastructure, support education and culture and improve the living standards of the indigenous peoples, Nornickel developed new long-term programme to support key business areas of the indigenous minorities

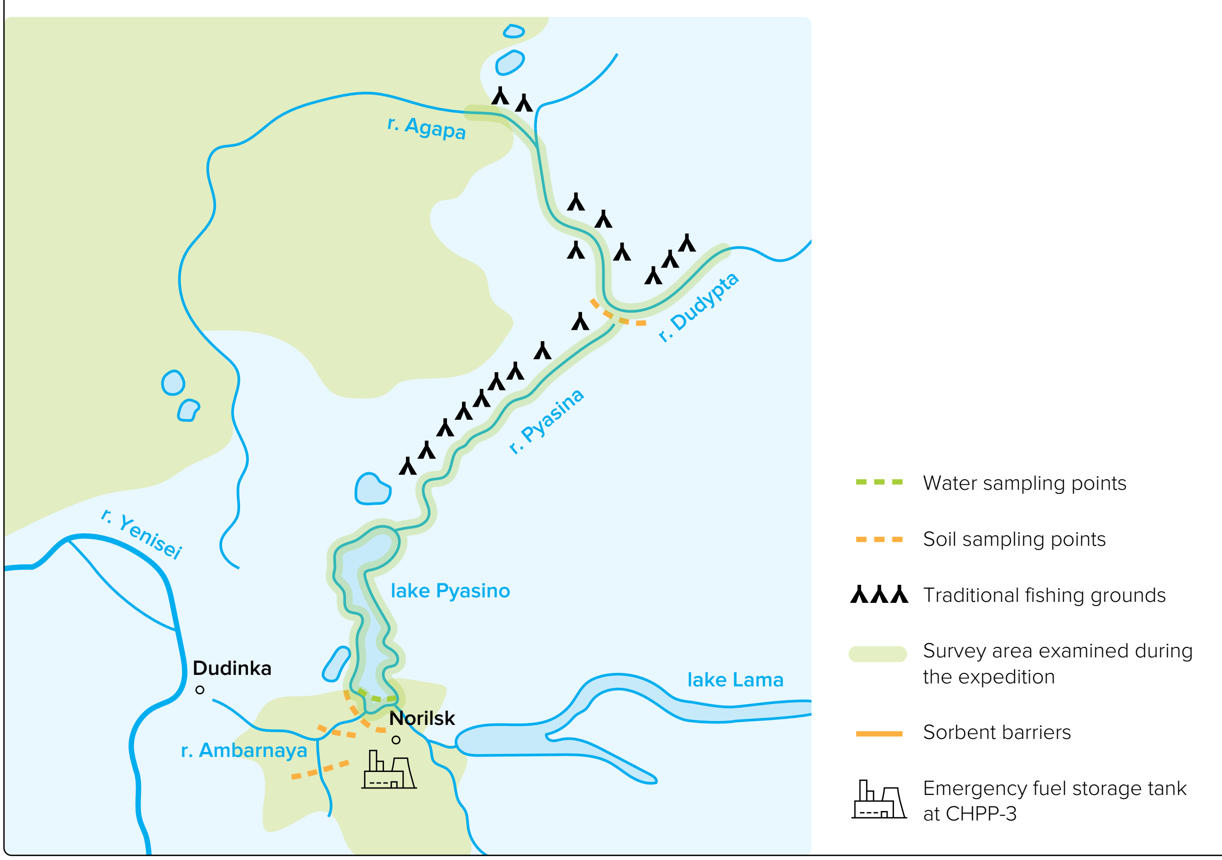
[1] According to IFRS statements.

of Taimyr. A follow-up to an ethnological expedition carried out in the summer of 2020 on the Taimyr Peninsula, the programme includes over 40 specific initiatives aimed at supporting traditional activities, developing indigenous trades, and reproducing renewable resources, which forms the basis for their traditional lifestyle and conservation of indigenous ethnic groups, as well as provides for funding to support housing, healthcare, infrastructure, tourism and socio-cultural projects. The programme is planned to be implemented within five years, with its financing totalling about RUB 2 billion (USD 28 million). Each initiative under the programme has been agreed with indigenous communities.

The supporting measures are outlined in an agreement on cooperation signed by Nornickel, the Russian Association of Indigenous Peoples of the North, the Regional Association of Indigenous Peoples of the North of the Krasnoyarsk Region, and the Local Public Organisation “Association of Indigenous Peoples of the Taimyr of the Krasnoyarsk Region”. The agreement is an important milestone of the historical partnership between the Company and indigenous peoples living in the Taimyrsky Dolgano-Nenetsky Municipal District.

In 2020, Nornickel also started making cash payments to indigenous communities fishing in the area of Lake Pyasino and the Pyasina River who were potentially affected by the diesel fuel spill at CHPP-3. Indigenous communities and the Russian Association of Indigenous Peoples of the North took part in compiling the list of 699 affected representatives of indigenous minorities based on an ethnological review conducted for the first time in Russia to assess ethnological consequences of an environmental incident. Total payments exceeded RUB 175 million (USD 2.4 million).

TRADITIONAL FISHING GROUNDS OF INDIGENOUS PEOPLES



COMPRISING 42 INITIATIVES:

- support for the traditional lifestyle of indigenous minorities on the Taimyr Peninsula
- support for educational projects, construction of a community centre
- construction of homes
- construction of children's playgrounds, purchase of sports equipment, etc.
- construction of new first aid stations, purchase of special equipment, etc.
- tourism and other development and support projects.

World of Taimyr project contest

In autumn 2020, the Taimyr Social Expedition visited Taimyr to develop proposals on a set of sustainable measures to support local social and public initiatives. The expedition held a series of focus groups, surveys and interviews. Its proposals determined a number of local development priorities such as traditional trades and ethno-tourism, creation of seasonal jobs, implementation of distance learning (online), etc.

The expedition's key proposals served as the basis for the regulations on a new World of Taimyr project contest, which will aim at supporting public initiatives and promoting sustainable development of Taimyr's indigenous territories. The Company started the World of Taimyr contest on 10 December 2020. In 2021, Nornickel will implement a unique training and support programme for project teams involving representatives of indigenous minorities, communities and public organisations of Taimyr.

The contest's key feature is that it only covers indigenous territories and communities within the Taimyrsky Dolgano-Nenetsky Municipal District. The maximum grant size is RUB 6.5 million (USD 90 thousand). The contest involves public and non-profit organisations, indigenous communities, as well as state and municipal organisations.

Every year, representatives of indigenous minorities take part in the Socially Responsible Initiatives Competition under the World of New Opportunities charity programme. In 2020, grants were awarded to 1 indigenous community, 5 non-profit organisations and 11 budgetary institutions across Taimyr settlements.

Nornickel also offers regular assistance in response to specific requests from Taimyr municipalities and sponsorship support for indigenous peoples of the North, including through arranging air transportation and supplies of construction materials and diesel fuel. Nornickel's expenses on support for northern indigenous minorities totalled about RUB 100 million (~USD 1.4 million).

SUPPORT FOR LOCAL COMMUNITIES

In supporting regional development, Nornickel focuses on financing projects that create both commercial and social value. Nornickel makes a significant contribution to the development of local communities across its footprint and runs voluntary social programmes and projects to build an inclusive and people-friendly environment, protect the environment, and support local communities, both independently and in partnership with municipalities, regional and federal authorities, not-for-profits, NGOs, and professional associations. These programmes and projects address specific regional matters to drive economic growth and improve the local social situation.

Norilsk Development Agency

The Norilsk Development Agency supports 16 SME investment projects in the service economy, manufacturing, and tourism with a total funding of around RUB 3 billion. The projects will create about 500 new jobs. IT-cube. Norilsk Children's Digital Training Centre is one of these investment projects. The agency applied to a grant competition held by the Ministry of Education of the Russian Federation to obtain a subsidy for the launches of children's digital training centres. The agency's application was supported by the city administration and the government of the Krasnoyarsk Region. Currently, 400 school students receive training in the centre.

The Norilsk Development Agency and the city administration implement greening and landscaping projects within the Lake Dolgoye recreation park and projects to create modern public and neighbourhood spaces with direct participation of Norilsk residents. A number of projects to install sports grounds and workout zones with outdoor gym equipment and benches and art forms have already been completed. One of the more recent projects is residential eco-parking with four stations for simultaneous heating of eight vehicle motors. 2020 saw the completion of an initiative to restore the Olympians, the fourth mosaic restored under the Norilsk Development Agency's project with participation of the city administration and support from Nornickel. All these projects are part of a master plan for Norilsk development.

The agency is completing the development of the first phase of a master plan for the proposed Arctic tourist cluster. The project aims to preserve fragile arctic nature and develop conscious tourism while making tourism a viable business in the arctic part of the Krasnoyarsk Region. A total of 51 investors signed an agreement for the cluster development. Funding for the cluster investment projects totals RUB 4.3 billion. Despite the COVID-19-induced lockdown, at the end of 2020, tourist traffic was up 4% year-on-year and exceeded 5,000 people. The Federal Agency for Tourism awarded grants totalling over RUB 17 million to seven companies active in the cluster. 7 new routes have been developed, 8 tourist accommodation establishments received classifications, and 38 new guides were registered. First-ever agreement for the sale of tours to Khatanga was signed between local company Anabar-tour and regional tour operators. The Arctic. Putorana Plateau tourism and recreation cluster was included in the top 30 high-potential eco-tourism areas at an all-Russian eco-cluster contest.

In August 2020, a research expedition team including representatives of WWF Russia, Joint Directorate of Taimyr Nature Reserves and federal experts visited Pronchishcheva Bay. The expedition provided data to develop future tourist routes and explore the viability of setting up camps and visitor centres at abandoned polar stations, established contacts with residents of remote villages Syndassko and Popigay as potential tourist destinations and collected information for further development of the master plan for the Arctic. Putorana Plateau tourism and recreation cluster.

Second School centre for community initiatives in the Pechengsky District

In the context of its closure of a smelting shop in Nikel, the Company together with regional and municipal authorities and local communities developed a new concept for the social and economic development of Nikel and Pechengsky District to address various social matters such as providing jobs for the shop employees, creating a favourable environment for SME development in the region as well as attracting investors to the region.

In 2020, the Company and the Second School centre for community initiatives in the Pechengsky District held a contest to provide interest-free loans for business development in the Pechengsky District. A total of 11 business projects won the contest, including new hotels, abrasive manufacturing facility, trout farm, dairy farm, environmentally friendly plastic waste recycling facility, holiday camp, bakery, mobile retail outlets, and a cafe on wheels. The total cost of the projects to be financed by Nornickel stands at RUB 212 million (USD 3 million), with about 145 new jobs expected to be created. All projects will be completed as early as 2021.

Monchegorsk Development Agency

Monchegorsk administration and Nornickel launched the Monchegorsk Development Agency in September 2020 to create a favourable environment and opportunities to drive the city's sustainable social and economic development. The agency will focus on three areas: business and investment, social and cultural projects, and tourism.

Relocation programme

In 2020, Nornickel and the Russian Government continued their joint implementation of a long-term target programme to relocate people from Norilsk and Dudinka (Krasnoyarsk Region) to other Russian regions with better climates. The programme provides for financing families entitled to relocation under government programmes and registered to purchase an apartment in Norilsk or Dudinka, with Nornickel operating as its sponsor. The programme was launched in 2011 and is scheduled for completion in 2020. Since its launch, the Company has donated a total of RUB 8,651 million (USD 207 million) under the programme. A total of 8,219 families exercised their relocation rights under the programme between 2011 and 2020, including 6,713 families from Norilsk and 1,506 families from Dudinka.

The Company fully discharged its financial obligations under the programme which was completed in 2020.

Construction of a sports and recreation centre

In 2020, the Company completed the construction of the Ayka sports and recreation centre in Norilsk. The centre was built under an agreement concluded in 2010 for collaboration and cooperation in the upgrade and development of social and utility infrastructure and housing in Norilsk. Investments in construction projects totalled more than RUB 3.6 billion (USD 50 million), including RUB 2.5 billion (USD 34.7 million) spent in 2020.

These projects span all areas within the Company's footprint. In Zabaykalsky and Murmansk Regions, such social projects have been running for several years under formal agreements.

In 2020, Nornickel provided RUB 400 million (USD 6 million million) to finance social projects of Zabaykalsky Region Government, plus RUB 50 million (USD 0.65 million million) for the Murmansk Region under a 3-year social and economic development programme.

Introduction

FIRST ON THE FRONTLINE OF FIGHT AGAINST THE COVID-19 PANDEMIC

Nornickel is Russia's No. 1 industrial company by COVID-19 spending, according to Forbes' ranking.

Last year, the global community faced a major disaster – the coronavirus pandemic. Within months, the pandemic disrupted the usual way of life for people all around the world. Nornickel management fully realised the gravity of the situation and joined the fight against the new infection as early as in March 2020.

Nornickel allocated over RUB 20 billion to fight the coronavirus – not only to protect its own enterprises but also to support local authorities, healthcare and educational institutions, and socially vulnerable citizens. The Company purchased over 460 thousand coronavirus tests and over 10 million protective masks, 356 ventilators, 400 thermal imagers, and 5 critical care vehicles. Nornickel financed the deployment of 2 stationary laboratories, 7 mobile laboratories, and 15 mini-laboratories in its regions of operation; new equipment was also purchased for local hospitals to replace obsolete equipment.

These efforts did not go unnoticed. Forbes magazine ranked Nornickel as Russia's No. 1 industrial company by COVID-19 spending.

Distancing from COVID-19

First of all, the Company made every effort to implement social distancing rules to prevent the spread of the disease. All international business travel was suspended and business travel within Russia was significantly curtailed. In the shortest timeframe, 14% of the Company employees, about 10 thousand people, were shifted to remote working. Access to Nornickel production sites was minimised for white-collar employees.

As older people are particularly vulnerable to COVID-19, all Company employees over 65 were suspended from work in accordance with a decree of Russian President Vladimir Putin. In addition, Nornickel voluntarily developed coronavirus control measures to protect employees aged over 60. The Company made sure that none of its older, more experienced employees found themselves in a difficult financial situation due to the pandemic, and continued to pay them full salaries. Blue-collar employees who could not be shifted to remote working received additional compensation.

A 24-hour employee hotline was set up, with information about all measures taken by Nornickel to combat the pandemic made available to employees at any time.

Safe operations

Nornickel, one of Russia's leading industrial companies, is one of the world's largest producers of precious and non-ferrous metals. The strategically important task of ensuring its continuous operation was greatly complicated by the threat of COVID-19 spread.

To minimise the risk of employees contracting the disease, Nornickel provided all staff with personal protective equipment and installed dispensers with disinfectants and sanitiser in all production and office premises. In a new environment, agreements were renegotiated with cleaning companies to increase the frequency of disinfection of workplaces and administrative premises.

The Company monitored employee health on a daily basis using thermal imagers and non-contact thermometers. Employees in the risk group were regularly tested for coronavirus and self-isolated as necessary.

Specific safety measures were developed for shift workers, comprising mandatory testing and quarantine in dedicated observation facilities built and equipped by the Company. Shifts were extended to include the time spent in observation facilities.

Helping hand

"Since we are in good shape, we have to take care of our employees, protect them in every possible way, both medically and socially. That's the first thing. Secondly, we need to take a look around and help municipalities and towns, especially the single-industry towns where we operate," said Nornickel's President Vladimir Potanin. Businesses had to invest considerable financial and human resources to adapt to the pandemic, and small and medium-sized enterprises were hit the hardest. Supporting them was one of the most important aspects of Nornickel's local efforts.

At the expense of Nornickel subsidiaries, rent holidays for the duration of the pandemic were granted, cargo deliveries to Norilsk were subsidised, and pro bono accounting and legal services were offered to 116 regional enterprises.

The Company provided subsidies for utility bill payments to non-profits, and granted six-month loan holidays to social entrepreneurs.

Contribution to healthcare

During the pandemic, the efforts of healthcare workers are as vital as the uninterrupted supply of medicines and availability of medical instruments and equipment.

This is especially important in the Far North. Nornickel was supporting healthcare facilities in Norilsk and on the Taimyr Peninsula from the onset of the pandemic. The Company allocated substantial sums to purchase personal protective equipment for healthcare workers, medicines and medical equipment, including vitally important defibrillators, inhalers, pulse oximeters, etc. Twenty-five new Swiss ECG machines worth a total of RUB 9 million were purchased for three ambulance sub-stations in Norilsk to replace the devices that had reached the end of their service life.

Nornickel supported the opening of an infectious disease ward for treating COVID-19 patients at the Monchegorsk Central District Hospital, equipped with ventilators. The Company also purchased state-of-the-art coronavirus testing equipment for the ward.

Doctors' efforts in minimising the spread of the virus were recognised: Nornickel awarded 27 Norilsk medics with RUB 50,000 certificates for their selfless fight against the pandemic.

CHARITY PROGRAMMES

World of New Opportunities programme

Nornickel runs the World of New Opportunities charity programme to provide sustainable development capabilities and opportunities to communities across its regions of operation. The programme aims at developing soft skills in local communities, demonstrating and introducing new social technologies, supporting and encouraging community initiatives, and creating a favourable environment for cross-sector partnerships.

In 2020, 90% of charitable events and projects scheduled for the year were held online, thus making it possible for Nornickel to continue reaching out to target audiences and achieve performance targets.

In February 2020, We Are the City! social technologies forum was held in Norilsk and Zapolyarny with over 2,000 participants. The forum was themed around People. Ideas. Locations – a synergy of caring people, useful ideas and meaningful public spaces. The main motivators were Russian and international experts: Guillermo Peñalosa, an urbanist and expert in park and urban street transformation (Toronto, Canada); Vadim Mamontov, the founder and CEO of RussiaDiscovery; winners of the Socially Responsible Initiatives Competition as regional experts; social entrepreneurs and Nornickel employee volunteers.

In June 2020, the first SVET ON youth online forum was held with over 500 participants aged between 12 and 18 from the Company's operating regions, discussing youth entrepreneurship trends, ideas for regional volunteering development, engineering and digital technologies.

The IMAKE engineering marathon was held online for more than 1,300 young inventors, resulting in a new system to engage teenagers and their parents in research and invention activities. Five participants of the marathon won the regional stage of Concours Lépine 2020 (France). Also, two-week long engineering shifts were arranged during summer holidays (in July and August).

An online Convention of Social Entrepreneurs from the North in December 2020 gathered together over 200 registered participants from 33 Russian cities (Norilsk, Dudinka, Chita, Monchegorsk, Nikel, Zapolyarny, Severodvinsk, Anadyr, Arkhangelsk, Naryan-Mar, Yakutsk, etc.) The convention focused on crisis as a time of business opportunity, with participants discussing coronavirus business cases and solutions and sharing their experiences and best practices.

In December 2020, the Company provided a total of RUB 154 million (USD 2.1 million) to support 109 social initiatives that had won the Socially Responsible Initiatives Competition.

All in all, about 27 thousand people from across Nornickel's footprint and beyond were involved in the social projects run under the World of New Opportunities charity programme in 2020. The charitable programme's wider footprint is one of the benefits of using the online format to hold its events.

The Plant of Goodness corporate volunteer programme

Nornickel's corporate volunteering programme comprises a vast array of volunteer and charitable projects across all regions in which Nornickel operates – in the Norilsk Industrial District, on Kola Peninsula, in Chita and Moscow. The programme supports employee volunteers' social initiatives aimed to contribute to the social development

of our operating regions and better quality of life for local communities. At present, the Plant of Goodness volunteer community boasts over 2,500 participants, who have launched and delivered over 350 initiatives between themselves.

VOLUNTEERING DURING THE PANDEMIC

The coronavirus pandemic presented a real challenge to the corporate volunteering programme. Nevertheless, employee volunteers promptly responded to the new challenges with mutual aid projects. As part of COVID-19 response, a 200-strong employee volunteer team was set up, which prepared and delivered food baskets and medicines to vulnerable groups and made over 3,000 reusable masks. Also during the pandemic, employee volunteers congratulated 372 veterans on the Victory Day.

Bystrinsky GOK volunteers and the Baikal regional branch of the Union of Russian Volunteers arranged the delivery of essential supplies to local people in the high coronavirus risk group, people with reduced mobility and elderly people living alone, in Chita and Gazimursky Zavod. The Company financed the procurement of food and provided the volunteers with personal protective equipment: masks, hand sanitisers, and gloves. Nornickel employees took special training from Russian volunteer university to help elderly people in emergencies. In Monchegorsk, the Plant of Goodness volunteers set up a small shop to make reusable masks. The Company helped with buying gauze for face masks, with the required number of volunteers found through the programme's chat.

THOSE WHO CARE, A CORPORATE PROGRAMME TO SUPPORT CHANGE WITHIN THE COMPANY

Those Who Care change-support programme for Nornickel employees was launched in 2020. The programme brings together activist employees of various professions from different enterprises to develop and implement change projects outside their functional roles or KPIs.

In 2020, Kola MMC hosted kick-off sessions, formed project teams, organised profiling business games (to define a participant's portrait and skills mix), and launched komunevseravno.ru website and the Change Makers Club.

NEW TEAM WILL GIVE SUSTAINABILITY

//photo: Interview of Vladimir Potanin

FOR MORE DETAIL
SEE ON THE WEB-SITE

//NORNICKEL.COM

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Changes in organizational structure aiming at strengthening of the management team should support Nornickel’s strategic drive to improve the sustainability and efficiency of operations. A new management Risk Committee to be created, which is to be chaired by the Company’s President, that should help improving the efficiency of risk management. This will mark the completion of a vertical risk management structure fully penetrating the Company from the level of blue-collar workers to its President.

LETTER FROM THE CHAIRMAN OF THE CORPORATE GOVERNANCE COMMITTEE

Nornickel is commuted to continuous and consistent improvement of its corporate governance framework. Effective corporate governance is critical to enhancing the stability and efficiency of the Company's operations and competitive edge while boosting investments in the Russian economy from both domestic sources and foreign investors. This is why Nornickel maintains a strong focus on this aspect and fully complies with the majority of the corporate governance principles set forth in the Corporate Governance Code. The Company will continue to improve its corporate governance practice in line with the highest standards, guided primarily by the Corporate Governance Code recommended by the Bank of Russia.

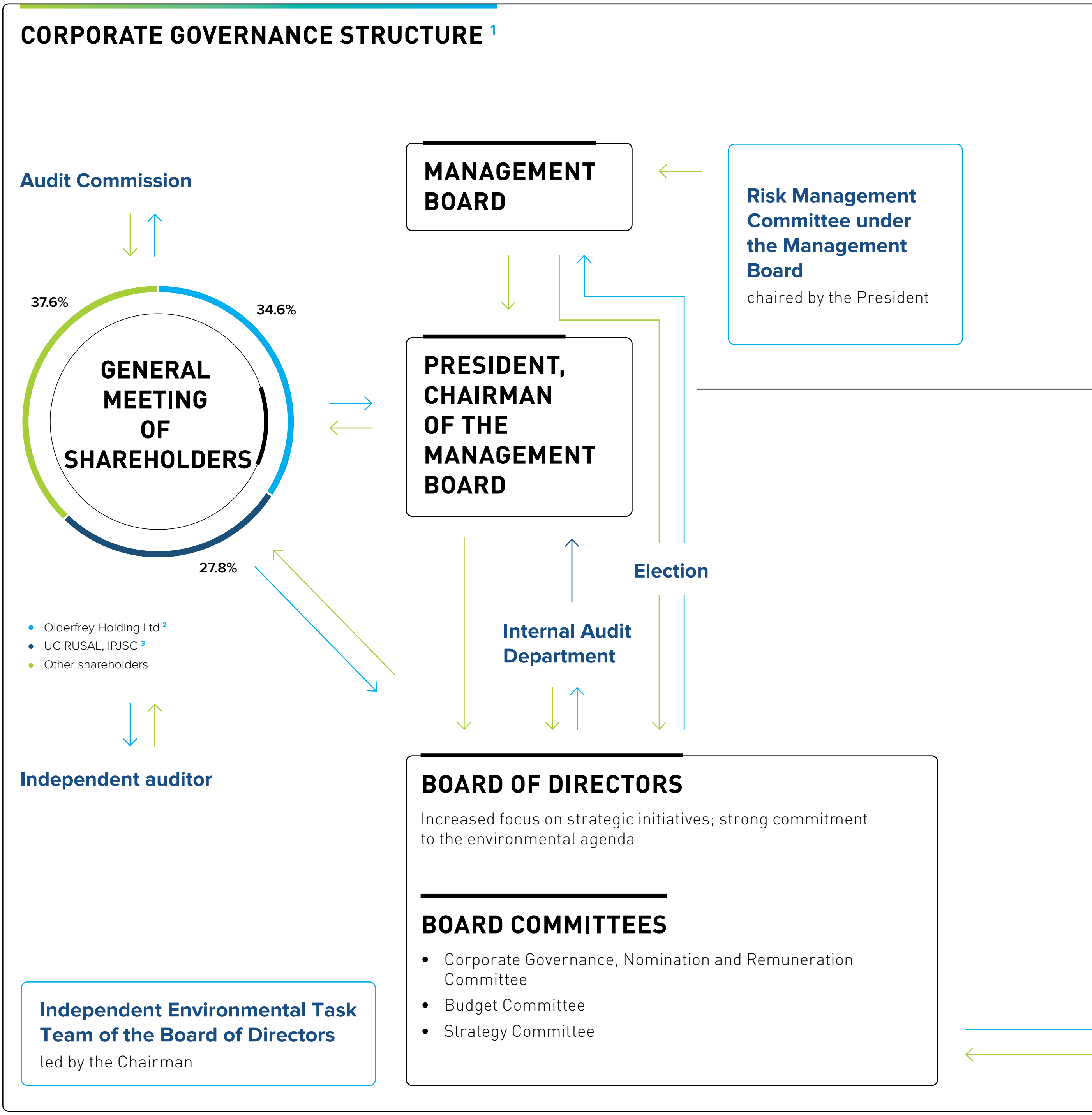
Although it was a difficult year for the Company and the country as a whole, in the reporting period, the Board of Directors addressed strategically important matters and placed a particular emphasis on enhancing corporate governance. The transformations and activities carried out during this challenging period enabled Nornickel to maintain its leadership in the Russian and global markets and retain its appeal to the investment community.

Being perfectly aware of the importance of its goals, in 2021, Nornickel will continue its best efforts to achieve them. By consolidating the experience of its employees, managers and shareholders the Company will be able to maintain high performance and confidently follow the path of development and success in the competitive environment.

Robert Edwards

Member of the Board of Directors, MMC Norilsk Nickel

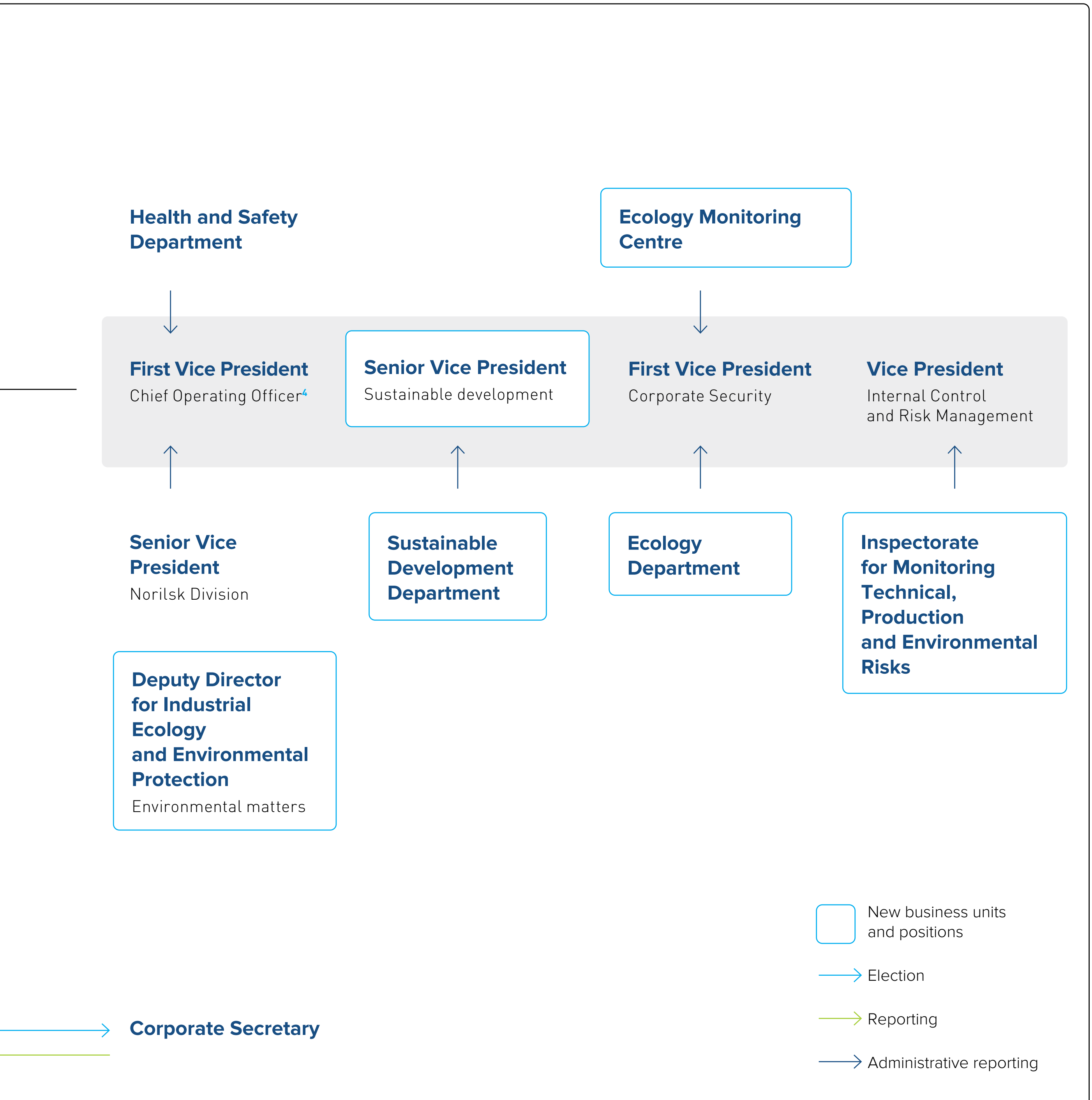
CORPORATE GOVERNANCE STRUCTURE



[1] The corporate governance chart includes new structures dealing with environmental matters.

[2] Indirect ownership via controlled persons.

[3] Direct and indirect ownership via controlled persons. IPJSC EN+ Group owns 56.88% of voting shares in UC RUSAL, IPJSC.



[4] On 1 March 2021, the position of First Vice President – Operations Director was removed from the Company's organisational structure, with Senior Vice President of the Norilsk Division now reporting directly to the Company's President, while the Health and Safety Department became part of the Strategy, Strategic Projects, Logistics and Procurement function.

KEY PRINCIPLES

In its corporate governance practice, Nornickel is governed by applicable laws, listing rules, and recommendations of the Corporate Governance Code. Nornickel's corporate governance framework is designed to balance the interests of our shareholders, the Board of Directors, management and employees, as well as other stakeholders involved in Nornickel's activities. The approach, key principles and mechanisms underpinning Nornickel's efforts to build a robust corporate governance framework are based on the applicable Russian laws, including the Corporate Governance Code recommended by the Bank of Russia.

KEY CORPORATE GOVERNANCE PRINCIPLES

Equitable and fair treatment of every shareholder

Corporate social responsibility

Ensuring transparency of information about the Company

Accountability of the Board of Directors and executive bodies

Professionalism and leadership of the Board of Directors

Effective risk management and internal control framework

Combating corruption

IMPROVEMENT OF CORPORATE GOVERNANCE

During the year, Nornickel focused on improving corporate governance to enhance sustainability management efficiency. The Environmental Task Team was set up at the Board level, chaired by Gareth Penny, the independent Chairman of the Board of Directors, and is comprised solely of independent directors. The new team was set up primarily in response to the Board of Directors' desire to pay closer attention to sustainability in general, and environment in particular.

Significant organisational changes were made at the management level within the Company. Specifically, to improve the efficiency of risk management and supplement the existing system of industry committees, the new Risk Committee was set up, headed by the President of the Company. The creation of the Committee marked the completion of a vertical risk management structure fully penetrating the Company from the level of blue-collar workers to its President, Management Board and Board of Directors.

In addition, in 2020, the new Ecology Department and Inspectorate for Monitoring Technical, Production and Environmental Risks were established to better manage the risks of negative environmental impacts and enhance environment-related industrial safety. The new Ecology Monitoring Centre was established to set up an ecology monitoring system designed in line with best practices. The Ecology Department cooperates with all units across the Company, being responsible for implementing the strategy aimed at assessing environmental risks and minimising the Company's adverse environmental impacts, as well as restoring ecosystems in Nornickel's regions of operation.

Last year, a new position of Senior Vice President for Sustainable Development was created (filled by Andrei Bougrov), and the Sustainable Development Department was set up. The key tasks of the new department are to improve sustainability performance and coordinate the Company's units in order to bring internal processes and regulations in line with the best international standards, such as ICMM and IRMA. Senior Vice President for Sustainable Development will focus on relations with all stakeholders and support the Board of Directors' Environmental Task Team.

In 2021, senior management's KPIs will include the Zero Environmental Incidents indicator with a weight of 20% (within team KPIs) to ensure a clear link between the implementation of the Company's environmental strategic priorities and the level of remuneration.

In addition, new position of Vice President for Federal and Regional Programmes with the following responsibilities was introduced:

- Implementing programmes and interacting with federal and regional government authorities
- Representing the Company's interests in various collective bodies
- Developing strategic partnerships with regional governmental authorities, development institutions, Russian and international public organisations, environmental organisations and movements, in particular, with the objective of promoting sustainable development of Nornickel's regions of operation while implementing its Indigenous Rights and Biodiversity Conservation policies

In 2020, particular emphasis was placed on social matters. The Company did all that was necessary to minimise the impact of the pandemic on its employees, local communities, and vulnerable groups in its regions of operation. The Board of Directors supports the policy of providing assistance to Nornickel's regions of operation. Management initiatives aimed at assisting Nornickel's operating regions are regularly reviewed by the Corporate Governance, Nomination and Remuneration Committee of the Board of Directors.

An important initiative to improve corporate governance last year was the transformation of the governance framework into three divisions on a regional basis – Norilsk, Kola and Trans-Baikal. The three divisions combine the Company's main production and ancillary assets located in respective regions. In addition to the assets located on the Kola Peninsula, Norilsk Nickel Harjavalta plant became part of the Kola Division. The prerequisites of the transition to a division-based governance model were the centralisation of service functions in the Shared Services Centre, as well as the high level of maturity of the Company's business processes and the degree of their automation achieved by the management team in recent years.

The transition to a division-based structure is aimed at significantly increasing the level of responsibility of local managers as they are vested with more powers in operational and investment matters (asset-level investment limits not requiring the approval of the corporate centre were tripled) while maintaining the strategic and expert role of the corporate centre.The divisions will have comprehensive operational responsibility for their respective production processes and infrastructure facilities, as well as financial performance and risk management. This transition was an important expansion of the earlier set of measures based on an analysis of the causes of recent environmental incidents, and should help the Board of Directors manage matters relating to sustainability and the Company's strategy in a more efficient way.

As part of the efforts to improve the corporate governance framework in 2020, the Board of Directors also approved a new version of the Directors' Code of Corporate Conduct and Business Ethics.

The new version of the Code complies with best corporate governance practices, builds on the Company's values listed in the Manifesto of Our Values, updates the rules for insider information transactions in accordance with the new version of the Regulations on Procedures for Access to Insider Information of PJSC MMC NORILSK NICKEL, and Rules for Protection of Insider Information Confidentiality and Control over Compliance with the Requirements of Laws Related to Combating Insider Information Unlawful Use and Market Manipulation.

Despite the challenges faced by the Company in 2020, a smart strategy and an in-depth analysis of market developments helped propel Nornickel to an entirely new level of efficiency, reaffirming its status as one of the most compelling investment cases in Russia.

In 2020, Nornickel's investment-grade credit ratings were affirmed by the Big Three credit rating agencies: Standard & Poor's, Moody's and Fitch. Expert RA affirmed Nornickel's credit (financial stability) rating at the highest level according to the national rating scale (the Company has maintained its ruAAA credit rating, which corresponds to the sovereign credit rating of the Russian Federation, for three years running). Russian AK&M Rating Agency assigned a RESG 1 rating to Nornickel's sustainability reporting (which attests to the highest level of disclosure in ESG reporting). Nornickel was also able to improve its ESG score from international rating agencies; in particular, the ESG score assigned by S&P Global, one of the world's leading rating agencies, was up by 11 points to 44 (33 in 2019), and the Company's ESG score from FTSE4Goog was 4.0 (3.0 in 2019).

Nornickel was included in the Most Honored list of Institutional Investor's 2020 Emerging EMEA Executive Team ranking, in the metals and mining sector.

In 2020, the ranking is based on a survey of 226 investors (portfolio managers and analysts) as well as 159 brokerage and investment banking analysts. The following parameters were assessed: the management's willingness to interact with the investment community; timely and appropriate disclosure of financial information; prompt and comprehensive response to queries; a well-informed investor relations team authorised to speak with authority on behalf of the Company; constructiveness of conference calls; quality of meetings held as part of road shows, conferences, corporate documents and materials for investors; provision of analytical assessment and ESG reports; quality of the corporate website; and adherence to corporate governance standards. In addition, Nornickel topped the rating of Russian companies that provided the most comprehensive response to the pandemic.

Nornickel reiterates its commitment to further improvement of corporate governance in 2021 in order to boost the Company's operational efficiency and drive its competitive edge in the domestic and global markets. Priorities include improving sustainability management, reducing environmental risks and enhancing industrial safety, as well as countering the coronavirus pandemic and mitigating its impact on the Company and local communities. In 2021, the Company plans to get ready to join the ICMM international association and be certified under the IRMA standard, as well as start implementing the plan to ensure compliance with TCFD standards. On top of that, in 2021, environmental performance indicators will be included in senior management's KPIs to ensure a clear link between the implementation of the Company's strategic priorities and the level of remuneration.

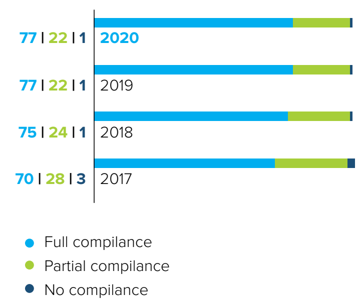
COMPLIANCE WITH THE CORPORATE GOVERNANCE CODE

Nornickel's corporate governance standards are based on the recommendations of the Corporate Governance Code, and the Company continues to implement the Code's principles and recommendations. Out of 79 principles of the Code, the Company fully complies with 61 (about 77%), partially complies with 17 and does not comply with only one principle. For the full 2020 Report on Compliance with the Corporate Governance Code with comments on cases of partial compliance and non-compliance with the Code's principles, please see Appendix 2.

In 2017, Nornickel prepared its inaugural Report on Compliance with the Corporate Governance Code using the report template recommended by the Bank of Russia's Letter No. IN-06–52/8.

The table below shows a significant improvement of the Company's compliance level since 2017 (61 principles are fully complied with versus 55 in 2017).

IMPLEMENTATION OF THE CORPORATE GOVERNANCE CODE PRINCIPLES AND RECOMMENDATIONS (%)



Corporate governance principles	Number of principles recommended by the Code	2017			2018			2019			2020		
		55	22	2	59	19	1	61	17	1	61	17	1
	100%	70%	28%	2%	7%	24%	1%	77%	22%	1%	77%	22%	1%
Rights and equal opportunities for shareholders in exercising their rights	13	12	1	–	12	1	–	12	1	–	12	1	–
Board of Directors	36	24	11	1	27	9	–	27	9	–	27	9	–
Corporate Secretary	2	2	–	–	2	–	–	2	–	–	2	–	–
Remuneration system for members of the Board of Directors and senior management	10	3	6	1	4	5	1	4	5	1	4	5	1
Risk management and internal control framework	6	4	2	–	4	2	–	6	–	–	6	–	–
Company disclosures	7	7	–	–	7	–	–	7	–	–	7	–	–
Material corporate actions	5	3	2	–	3	2	–	3	2	–	3	2	–

Full compliance   Partial compliance   No compliance

STAKEHOLDER RELATIONS

To achieve operational excellence and further improve corporate governance, Nornickel focuses on engaging its stakeholders in corporate governance, taking their needs into account when making important decisions.

DIALOGUE WITH INVESTORS

Nornickel maintains an active dialogue with a wide universe of international and Russian investors, seeking to follow global best practices in making mandatory disclosures. To make disclosures more meaningful and comprehensive, Nornickel uses an array of disclosure tools, including press releases, presentations, annual and sustainability reports, corporate action notices, as well as interactive tools. With Nornickel's growth story appealing to both Russian and international investors, the Group provides parallel disclosure both in Russian and in English via a disclosure service authorised by the UK regulator.

Nornickel's quarterly disclosures via its website include its operating performance, quarterly issuer reports, financial statements under RAS, and lists of affiliates. Financial statements in accordance with IFRS are released on a semi-annual basis and are followed by webcasts and conference calls with the Group's senior management and one-on-one meetings with analysts. Nornickel also holds an annual Capital Markets Day to share its updates on the corporate long-term strategy until 2030, focusing on sustainability and environmental friendliness. To maintain strong investor relations, the Group makes extensive use of various communication tools, including conference speaking opportunities, road shows, site visits for investors, etc.[1]

In 2020, despite the pandemic, the Company continued to pursue an active dialogue with investors while striving to diversify its shareholder base. In March 2020, following the nationwide lockdown in Russia, all investor communications went online. For the first time, the Company held its Capital Markets Day online, along with over 300 virtual meetings with investors and conference calls with the Company's senior management to discuss IFRS statements.

In its communications, Nornickel places a particular emphasis on environmental safety and sustainability. 2020 saw a major environmental incident: an accidental damage to a diesel fuel storage tank, caused by melting permafrost and design/construction flaws, resulted in a leak of 21 thousand t of diesel fuel in the Kayerkan District of Norilsk. The Company immediately responded with a major programme, implying active state and private partner engagement, to collect the fuel and clean up the area. Comprehensive real-time updates on the incident were published on the Company's website and in social media. In addition, an emergency conference call with investors and analysts was arranged at short notice. Nornickel did its best to clean up the site and prevent any such incidents in the future.

To improve its communication with investors who consider the Company's ESG ratings when making investment decisions, as well as with rating agencies that rate the Company on ESG factors, since 2020, Nornickel publishes all latest updates on its ESG performance, in a new section on its website, ESG Highlights.

DIALOGUE WITH EMPLOYEES

The Company regularly runs open online conferences between employees and senior management to identify strengths and weaknesses in communication and improve corporate governance. In 2020, more than 40 Nornickel enterprises held 1.5-hour live conferences where top managers spoke about the Company's future plans and development strategy, and answered the most pressing questions first-hand. Following the latest conference at the end of December, Nornickel issued a leaflet for employees covering such urgent matters as the pandemic and its impact on the Company, the global economy, the environment and the accident at CHPP-3, as well as organisational changes. A particular emphasis was placed on salaries and social benefits amid the lockdown; Nornickel's HR policy, which is traditionally employee-oriented; and measures to prevent the spread of coronavirus. The leaflet also details how the Company helps local communities in its operating regions, medical institutions and entrepreneurs in the Norilsk Industrial District, on the Taimyr Peninsula, in Monchegorsk and in the Pechenegsky District during the pandemic.

Over the past 3 years, 24 thousand employees participated in 120 conferences.

DIALOGUE WITH LOCAL AND INTERNATIONAL ORGANISATIONS

In November 2020, Nornickel's representatives participated in the UN's online conference on transnational organised crime which brought together over 40 experts from two dozen countries. Nornickel's representative spoke about its new initiatives to be discussed with its partners at the Security Committee of the International Platinum Group Metals Association and within the scope of the Company's involvement in the Security Improvements through Research, Technology and Innovation (SIRIO) project of the United Nations Interregional Crime and Justice Research Institute (UNICRI).

Nornickel also became an official partner of the Arctic: Today and the Future forum, which in 2020 focused on uniting the efforts of the government, businesses and communities to tackle sustainability issues and implement national projects in the Arctic. The forum brought together representatives of Russian federal and regional executive authorities, member countries of the Arctic Council, leading Russian and international companies, as well as research, public and environmental organisations. Nornickel's representatives emphasised that developing the Russian Arctic is

[1] Information about upcoming events is posted in the IR Calendar on the corporate website.

a crucial strategic goal and that the only way to act in the most efficient way is to join the efforts of the government and large businesses.

A well-built and clear corporate governance framework which is transparent for both Russian and foreign shareholders and investors, as well as active stakeholder engagement directly affect investment decisions and the price of Company securities.

MANAGING CONFLICTS OF INTEREST

Nornickel has developed measures to prevent potential conflicts of interest involving shareholders, Board members and senior managers.

The Company's Articles of Association set forth the procedure for approving transactions with a conflict of interest made by shareholders who hold more than 5% of voting shares. Such transactions are only made if approved by Nornickel's Board of Directors by a qualified majority of directors (at least 10 out of 13 votes).

Transactions with a conflict of interest that are deemed interested-party transactions are regulated by the law on joint stock companies.

In addition, Nornickel's internal documents stipulate that members of the Board of Directors and the Management Board are to refrain from actions that may result in a conflict of interests, and if such a conflict arises, they should promptly inform the Corporate Secretary in writing thereof.

If a Board member has a direct or indirect personal interest in a matter reviewed by the Board of Directors, they should inform other members of the Board of Directors before the matter is reviewed or a relevant resolution is passed, and refrain from participating in the review and from voting on the matter.

Nornickel also has in place the Regulations on the Prevention and Management of Conflicts of Interest, covering the Company employees, that outlines, in particular, the methods to identify potential or existing conflicts of interest and ways to resolve them. A Conflict of Interest Commission was set up at the Company's Head Office to enhance the effectiveness of preventing, identifying and resolving conflicts of interest, as well as to develop and improve the corporate culture.

GENERAL MEETING OF SHAREHOLDERS

The General Meeting of Shareholders is the supreme governance body of MMC Norilsk Nickel responsible for making decisions on matters most crucial to the Company. A full list of matters within the remit of the General Meeting of Shareholders is detailed in the Company's Articles of Association. Nornickel has in place the Regulations on the General Meeting of Shareholders, detailing the procedures for convening, preparing and holding general meetings.

The notice of a General Meeting of Shareholders is published in the Rossiyskaya Gazeta and Taimyr newspapers, and posted on Nornickel's website at least 30 calendar days prior to the date of the general meeting.

Holders of MMC Norilsk Nickel shares who are registered in the shareholder register receive a ballot directly from the Company and are entitled to exercise their voting right by sending the ballot to the Company or by attending the General Meeting of Shareholders (in person or by proxy).

Shareholders of MMC Norilsk Nickel who own the Company shares via nominee holders receive the voting ballot from the nominee holder. They are entitled to vote at the meeting in the same way as the holders registered in the shareholder register or instruct the nominee holder to do the same as prescribed by the Russian securities law. Nominee holders duly instructed by their clients communicate the voting instructions to the registrar. The receipt of instructions by the registrar shall be equivalent to voting by ballot.

ADR holders do not receive voting ballots directly from the Company. According to the depository agreement, Nornickel notifies the depository, which as soon as possible, and provided it is not prohibited by the Russian law, notifies ADR holders about the general meeting and encloses voting materials and a document describing the voting procedure for ADR holders. To exercise their voting rights, ADR holders instruct the depository accordingly.

Except for the cumulative voting to elect members of the Board of Directors, each voting share represents one vote at the General Meeting of Shareholders.

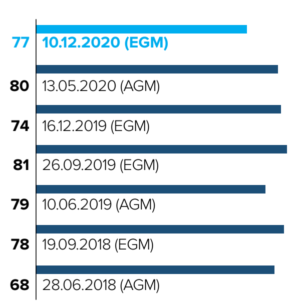
Two General Meetings of Shareholders were held in 2020, and a high level of shareholders' attendance was maintained. The Annual General Meeting of Shareholders during the COVID-19 pandemic was held in absentia using an e-voting service.

Each year, more and more shareholders take advantage of this service enabling them to vote regardless of their location. E-voting is available both on the gosuslugi.ru website accessible to general public and via the Shareholder's Personal Account, a dedicated online resource for Nornickel's shareholders. The service is highly reliable and easy to use.

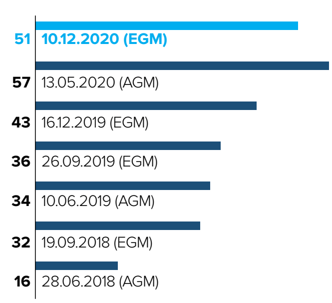
GENERAL MEETINGS OF SHAREHOLDERS HELD IN 2020

13 May 2020 – an Annual General Meeting of Shareholders (held in absentia)	The Meeting approved the Annual Report, annual accounting (financial) statements and consolidated financial statements. Profit for the period was distributed, and the resolution on FY 2019 dividend payout was passed. A new Board of Directors and Audit Commission were elected; resolutions on remuneration of members of the Board of Directors and the Audit Commission were passed. A new version of the Remuneration Policy for Members of the Board of Directors of MMC Norilsk Nickel was approved. An interested party transaction (liability insurance of members of the Board of Directors and the Management Board) and related interested party transactions (indemnification of members of the Board of Directors and the Management Board) were approved. The auditor was approved to audit Nornickel's Russian accounting (financial) statements, consolidated financial statements, and interim consolidated financial statements.
10 December 2020 – an Extraordinary General Meeting of Shareholders (held in absentia)	A resolution to pay the 9M 2020 dividend was passed

QUORUM AT GENERAL MEETING OF SHAREHOLDERS IN 2018–2020 (%)



THE SHARE OF SHAREHOLDERS WHO USED E-VOTING SERVECES (%)



SHAREHOLDERS' ATTENDANCE AT AGM (NUMBER OF SHAREHOLDERS)

BOARD OF DIRECTORS

COMPOSITION OF THE BOARD OF DIRECTORS

The Board of Directors plays a crucial role in designing and developing the corporate governance framework, ensures the protection and exercise of shareholder rights, and supervises executive bodies. Guided by the principles of mutual respect and humanism, the Board of Directors sets the fundamental principles of business conduct and is responsible for nurturing Nornickel's business and social culture.

The Board's authority and formation process, as well as the procedure for convening and holding Board meetings are determined by the Articles of Association and Regulations on the Board of Directors

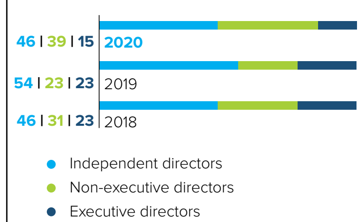
According to Nornickel's Articles of Association, the Board of Directors has 13 members. Members of the Board are elected at the Annual General Meeting of Shareholders for a period until the next Annual General Meeting of Shareholders. The current size of the Board of Directors is best aligned with Nornickel's goals and objectives, and its appropriate independence mix ensures that decision making considers the interests of all stakeholders and enhances the quality of managerial decisions. The current Board of Directors comprises six independent directors, which enables highly professional, independent judgements on matters on the agenda.

Following the Annual General Meeting of Shareholders on 13 May 2020, Andrei Bougrov and Stalbek Mishakov stepped down from the Board of Directors, and Nikolay Abramov and Sergey Batekhin were elected to the Board.

As at 31 December 2020, the Board of Directors had 13 members, of which:

- six independent directors: Gareth Peter Penny, [redacted], Sergey Volk, Roger Munnings, Evgeny Shvarts, and Robert Edwards
- five non-executive directors: Nikolay Abramov, Alexey Bashkirov, Sergey Batekhin, Maxim Poletaev, and Vyacheslav Solomin
- two executive directors: Sergey Barbashev and Marianna Zakharova.

STATUS OF BOARD MEMBERS



CHAIRMAN OF THE BOARD OF DIRECTORS

The Chairman of Nornickel's Board of Directors leads the Board of Directors, convenes and chairs its meetings, ensures constructive collaboration between the Board members and corporate management.

Since March 2013, the Board of Directors has been chaired by Gareth Peter Penny, who in line with global best practice is an independent director. At Gareth Penny's initiative, in June 2020, the Board of Directors set up an Environmental Task Team to review a wide range of matters relating to the Company's sustainable development, including the climate agenda. Gareth Penny promotes open discussion at meetings and encourages active involvement of all Board members. Gareth Penny's external non-executive directorships enable Nornickel's Board of Directors to better keep abreast of global best practice in corporate governance.

INDEPENDENT DIRECTORS

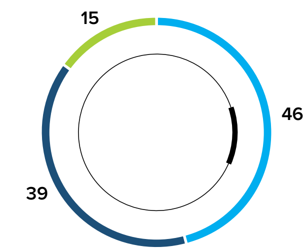
In line with corporate governance best practice, Nornickel's Board of Directors assesses Board nominees and new members against the independence criteria set forth in the Company's Articles of Association and the Listing Rules of PJSC Moscow Exchange (the "independence criteria").

As at the beginning of the reporting year, [redacted], Roger Munnings, Gareth Peter Penny, Robert Edwards and Evgeny Shvarts fully met the independence criteria. Members of the Board of Directors Sergey Volk and Maxim Poletaev were determined to be independent by resolution of the Board of Directors despite being related to a substantial counterparty, Sberbank, as the relation does not affect their ability to make independent, unbiased judgements in good faith.

In March 2020, [redacted] and Gareth Peter Penny's tenures on the Board of Directors exceeded seven years, and upon assessing their independence, the Board of Directors deemed them independent despite their relation to Nornickel.

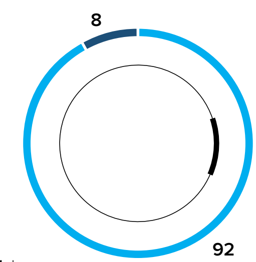
The new Board of Directors elected by the Annual General Meeting of Shareholders assessed the elected Board members against the independence criteria and determined that Roger Munnings and Evgeny Shvarts meet the criteria, and Gareth Peter Penny, [redacted], Robert Edwards and Sergey Volk are independent despite being related to Nornickel (Gareth Peter Penny, [redacted] and Robert Edwards – due to their tenure on the Board over seven years) or a substantial counterparty (Sergey Volk) as it does not affect their ability to make independent, unbiased judgements in good faith.
Thus, as at end-2020, 6 out of the 13 Directors, or 46.2%, were independent.

TENURE ON THE BOD (%)



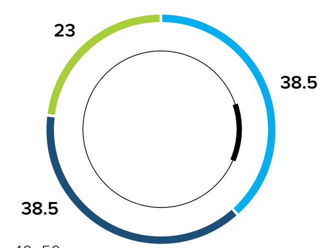
- Under 3 years
- 3–8 years
- Over 8 years

BOARD COMPOSITION BY GENDER (%)



- Male
- Female

BOARD COMPOSITION BY AGE GROUP (%)



- 40–50
- 51–61
- Over 61

THE BOARD'S EXPERIENCE AND SKILL MIX

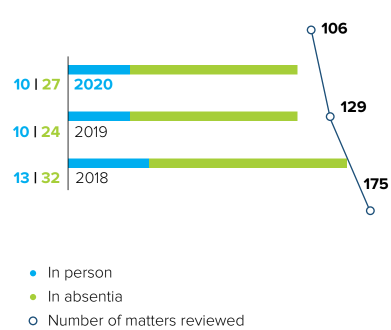
Name	Tenure on the Board of Directors	Key skills				
		Strategy	Law and corporate governance	Finance and audit	Metals and mining/ engineering	International economic relations
Gareth Peter Penny	2013–present	+			+	+
Sergey Barbashev	2011–present		+			
Alexey Bashkirov	2013–present	+	+	+		+
[redacted]	2013–present	+	+	+	+	
Sergey Volk	2019–present			+		
Marianna Zakharova	2010–present		+		+	
Roger Munnings	2018–present			+	+	
Maxim Poletaev	2019–present	+		+		
Vyacheslav Solomin	2019–present			+		+
Evgeny Shvarts	2019–present	+			+	
Robert Edwards	2013–present		+	+	+	
Nikolay Abramov (from 13 May 2020)	2020–present	+				
As at 31 December 2020, the average tenure on the Board of Directors was five years		**5**	**6**	**8**	**8**	**5**
Sergey Batekhin (from 13 May 2020)	2020–present			+		+
Andrei Bougrov (until 13 May 2020)	2002–2020		+		+	+
Stalbek Mishakov (until 13 May 2020)	2012–2020		+	+	+	+

BOARD OF DIRECTORS' PERFORMANCE

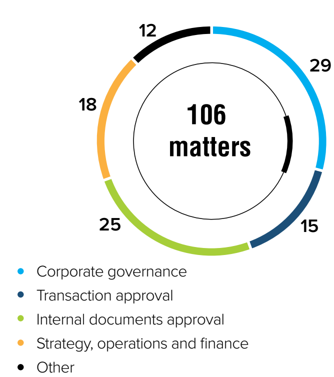
In 2020, Nornickel's Board of Directors held 37 meetings, including 10 meetings in person, and reviewed 106 matters.

At its meetings, the Board focused on environment matters, including regular management reports on the progress of eliminating the consequences of the incident at CHPP No. 3 in Norilsk, analysis of Nornickel's environmental protection strategy, including the Sulphur Programme, assessment of the infrastructure, and the impact of climate factors, such as permafrost, on the Company's operations. Particular attention was paid to stakeholder engagement on ESG matters and review of the Company's internal control and risk management frameworks critical for the Company's sustainability.

NUMBER OF BOARD MEETINGS



MATTERS REVIEWED (%)



ATTENDANCE AT MEETINGS IN 2020 [1]

In 2020, attendance at Board meetings was 100%.

Name	Status	Meetings of the Board of Directors attended/held			Meetings of Board committees attended/held			
		Total	In person	In absentia	Strategy Committee	Budget Committee	Audit and Sustainable Development Committee	Corporate Governance, Nomination and Remuneration Committee
Gareth Peter Penny	Independent Director/Chairman of the Board of Directors	37/37	10/10	27/27	8/8	—	—	—
Sergey Barbashev	Executive Director	37/37	10/10	27/27	—	—	—	—
Alexey Bashkirov	Non-Executive Director	37/37	10/10	27/27	2/8	1/4	5/9	4/13
[redacted]	Independent Director	37/37	10/10	27/27	8/8	4/4	9/9	13/13
Sergey Volk	Independent Director	37/37	10/10	27/27	—	1/4	—	9/13
Marianna Zakharova	Executive Director	37/37	10/10	27/27	—	—	—	—
Roger Munnings	Independent Director/Chairman of the Audit and Sustainable Development Committee	37/37	10/10	27/27	—	4/4	9/9	—
Maxim Poletaev	Non-Executive Director/ Chairman of the Strategy Committee	37/37	10/10	27/27	8/8	3/4	—	4/13
Vyacheslav Solomin	Non-Executive Director	37/37	10/10	27/27	—	3/4	9/9	—
Evgeny Shvarts	Independent Director	37/37	10/10	27/27	2/8	—	—	9/13
Robert Edwards	Independent Director/Chairman of the Corporate Governance, Nomination and Remuneration Committee	37/37	10/10	27/27	—	—	9/9	13/13
Nikolay Abramov (from 13 May 2020)	Non-Executive Director	25/37	9/10	16/27	6/8	—	—	—
Sergey Batekhin (from 13 May 2020)	Non-Executive Director/ Chairman of the Budget Committee	25/37	9/10	16/27	6/8	3/4	4/9	9/13
Andrei Bougrov (until 13 May 2020)	Executive Director	12/37	1/10	11/27	—	—	—	—
Stalbek Mishakov (until 13 May 2020)	Non-Executive Director	12/37	1/10	11/27	—	1/4	—	4/13

[1] The attendance by Board members is represented as X/Y, where X is the number of meetings attended by the Director, and Y is the number of meetings held.

INDUCTION OF NEW MEMBERS OF THE BOARD OF DIRECTORS

Nornickel has in place the the Professional Development Policy for Members of Board of Directors. To comply with the Policy's requirements as well as to maintain good governance at Nornickel and ensure its continuous improvement, newly elected Board members get immersed into the business processes through a series of meetings with executives and key employees where they discuss key aspects of Nornickel's business, and the Corporate Secretary ensures that new directors get acquainted with the requirements of Nornickel's current internal documents. Board members are informed about their rights and duties, including the requirement to notify the Company on changes in their status. Company employees attend the insider information management training course each year. The Company arranges regular off-site sessions for members of the Board of Director to make site visits to production facilities and meet with heads of operating units. In September 2020, an off-site session was arranged for several Board members to visit Kola MMC. Due to the COVID-19 pandemic, no other off-site events were held but regular video calls made up for cancelled visits. In 2021, members of the Board of Directors plan a number of site visits to Nornickel's production facilities as soon as the situation allows.

PERFORMANCE EVALUATION OF THE BOARD OF DIRECTORS

As recommended by the Corporate Governance Code, the Corporate Governance, Nomination and Remuneration Committee of the Board of Directors initiated the development of the Performance Evaluation Policy for Board of Directors, engaging independent consultants and incorporating global best practice in corporate governance. In line with the Policy, since 2014, Nornickel has run annual internal evaluation (self-evaluation) of the Board of Directors' performance by inviting Directors to fill in an online questionnaire following the schedule approved by the Board of Directors.

Based on the evaluation results, the Corporate Governance, Nomination and Remuneration Committee prepares a statement (report) on the Board of Directors' performance in the reporting year and makes improvement recommendations for areas where the Board scores were below average. The Report is approved by Nornickel's Board of Directors taking into account the recommendations of the Corporate Governance, Nomination and Remuneration Committee. The recommendations are communicated to all stakeholders.

In line with the recommendations given by the Corporate Governance, Nomination and Remuneration Committee following the 2019 performance evaluation, in 2020, the Board of Directors and the Company's management focused on improving the performance of the functions with scores below average. Specifically, in 2020, the Internal Dynamics indicator was improved compared to 2019 as a result of more efficient interaction between major shareholders, the management and key stakeholders achieved by holding meetings with institutional investors, preparing interim reports, informing the investment community on latest operating and financial results, and disclosing key aspects of the Company's development with a particular focus on sustainability and environment. The improvement in the Involvement in the Company's Development Strategy indicator in 2020 was driven by efficient interaction between the marketing committee and members of the Board of Directors supported by providing regular updates to the Board of Directors on the Company's sales performance. The Strategy Committee reviewed matters related to the market situation, the development status of the sales strategy and sales of non-key metals, as well as major investments. The positive dynamics in the performance evaluation of the Corporate Governance, Nomination and Remuneration Committee resulted from efficient interaction with other committees and the Company's management to consider stakeholder opinions and interests in decision making. During the year, the Corporate Governance, Nomination and Remuneration Committee continued reviewing human capital development and staff motivation matters. The Committee annually reviews the implementation status of the Policy of Non-Monetary Incentives for Nornickel Employees (including the Our Home and My Home programmes), remuneration of key employees of the Company, members of the Board of Directors and Audit Commission.

The internal performance evaluation of the Board of Directors in 2020 was carried out by the Corporate Governance, Nomination and Remuneration Committee in line with the resolution of the Board of Directors dated 4 February 2021. Following the approved schedule, Directors were surveyed between 8 and 25 February 2021 in accordance with the current Performance Evaluation Policy for the Board of Directors. All 13 members of the Board of Directors took part in the survey.

The Corporate Governance, Nomination and Remuneration Committee analysed the results of the Board of Directors' performance self-evaluation and concluded the following:

- The current composition of the Board of Directors is well-balanced in terms of directors' qualifications, experience, and business skills. The qualitative and quantitative composition of the Board of Directors meets the Company's needs and shareholder interests
- The composition of the Board committees is aligned with the Company's goals and objectives; there is no need to set up additional Board committees
- The Chairman of the Board of Directors organises the Board of Directors' activities in the most efficient way, ensures its communication with other bodies of the Company, and facilitates the best performance of assigned duties

The Corporate Governance, Nomination and Remuneration Committee used the self-evaluation results to develop recommendations to the Board of Directors for further improvement:

- Maintain the practice of regularly informing the Board of Directors about key trends and problems in the markets in which the Company operates
- Continue reviewing matters relating to implementation of major investment projects
- Hold regular meetings between Board members and the President of the Company, informal meetings between Board members and senior management
- For the Company's management and the Corporate Governance, Nomination and Remuneration Committee – assess the need to develop and apply new tools to analyse the existing corporate governance framework
- Expand the practice of reviewing human capital development and staff motivation matters at meeting of the Corporate Governance, Nomination and Remuneration Committee

At its meeting on 9 April 2021, the Board of Directors reviewed the Report on the Internal Performance Evaluation of the Board of Directors in 2020 and the recommendations of the Corporate Governance, Nomination and Remuneration Committee, and acknowledged that the Board of Directors and its committees, as well as the Board Chairman and the Corporate Secretary discharged their duties effectively. The Board of Directors will incorporate the recommendations of the Corporate Governance, Nomination and Remuneration Committee in its work in 2021.

In line with corporate governance best practice, the Board of Directors will continue performing an independent expert to evaluate its performance at least once every three years. The next external evaluation will cover the Board's performance in 2021, as the last one covered its 2018 performance (for more details, please see the 2018 Annual Report).

BIOGRAPHICAL DETAILS OF BOARD MEMBERS[1]

Biographical details of previous members of the Board of Directors are available in the 2019 Annual Report.

Gareth Peter Penny

Chairman of the Board of Directors since 2013 (Independent Director), member of the Strategy Committee

Born in: 1962
Nationality: UK

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them

Education:

Diocesan College (Bishops) (Cape Town, South Africa)

Eton College (UK)

Rhodes Scholar, Master in Philosophy, Politics and Economics, University of Oxford (UK)

Experience in the last five years

2019–present: non-executive Chairman of the Board of Directors of Ninety One plc and Ninety One Ltd

2017–present: member of the Board of Directors of Amulet Diamond Corp.

2017–2020: non-executive Chairman of the Board of Directors of Edcon Holdings Limited

2016–2018: non-executive Chairman of the Board of Directors of Pangolin Diamonds Corp.

2012–2016: member of the Board of Directors of OKD

2012–2016: executive Chairman at New World Resources Plc, executive director at New World Resources N.V.

2007–2019: non-executive director at Julius Baer Group Ltd

[1] Positions are indicated as at the end of 2019.

Nikolay Abramov

Member of the Board of Directors since 2020 (Non-Executive Director), Member of the Strategy Committee

Born in: 1946

Nationality: Russian Federation

Shareholding: 0.000667%
Made no transactions with shares in MMC Norilsk Nickel in the reporting year

Education:

Degree in Chemical Technology of Solid Fuel, Donetsk National Technical University

Experience in the last five years

2020–present: team leader at JSC RUSAL Management

2017–present: member of the Board of Directors of Seligdar

2005–2019: CEO of Interregional Centre for Energy Saving Technologies

Sergey Batekhin

Deputy Chairman of the Board of Directors since 2020 (Non-Executive Director)

Born in: 1965

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them

Education

Major in Foreign Languages (military and political translation), Krasnoznamenny Military Institute of the Ministry of Defence of the USSR

Degree in Finance and Credit, Plekhanov Russian Academy of Economics

Master of Business Administration, PhD in Economics, Moscow International Higher School of Business MIRBIS

Speaks French, German, English and Italian

Experience in the last five years

2020–present: Chairman of the Supervisory Board of the Digital Capital

2020–present: member of the Board of Trustees of the Vladimir Potanin Foundation

2020–present: CEO, Chairman of the Management Board of Interros Holding Company

2019–present: member of the Board of Directors of Jokerit Hockey Club Oy

2019–present: Chairman of the Presidium of the Night Hockey League non-profit amateur hockey foundation

2018–present: member of the Board of Directors of LLC Kontinental Hockey League

2013–2020 – member of the Management Board (2013–2020), Vice President (2015–2016), Senior Vice President – Head of Sales, Commerce and Logistics (2016–2018), Senior Vice President – Head of Sales, Procurement and Innovation (2018–2020) at MMC Norilsk Nickel

Sergey Barbashev

Member of the Board of Directors since 2011 (Executive Director)

Born in: 1962

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them

Education

Degree in Law, Moscow Higher School of Militia of the Ministry of Internal Affairs of the USSR

Experience in the last five years

2018–present: member of the Management Board, First Vice President – Head of Corporate Security at MMC Norilsk Nickel

2016–present: member of the Board of Endowment Fund for Education, Science and Culture

2016–2018: Director at Olderfrey Holdings Limited

2015–2018: Branch Director at Olderfrey Holdings Ltd

2011–2019: Chairman of the Board of Directors of Rosa Khutor Ski Resort Development Company

2008–present: member of the Board of the Vladimir Potanin Foundation

2008–2018: CEO, Chairman of the Management Board of Interros Holding Company

Alexey Bashkirov

Member of the Board of Directors since 2013 (Non-Executive Director)

Born in: 1977

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them

Education

Degree in International Economic Relations, Moscow State Institute of International Relations (MGIMO University)

Experience in the last five years

2020: member of the Management Board, Senior Vice President – Head of Commerce, Business Development, Investor and Public Relations at MMC Norilsk Nickel

2016–present: CEO of Translaininvest

2016–present: Managing Director at Winter Capital Advisors

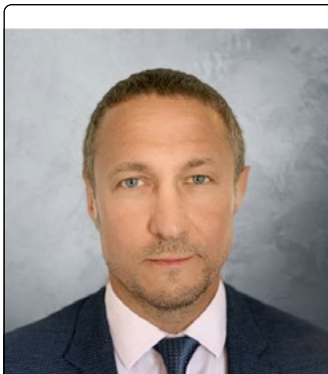
2016–2018: member of the Board of Directors of iGlass Technology Inc

2016–present: member of the Board of Trustees of the Night Hockey League non-profit amateur hockey foundation

2014–present: member of the boards of directors of NPO Petrovax Pharm and Hoym Market (before – Zaodno)

2009–present: executive director, Director of the Investment Department (2009–2015), Deputy Chief Investment Officer (2009–2018), member of the Management Board (2011–2018), CEO and Chairman of the Management Board (2018–2020) at Interros Holding Company

[redacted]



Sergey Volk

Member of the Board of Directors since 2019 (Independent Director), member of the Corporate Governance, Nomination and Remuneration Committee of the Board of Directors

Born in: 1969

Nationality: Ukraine

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them

Education

Master of Business Administration (majoring in Finance), University of Texas at Austin (USA)

Experience in the last five years

2019–present: member of the Board of Directors of Fortenova grupa d.d. (Zagreb, Croatia)

2018–present: member of the Supervisory Board of Mercator d.d. (Ljubljana, Slovenia)

2016–present: senior banker at Sberbank

2013–2016: consulting specialist, business management consultant

Marianna Zakharova

Member of the Board of Directors since 2010 (Executive Director), Member of the Management Board since 2016

Born in: 1976

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them

Education

Master in Law, Peoples' Friendship University of Russia (RUDN)

Experience in the last five years

2020–present: member of the Board of Trustees of the Vladimir Potanin Foundation

2015–present: First Vice President – Head of Corporate Governance, Asset Management and Legal Affairs at MMC Norilsk Nickel

Roger Llewelyn Munnings

Member of the Board of Directors since 2018 (Independent Director), Chairman of the Audit and Sustainable Development Committee, member of the Budget Committee

Born in: 1950

Nationality: UK

Education

Master in Politics, Philosophy and Economics (Hons), University of Oxford (UK)

Fellow of the Institute of Chartered Accountants in England and Wales

Experience in the last five years

2020–present: member of the Board of Directors of the Royal Welsh College of Music & Drama

2017–present: Director of 3 Lansdown Crescent Limited

2017–present: member of the Council of National Representatives (UK) at the Association of European Businesses in Russia

2015–present: member of the Board of Directors of LUKOIL

2013–present: member of the Board of Trustees of International Business Leaders Forum

2013–present: trustee at Kino Klassika Foundation

2013–present: member of the National Council on Corporate Governance non-profit partnership

2010–present: member of the Board of Directors of Sistema

2010–2016: member of the Board of Directors of Wadswick Energy Limited

2009–2016: trustee at the John Smith Trust

2003–present: member of the Board of Directors, Chairman of the Board of Directors of the Russo-British Chamber of Commerce

Maxim Poletaev

Member of the Board of Directors since 2019 (Non-Executive Director), Chairman of the Strategy Committee of the Board of Directors, member of the Budget Committee of the Board of Directors

Born in: 1971

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them

Education

Degree in Accounting and Business Analysis, P. G. Demidov Yaroslavl State University

Experience in the last five years

2020–present: Deputy CEO of RUSAL

2019–2020: member of the Board of Directors of United Company RUSAL Plc

2019–present: Chairman of the Board of Directors of Fortenova grupa d.d. (Zagreb, Croatia)

2018–present: advisor to the President of Sberbank

2013–2018: First Deputy Chairman of the Management Board of Sberbank

Vyacheslav Solomin

Member of the Board of Directors since 2019 (Non-Executive Director), member of the Audit and Sustainable Development Committee of the Board of Directors, member of the Budget Committee of the Board of Directors

Born in: 1975

Nationality: Russian Federation

Education

Degree in International Economics, Far Eastern Federal University

Experience in the last five years

2020–present: Executive Director, deputy CEO – COO of En+ Holding (2015–2020: Director)

2018–present: director, member of Board of Directors of UC RUSAL, IPJSC (until 25 September 2020 – United Company RUSAL Plc)

2018–2020: executive director at En+ Management

2014–2018: CEO of EuroSibEnergo

2011–present: director at YES Energo Limited

Evgeny Shvarts

Member of the Board of Directors since 2019 (Independent Director), member of the Strategy Committee of the Board of Directors

Born in: 1958

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them

Education

Degree in Biology/Zoology and Botanics, Lomonosov Moscow State University

Candidate of Geographical Sciences (Biogeography and Soil Geography), Institute of Geography, Academy of Sciences of the Soviet Union

Doctor of Geographical Sciences (Geoecology), Institute of Geography, Russian Academy of Sciences

Experience in the last five years

2020–present: leading researcher at the Department of Physical Geography and Environmental Management Problems of the Institute of Geography, Russian Academy of Sciences

2020–present: member of the Board of Directors of UC RUSAL, IPJSC (until 25 September 2020 – United Company RUSAL Plc)

2007–2019: director for Conservation Policy at the World Wide Fund for Nature

1993–present: member of the Board of the Biodiversity Conservation Centre charitable foundation

Robert Edwards

Member of the Board of Directors since 2013 (Independent Director), Chairman of the Corporate Governance, Nomination and Remuneration Committee, member of the Audit and Sustainable Development Committee

Born in: 1966

Nationality: UK

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them

Education

Degree in Mining Engineering, Camborne School of Mines (UK)

Experience in the last five years

2018–present: member of the Board of Directors of Scriptfert New Zealand Ltd

2018–present: member of the Board of Directors of Chaarat Gold Holdings Limited

2016: non-executive Chairman of the Board of Directors of Sierra Rutile Limited

2014–2018: non-executive member of the Board of Directors of GB Minerals Ltd

2013–present: head of Highcross Resources Ltd

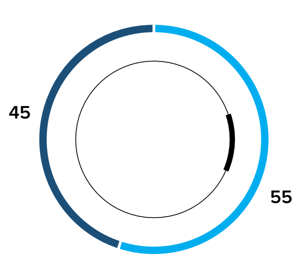
BOARD COMMITTEES

AUDIT AND SUSTAINABLE DEVELOPMENT COMMITTEE

Committees established by Nornickel's Board of Directors are responsible for preliminary review of critical matters and making recommendations to the Board of Directors. To discharge their responsibilities in the most effective way, the committees may consult Nornickel's governance bodies and seek opinions from independent external consultants. Nornickel has four Board committees, each comprised of five members:

- Strategy Committee (five members, including two independent directors (40%) and three non-executive directors)
- Audit and Sustainable Development Committee (five members, including three independent directors (60%) and two non-executive directors)
- Budget Committee (five members, including two independent directors (40%) and three non-executive directors)
- Corporate Governance, Nomination and Remuneration Committee (five members, including four independent directors (80%) and one non-executive director)

SHARE OF INDEPENDENT DIRECTORS ON THE BOARD COMMITTEES (%)



- Independent directors
- Non-executive directors

MEMBERS OF THE AUDIT AND SUSTAINABLE DEVELOPMENT COMMITTEE

Committee members before the Annual General Meeting of Shareholders (13 May 2020)	Committee members after the Annual General Meeting of Shareholders (13 May 2020)
Roger Munnings (Chairman, Independent Director)	Roger Munnings (Chairman, Independent Director)
Alexey Bashkirov	Vyacheslav Solomin
[redacted] (Independent Director)	[redacted] (Independent Director)
Vyacheslav Solomin	Sergey Batekhin
Robert Edwards (Independent Director)	Robert Edwards (Independent Director)

Members of the Audit and Sustainable Development Committee are appointed by the Board of Directors. In accordance with the Terms of Reference of the Audit and Sustainable Development Committee of the Board of Directors, the Committee has five members, all of them independent directors. If it is reasonably impracticable to meet the above requirement, independent directors should make up the majority of Committee members, while the remaining Committee members may include members of the Board of Directors, except for the Company's CEO and/or members of its Management Board. Only an independent director may chair the Committee.

In accordance with its Terms of Reference, the current Audit and Sustainable Development Committee is made up of five directors, three of whom are independent directors, including its Chairman (i.e. 60% of the Committee members are independent directors). On average, Committee members have more than 10 years of experience in finance.

In 2020, the Committee held nine meetings, including six in person, and three in absentia.
The Committee discharges its responsibilities by overseeing:

- financial reporting
- risk management and internal controls
- external and internal audit
- prevention of wrongdoing by Nornickel employees and third parties
- HSE matters.

The Audit and Sustainable Development Committee plays an important role in enabling controls and accountability, and has become an effective interface between the Board of Directors, Audit Commission, independent auditor, Internal Audit Department, and management of Nornickel.

During 2020, the Audit and Sustainable Development Committee prepared for the Board of Directors a number of recommendations on the accuracy, completeness and reliability of Nornickel's financial statements, as well as on HSE matters, and approval of the Company's auditors. The Committee also reviewed the results of audit reports by the Internal Audit Department and Internal Control Department and considered them when reviewing the 2019 Sustainability Report, report by Nornickel's management on COVID-related spending, Report on Improvements to Procurement, and Corporate Risk Appetite Statement for 2020.

In 2020, the Audit and Sustainable Development Committee of the Board of Directors:

- reviewed the annual audit plan and internal audit development plans
- reviewed bonus-related performance targets (KPI scorecards) of the Internal Audit Department Director
- discussed the results of completed audits, including gaps identified and remedial actions designed by management to improve internal controls and minimise risks.

STRATEGY COMMITTEE

Members of the Committee are appointed by the Board of Directors. In accordance with the Terms of Reference of the Strategy Committee of the Board of Directors, the Committee has five members, all of them non-executive directors. At least one Committee member must be an independent director. The Committee Chair may serve on other Board committees, but may not chair more than two committees at a time.

MEMBERS OF THE STRATEGY COMMITTEE

Committee members before the Annual General Meeting of Shareholders (13 May 2020)	Committee members after the Annual General Meeting of Shareholders (13 May 2020)
Maxim Poletaev (Chairman)	Maxim Poletaev (Chairman)
Alexey Bashkirov	Sergey Batekhin
[redacted] (Independent Director)	[redacted] (Independent Director)
Evgeny Shvarts (Independent Director)	Nikolay Abramov
Gareth Peter Penny (Independent Director)	Gareth Peter Penny (Independent Director)

In accordance with its Terms of Reference, the current Strategy Committee is made up of five directors, two of whom are independent directors (i.e. 40% of the Committee members are independent directors). In 2020, the Committee held seven meetings in person and one in absentia.

The Strategy Committee assists the Board of Directors by previewing matters related to:

- building a sustainability strategy
- investment planning and structural changes
- engagement with capital markets and government relations.

The Strategy Committee's key areas of focus:

- Supporting Nornickel's Board of Directors in developing, following up and adjusting the corporate strategy
- Recommending updates to the strategy

During the reporting year, the Strategy Committee made recommendations to the Board of Directors, reviewed the progress and status updates on Nornickel's major investment projects (including Bystrinsky GOK, 3rd Stage of Talnakh Concentrator Upgrade, the South Cluster, and the Sulphur Programme), and prepared reports on the Company's operational performance, Report on the Comprehensive Insurance Programme (including a review of property insurance quality), Progress Report on the IT Programme, including progress on the ERP and Technology Breakthrough programmes, Report on the Performance of Global Palladium Fund L.P. and a consolidated progress report on the Company's investment programme, as well as investment plans. The Committee also considered the progress updates on the Company's Fuel and Energy Complex Development Strategy, Sales Strategy, and exploration strategy. To inform the Board of Directors on developments in metals markets and on sales-related risks, the Committee reviewed the impact of COVID-19 on metals markets and Nornickel's sales.

BUDGET COMMITTEE

Members of the Committee are appointed by the Board of Directors. In accordance with the Terms of Reference of the Budget Committee of the Board of Directors, the Committee has five members, all of them non-executive directors. At least one Committee member must be an independent director. The Committee Chair may serve on other Board committees, but may not chair more than two committees at a time.

In accordance with its Terms of Reference, the current Budget Committee is made up of five directors, two of whom are independent directors (i.e. 40% of the Committee members are independent directors).

In 2020, the Budget Committee focused on making recommendations to the Board of Directors to inform decision-making on the amount of dividends and on the record date to be suggested by the Board of Directors, and reviewed the Company's financial performance. The Budget Committee also approved and recommended that the Board of Directors approve Nornickel's 2021 budget.

MEMBERS OF THE BUDGET COMMITTEE

Committee members before the Annual General Meeting of Shareholders (13 May 2020)	Committee members after the Annual General Meeting of Shareholders (13 May 2020)
Alexey Bashkirov (Chairman)	Sergey Batekhin (Chairman)
[redacted] (Independent Director)	[redacted] (Independent Director)
Sergey Volk (Independent Director)	Maxim Poletaev
Roger Munnings (Independent Director)	Roger Munnings (Independent Director)
Stalbek Mishakov	Vyacheslav Solomin

CORPORATE GOVERNANCE, NOMINATION AND REMUNERATION COMMITTEE

Members of the Corporate Governance, Nomination and Remuneration Committee are appointed by Nornickel's Board of Directors. The Committee has five members in accordance with its Terms of Reference. The Board of Directors, however, may increase the membership of the Committee. The Committee may only include independent directors. If it is reasonably impracticable to meet the above requirement, independent directors other than the Company's CEO and/or members of its Management Board should make up the majority of Committee members.

In accordance with its Terms of Reference, the current Budget Committee is made up of five directors, four of whom are independent directors, including its Chairman (i.e. 80% of the Committee members are independent directors).

MEMBERS OF THE CORPORATE GOVERNANCE, NOMINATION AND REMUNERATION COMMITTEE

Committee members before the Annual General Meeting of Shareholders (13 May 2020)	Committee members after the Annual General Meeting of Shareholders (13 May 2020)
Robert Edwards (Chairman, Independent Director)	Robert Edwards (Chairman, Independent Director)
Alexey Bashkirov	Sergey Batekhin
Stalbek Mishakov	Sergey Volk (Independent Director)
[redacted] (Independent Director)	[redacted] (Independent Director)
Maxim Poletaev (Independent Director)	Evgeny Shvarts (Independent Director)

The Corporate Governance, Nomination and Remuneration Committee supports the Board of Directors by:

- evaluating, overseeing and improving Nornickel's corporate governance framework
- ensuring succession planning for Nornickel's Board of Directors and Management Board
- providing incentives, evaluating the performance of Nornickel's Board of Directors, Management Board, President, and Corporate Secretary, and setting relevant remuneration policies
- supervising the development and implementation of Nornickel's information policy.

In the reporting year, the Committee held 13 meetings, including 10 in absentia, and 3 in person.

The Committee made recommendations to the Board of Directors to inform decision-making on convening, preparing and holding the Annual and Extraordinary General Meetings of Shareholders, and on matters reserved to the General Meeting of Shareholders (remuneration and reimbursement of expenses of members of the Board of Directors and the Audit Commission, and liability insurance and indemnity for members of the Board of Directors and the Management Board).

The Corporate Governance, Nomination and Remuneration Committee advised the Board of Directors on evaluation of the Board of Directors' performance in 2019. The Committee reviewed the updates on the Our Home and My Home programmes, Corporate Social Subsidised Loan Programme, Nornickel's Charitable Policy, and considered the approval of a number of the Company's internal documents. The Committee also considered the annual evaluation of the Board of Directors' performance in 2019, which concluded that the Board of Directors and the Corporate Secretary of Nornickel were effective, and assessed the independence of nominees to the Company's Board of Directors. Several meetings of the Corporate Governance, Nomination and Remuneration Committee were dedicated to reviewing matters relating to remuneration of Nornickel's key employees.

PRESIDENT AND MANAGEMENT BOARD

The President and the Management Board are Nornickel's executive bodies in charge of day-to-day operations. They ensure:

- compliance with resolutions of the Board of Directors and the General Meeting of Shareholders
- implementation of Nornickel's key plans and programmes
- continuous operation of an effective risk management and internal control framework.

One of the Company's major challenges in 2020 was the diesel fuel spill at CHPP-3 in Norilsk. Vladimir Potanin, the Company's President, and Sergey Dyachenko, First Vice President – Chief Operating Officer, took an active part in eliminating the consequences of the incident.

From the very beginning, regardless of the causes of the incident, the Company took responsibility for the full clean-up. The Company's management is aware that new climate change risks are emerging and that Nornickel should improve its risk management in order to mitigate them more effectively.

Nornickel's President initiated a comprehensive review of environmental risk management and the introduction of a number of new corporate governance instruments, including a Risk Management Committee chaired by him. In terms of physical risks, the Company's management is taking measures to upgrade the permafrost monitoring service and designs a foundations monitoring system. The monitoring project includes satellite imaging, monitoring of supporting piles and soil temperature by means of geological drilling and installation of strain gauges and temperature sensors, as well as upgrading the Polar Division's Diagnostic Centre and the permafrost laboratory. The Company remains firmly committed to do all that is necessary to minimise the risks of environmental impact. The Company also reiterates its commitment to fully rehabilitate the area impacted by the diesel fuel spill incident.

PRESIDENT

The President is Nornickel's sole executive body in charge of day-to-day operations. The President is elected by the General Meeting of Shareholders for an indefinite term and acts as Chairman of the Management Board.

The President reports to the Board of Directors and the General Meeting of Shareholders. Since 1 July 2016, election and dismissal of the President is reserved to the General Meeting of Shareholders. Since 2015, this position has been held by Vladimir Potanin (Nornickel's CEO in 2012–2015).

MANAGEMENT BOARD

The Management Board is a collective executive body in charge of Nornickel's day-to-day operations within its scope of authority as set out in the Articles of Association; it ensures the implementation of resolutions passed by the General Meeting of Shareholders and the Board of Directors.

Members of the Management Board are elected by the Board of Directors for an indefinite term. The Board of Directors may at any time terminate the office of any member of the Management Board.

The Management Board had 12 members at the start of 2020, according to the composition approved by the Board of Directors on 12 July 2019. During the reporting year, the composition of the Company's Management Board changed three times:

- On 7 April 2020, the Board of Directors resolved to terminate the office of Sergey Batekhin and Larisa Zelkova and to institute a 10-member Management Board as of 8 April 2020
- On 15 June 2020, the Board of Directors resolved to terminate the office of Vladislav Gasumyanov and elected Alexey Bashkirov to the Management Board as of 16 June 2020
- On 13 August 2020, the Board of Directors resolved to terminate the office of Alexey Bashkirov and elected Larisa Zelkova to the Management Board as of 14 August 2020

Biographical details of previous members of the Management Board are available in the 2019 Annual Report.

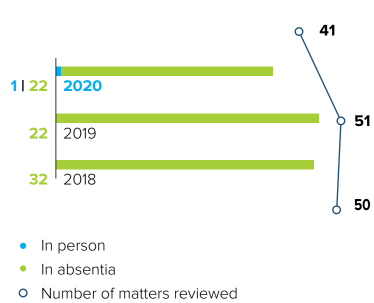
In 2020, the Management Board held 23 meetings, including 22 in absentia and 1 in the form of joint attendance.

During the reporting period, the Management Board resolved to set up divisions and revise the limits of independent decision-making by the CEOs of branches and subsidiaries within the divisions, as well as the powers of the Company's investment committee and its subcommittees. In 2020, the Management Board passed resolutions regarding branch directors, reviewed the Company's capital-raising and guarantee transactions, and approved the Group's Tax Strategy Policy.

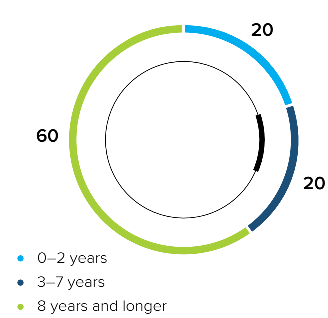
ATTENDANCE AT MEETINGS IN 2020

Name	Tenure on the Management Board	Meetings attended/total number of meetings
Vladimir Potanin	8	23/23
Sergey Barbashev	2	23/23
Sergey Batekhin[1] (until 7 April 2020)	8	8/23
Andrei Bougrov	8	23/23
Alexey Bashkirov[3,5] (until 13 August 2020)	1	2/23
Vladislav Gasumyanov[2] (until 15 June 2020)	7	12/23
Sergey Dubovitsky	2	23/23
Sergey Dyachenko	8	23/23
Marianna Zakharova	5	23/23
Larisa Zelkova[1,4]	8	16/23
Elena Savitskaya	7	23/23
Sergey Malyshev	7	23/23
Nina Plastinina	7	23/23

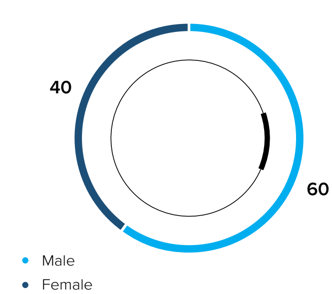
NUMBER OF MANAGEMENT BOARD MEETENGS



TENURE ON THE MANAGEMENT BOARD (%)



MANAGEMENT BOARD COMPOSITION BY GENDER (%)



1 Left the Management Board on 7 April 2020 as per the Board of Directors' resolution.
2 Left the Management Board on 15 June 2020 as per the Board of Directors' resolution.
3 Joined the Management Board on 16 June 2020 as per the Board of Directors' resolution.
4 Joined the Management Board on 14 August 2020 as per the Board of Directors' resolution.
5 Left the Management Board on 13 August 2020 as per the Board of Directors' resolution.

BIOGRAPHICAL DETAILS OF MEMBERS OF THE MANAGEMENT BOARD[1]

Vladimir Potanin

Chairman of the Management Board since 2012, President of the Company since 2015 (CEO in 2012–2015)

Born in: 1961

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them.

Education

Degree in International Economics, Moscow State Institute of International Relations (MGIMO University)

Experience in the last five years

2020 - present: - Chairman of the Board of the Vladimir Potanin Foundation;

2020–present: member of the Board of Trustees of the ROZA Club for Sport Development and Support

2018–present: member of the Board of Trustees of the Russia-U.S. Council on Business Cooperation trade association

2018–present: member of the Board of Trustees of the Fund for the Conservation and Development of the Solovetsky Archipelago

2017–present: Chairman of the Supervisory Board of the Norilsk Development Agency

2016–present: member of the Board of the Endowment Fund for Education and Culture, Chairman of the Board of Trustees of the Night Hockey League non-profit amateur hockey foundation

2013–present: President of Interros Holding Company

2014–2019: Chairman of the Board of Trustees of the ROZA Club for Sport Development and Support

2012–present: CEO (2012–2015), President (2015–present), the Chairman of the Management Board (2012–present) of MMC Norilsk Nickel

2011–present: member of the Board of Trustees of the State Hermitage Museum Endowment Fund non-profit organisation and the Moscow Church Construction Foundation

2010–present: member of the Board of Trustees of the Russian Geographical Society all-Russian non-governmental organisation

2009–present: Deputy Chairman of the Board of Trustees of the Russian International Olympic University

2009–2016: Chairman of the Supervisory Board of the Russian International Olympic University

2008–2020: member of the Board of the Vladimir Potanin Foundation

2007–present: member of the Board of Trustees of Saint Petersburg State University, Deputy Chairman of the Board of Trustees of MGIMO Endowment Fund

2006–present: Deputy Chairman of the Board of Trustees of MGIMO, member of the Board of Trustees, member of the Management Board of the Graduate School of Management at Saint Petersburg State University, member of the Bureau of the Management Board of the Russian Union of Industrialists and Entrepreneurs

2005–present: member of the Board of Trustees, member of the Board of the Russian Olympians Foundation non-profit charitable organisation

2004–present: Chairman, member of the Presidium of the National Council on Corporate Governance non-profit partnership

2003–present: Chairman of the Board of Trustees of the State Hermitage Museum

2001–present: member of the Board of Trustees of the Solomon R. Guggenheim Foundation (New York)

2000–present: member of the Bureau of the Management Board and member of the Management Board of the Russian Union of Industrialists and Entrepreneurs

1995–present: member of the Presidium of the International Foundation for the Unity of Orthodox Christian Nations

[1] Positions are indicated as at the end of 2019.

Sergey Barbashev

Member of the Management Board since 2018, First Vice President – Head of Corporate Security

Born in: 1962

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them.

Education

Degree in Law, Moscow Higher School of Militia of the Ministry of Internal Affairs of the USSR

Experience in the last five years

2018–present: member of the Management Board, First Vice President – Head of Corporate Security at MMC Norilsk Nickel

2016–present: member of the Board of the Endowment Fund for Education and Culture

2015–2018: branch director at Olderfrey Holdings Ltd

2011–2019: Chairman of the Board of Directors of Rosa Khutor Ski Resort Development Company

2008–present: member of the Board of the Vladimir Potanin Foundation

2008–2018: CEO, Chairman of the Management Board of Interros Holding Company

Sergey Batekhin

Deputy Chairman of the Board of Directors since 2020 (Non-Executive Director)

Born in: 1965

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them

Education

Major in Foreign Languages (military and political translation), Krasnoznamenny Military Institute of the Ministry of Defence of the USSR

Degree in Finance and Credit, Plekhanov Russian Academy of Economics

Master of Business Administration, PhD in Economics, Moscow International Higher School of Business MIRBIS

Speaks French, German, English and Italian

Experience in the last five years

2020–present: Chairman of the Supervisory Board of the Digital Capital

2020–present: member of the Board of Trustees of the Vladimir Potanin Foundation

2020–present: CEO, Chairman of the Management Board of Interros Holding Company

2019–present: member of the Board of Directors of Jokerit Hockey Club Oy

2019–present: Chairman of the Presidium of the Night Hockey League non-profit amateur hockey foundation

2018–present: member of the Board of Directors of LLC Kontinental Hockey League

2013–2020 – member of the Management Board (2013–2020), Vice President (2015–2016), Senior Vice President – Head of Sales, Commerce and Logistics (2016–2018), Senior Vice President – Head of Sales, Procurement and Innovation (2018–2020) at MMC Norilsk Nickel

Andrei Bougrov

Member of the Management Board since 2013, Senior Vice President for Sustainable Development

Born in: 1952

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them.

Education

Degree in International Economic Relations, PhD in Economics, Moscow State Institute of International Relations (MGIMO University)

Experience in the last five years

2020 - present - member of the RSPP Committee on climate policy and carbon regulation

2020 - present - member of the Expert Council for Sustainable Development under the Ministry of Economic Development of Russia

2020–present: Chairman of the Expert Group on Corporate Governance, Special Administrative Regions, Bankruptcy Procedures and Appraisal Activity at the Russian Ministry of Economic Development

2018–present: member of the Advisory Council of the Russo-British Chamber of Commerce

2018–2020: member of the Expert Council on Corporate Governance at the Russian Ministry of Economic Development

2018–present: Chairman of the Council for Non-Financial Reporting of the Russian Union of Industrialists and Entrepreneurs

2016–present: Chairman of the Share Issuers Committee of Moscow Exchange

2016–present: member of the Expert Council on Corporate Governance at the Bank of Russia

2015–present: member of the National Council on Corporate Governance non-profit partnership

2015–2016: member of the Investment Committee of Federal Hydro-Generating Company RusHydro

2013–present: Deputy CEO (2013–2015), Vice President (2015–2016), Senior Vice President (2016–2020), Deputy Chairman of the Board of Directors (2013–2020), Senior Vice President for Sustainable Development (2020-present) at MMC Norilsk Nickel

2014–present: member of the Expert Committee of the Russian President's Anti-Corruption Office

2014–present: member of the Board of Directors of Inter RAO UES

2013–present: Vice President of Interros Holding Company

2006–present: member of the Management Board, Vice President (since 2013) of the Russian Union of Industrialists and Entrepreneurs

2002–present: member of the Council on Foreign and Defence Policy non-governmental association

Elena Savitskaya

Member of the Management Board since 2014, Vice President – Chief of Staff

Born in: 1972

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them.

Education

Degree in Psychology, Moscow Pedagogical State University

Experience in the last five years

2015–present: Vice President – Chief of Staff (until 2015: Chief of Staff) at MMC Norilsk Nickel

2013–present: advisor to the President of Interros Holding Company (part-time)

Sergey Dubovitsky

Member of the Management Board since 2018, Senior Vice President – Head of Strategy and Strategic Projects, Logistics and Procurement

Born in: 1978

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them.

Education

Degree in International Information, Moscow State Institute of International Relations (MGIMO University)

Master of Business Administration, INSEAD Business School

Experience in the last five years

2013–present: Director of the Strategic Planning Department (2013–2016), Vice President for Strategic Planning (2016–2019), Vice President – Head of Strategy and Strategic Projects (2019–2020), Senior Vice President – Head of Strategy and Strategic Projects, Logistics and Procurement (2020–present) at MMC Norilsk Nickel

Sergey Dyachenko

Member of the Management Board since 2013, First Vice President – Chief Operating Officer - until 1 March, 2021

Born in: 1962

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them.

Education

Degree in Mining Engineering, Plekhanov Leningrad State Mining Institute

Master, University of Pretoria (South Africa)

Experience in the last five years

2019–present: member of the Board of Trustees of the North Caucasian Institute of Mining and Metallurgy

2017–2021: member of the boards of directors of MPI Nickel Pty Ltd, Norilsk Nickel Cawse Pty Ltd, Norilsk Nickel Avalon Pty Ltd, Norilsk Nickel Wildara Pty Ltd, Norilsk Nickel Africa Pty Ltd, Norilsk Nickel Mauritius, member of the Executive Committee at Nkomati

2017–2018: member of the Board of Directors of Norilsk Nickel Harjavalta

2016–present: member of the Supreme Mining Council of the Russian Mining Operators non-profit partnership

2013–2021: First Deputy CEO – Chief Operating Officer (2013–2015), First Vice President – Chief Operating Officer (2015–2021) at MMC Norilsk Nickel

Marianna Zakharova

Member of the Management Board since 2016, First Vice President – Head of Corporate Governance, Asset Management and Legal Affairs

Born in: 1976

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them.

Education

Master in Law, Peoples' Friendship University of Russia (RUDN)

Experience in the last five years

2020–present: member of the Board of Trustees of the Vladimir Potanin Foundation

2015–present: First Vice President – Head of Corporate Governance, Asset Management and Legal Affairs at MMC Norilsk Nickel

Larisa Zelkova

Member of the Management Board since 2013, Senior Vice President – Head of HR, Social Policy and Public Relations

Born in: 1969

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them.

Education

Degree in Journalism, Lomonosov Moscow State University

Experience in the last five years

Experience in the last five years

2020–present: Chairman of the Management Board of the Second School Centre for community initiatives in the Pechenegsky District

2020–present: member of the council of the endowment fund for the replenishment of the Tretyakov Gallery's collection at the State Tretyakov Gallery Foundation

2020–present: member of the Management Board of the Monchegorsk Development Agency

2019–present: member of the councils of the endowment funds for the replenishment of the Tretyakov Gallery's collection and development of its small museums

2017–present: member of the Supervisory Board, Chairwoman of the Management Board of the Norilsk Development Agency

2016–present: member of the Board of Trustees of the Endowment Fund for Education and Culture

2015–present: member of the Board of Trustees of the Hermitage Foundation UK, member of the Board of Trustees of the Russian Academy of Education

2014–present: Chairwoman of the Board, President (2014–2018) of the Vladimir Potanin Foundation

2013–present: member of the Management Board (2013–2020, 2020–present), Deputy CEO for Social Policy and Public Relations (2013–2015), Vice President – Head of HR, Social Policy and Public Relations (2015–2016), Senior Vice President – Head of HR, Social Policy and Public Relations (2016–2020, 2020–present) at MMC Norilsk Nickel

2012–2018: member of the Russian Presidential Council for Culture and Art

2011–2016: member of the Supervisory Board of the Russian International Olympic University

2011–present: member of the Board of Directors of Rosa Khutor Ski Resort Development Company, Chairwoman of the Management Board of the State Hermitage Museum Endowment Fund

2009–present: member of the Board of Trustees of the Pavlovsk Gymnasium private autonomous non-profit organisation

2007–present: member of the Presidium of MGIMO Endowment Fund

Sergey Malyshev

ember of the Management Board since 2013, Senior Vice President – Chief Financial Officer

Born in: 1969

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them.

Education

Degree in Finance and Credit, Finance Academy under the Government of the Russian Federation

Degree in Public and Municipal Administration, Institute of Advanced Training at the Russian Presidential Academy of National Economy and Public Administration

Degree in Mechanical Engineering, Kosygin State University of Russia

Experience in the last five years

2013–present: member of the Management Board, Deputy CEO – Head of Economics and Finance (2013–2015), Vice President – Head of Economics and Finance (2015–2016), Senior Vice President – Head of Economics and Finance (2016), Senior Vice President – Chief Financial Officer (2016–present) at MMC Norilsk Nickel

Nina Plastinina

Member of the Management Board since 2013, Vice President – Head of Internal Control and Risk Management

Born in: 1961

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them.

Education

Degree in Mechanical Engineering, Moscow Chemical Machine Building Institute

Post-graduate degree in Economics and Production Management, Bauman Moscow State Technical University

Experience in the last five years

2013–present: member of the Management Board, Director of the Internal Control Department (2013–2015), Vice President – Head of Internal Audit (2015–2016), Vice President – Head of Internal Control and Risk Management (2016–present) at MMC Norilsk Nickel

CORPORATE SECRETARY

The role of the Corporate Secretary is to ensure compliance with the procedures for the protection of shareholder rights and legitimate interests, as prescribed by applicable laws and Nornickel's internal documents, and to monitor such compliance. According to the Company's Articles of Association, the Corporate Secretary is appointed by the Board of Directors for a three-year term. The Board of Directors may terminate the office of the Corporate Secretary before the end of the term.

The Corporate Secretary reports administratively to the President and is accountable to the Board of Directors.

At present, Pavel Platov is Nornickel's Corporate Secretary. In December 2018, the Board of Directors extended Pavel Platov's term as Corporate Secretary by another three years.

At its 15 January 2020 meeting, the Board of Directors approved a new version of the Regulations on the Corporate Secretary of MMC Norilsk Nickel following a preview by the Corporate Governance, Nomination and Remuneration Committee. The new version of the Regulations contains updated terms and definitions which are fully compliant with the Bank of Russia's Corporate Governance Code.

THE CORPORATE SECRETARY'S KEY FUNCTIONS:

- Involvement in preparing and holding the General Meeting of Shareholders
- Preparing and holding meetings of the Board of Directors and its committees
- Contributing to the improvement of Nornickel's corporate governance framework and practice
- Managing the activities of the Secretariat
- Other functions in accordance with Nornickel's internal documents

Pavel Platov

Corporate Secretary since 2011

Born in: 1975

Nationality: Russian Federation

In the reporting year, held no shares in MMC Norilsk Nickel and made no transactions with them

Education:
Dobrolyubov Linguistics University of Nizhny Novgorod
Academy of National Economy under the Government of the Russian Federation

Experience in the last five years:
2017–present — Corporate Secretary of MMC Norilsk Nickel
(2011–2017: Company Secretary)

REMUNERATION

The Board of Directors directly supervises the remuneration framework at Nornickel. The Corporate Governance, Nomination and Remuneration Committee of the Board of Directors is responsible for::

- developing the Remuneration Policy for Members of the Board of Directors, Members of the Management Board, and the President of Nornickel
- overseeing the implementation and execution of the Policy
- reviewing the Policy on a regular basis.

Nornickel does not issue loans to members of the Board of Directors and the Management Board but encourages them to invest in Nornickel shares.

Remuneration paid to members of Nornickel's governance bodies in 2020 totalled RUB 6.4 billion (USD 89 million), including salaries, bonuses, commissions, benefits, and reimbursed expenses).[1].The Board of Directors' annual remuneration is set out in the Remuneration Policy for Members of the Board of Directors. The Policy was adopted to attract and properly incentivise top talent with required skill sets and experience to serve on the Board of Directors. The Policy also provides for presenting shareholders with a full report on all components of the remuneration payable to members of the Board of Directors. If the Policy needs revision, the relevant changes are submitted to Nornickel's General Meeting of Shareholders for approval.

REMUNERATION OF THE CHAIRMAN OF THE BOARD OF DIRECTORS

Remuneration of the Chairman of the Board of Directors differs from remuneration payable to other non-executive directors, due to the Chairman's enhanced scope of expertise and responsibilities. Subject to a resolution of the General Meeting of Shareholders, the Chairman of the Board of Directors may be entitled to additional remuneration and benefits other than those set out in the Policy. Under the Policy, the annual base remuneration of the Chairman of the Board of Directors is USD 1 million. The Chairman of the Board of Directors is not entitled to any additional remuneration for serving on Board committees.

DIRECTORS' REMUNERATION

By resolution of the General Meeting of Shareholders, members of the Board of Directors are remunerated for their service on the Board of Directors and reimbursed for expenses incurred by them in performing their duties as Board members. Additional benefits for all Board members include liability insurance and reimbursement of losses incurred in connection with their service on the Board of Directors. The Bank of Russia's Corporate Governance Code recommends companies to insure liability of their directors to be able to recover potential losses through the insurer. Apart from ensuring stronger commitment from directors, the insurance encourages competent leaders to join the Board.

REMUNERATION OF NON-EXECUTIVE DIRECTORS

Under the above Policy, all non-executive directors receive equal remuneration. The Policy sets forth the following annual remuneration for non-executive directors:

- Base remuneration of USD 120 thousand for Board membership
- Additional remuneration:
  - of USD 50 thousand for membership on a Board committee
  - of USD 150 thousand for chairing a Board committee.

Non-executive directors are not eligible for any forms of short-term or long-term cash incentives, or non-cash remuneration, including shares (or

[1] The amount of remuneration paid does not include the remuneration accrued but not yet paid as of 31 December 2020, as well as insurance premiums and voluntary health insurance (VHI) contributions. Adding the amounts above, remuneration of members of Nornickel's governance bodies for 2020 as per the 2020 consolidated IFRS financial statements totalled RUB 5.6 bn (USD 78 mln).

share-based payments), share options (option agreements), or other non-cash rewards or benefits.

REMUNERATION OF EXECUTIVE DIRECTORS

In line with the approved Policy, executive directors do not receive any additional remuneration for their service on the Board of Directors to avoid any potential conflict of interest.

DIRECTORS' REMUNERATION IN 2020

Type	Amount	
	RUB mln	USD mln
Remuneration for serving on the Board of Directors	292	4.05
Salary	0	0
Bonuses	0	0
Commissions	0	0
Benefits	0	0
Reimbursement	0.7	0.01
Other	0	0
Total	293	4.1

MANAGEMENT BOARD'S REMUNERATION

KPIs used to assess senior management's performance are aligned to Nornickel's strategic goals. In line with Nornickel's Articles of Association, the remuneration and reimbursement payable to the President and members of the Management Board are determined by the Board of Directors.

Remuneration payable to senior management is comprised of basic salary and bonuses. Bonuses are linked to Nornickel's performance, including both financial (EBITDA, per unit costs) and non-financial metrics (work-related injury rates and labour productivity). The variable component of the remuneration payable to members of the Management Board reflects key performance indicators, which are annually updated and approved by the Corporate Governance, Nomination and Remuneration Committee of the Board of Directors.

The Board of Directors decides whether to pay the President a performance bonus for the reporting year. In 2021, senior management's KPIs will include the Zero Environmental Incidents indicator with a weight of 20% (of team KPI) team) to ensure a clear link between the implementation of the Company's strategic priorities and the level of remuneration.

REMUNIRATION OF SENIOR MANAGEMENT

FIXED COMPONENT

BONUS

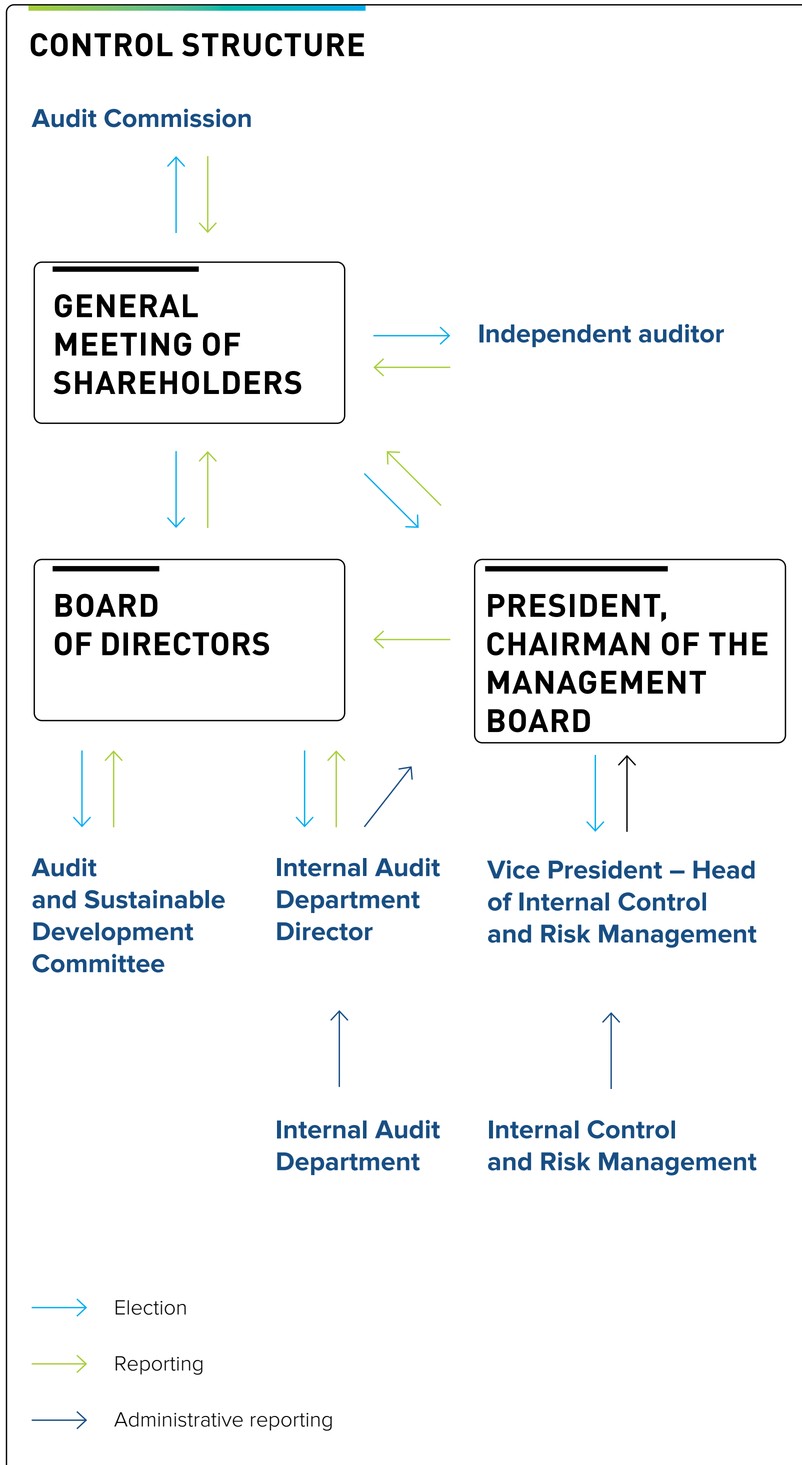
Financial metrics
- EBITDA (20%)
- Per unit costs (up to 5%)

Non-financial metrics
- Work-related injury rate (5–10%)
- Labour productivity (2.5%)

MANAGEMENT BOARD'S REMUNERATION IN 2020

Type	Amount	
	RUB mln	USD mln
Remuneration for serving on the Management Board	2	0.03
Salary	3,686	51
Bonuses	2,467	34
Commissions	0	0
Benefits	0	0
Reimbursement	0	0
Other	0	0
Total	6,155	85.03

CONTROL SYSTEM



AUDIT COMMISSION

The Audit Commission is Nornickel's standing internal control body that monitors its financial and business operations. The Audit Commission works in the shareholders' interests and reports to the General Meeting of Shareholders, which elects members of the Audit Commission to hold office until the next Annual General Meeting of Shareholders. The Audit Commission is independent from the officers of Nornickel's governance bodies, and its members do not serve on the Company's governance bodies.

AUDIT COMMISSION'S PERFORMANCE

In 2020, the Audit Commission audited Nornickel's business operations for 2019, with the auditors' report presented to the shareholders as part of materials for the Annual General Meeting of Shareholders. A report on the audit of the Company's business operations for 2020 will be presented to the Annual General Meeting of Shareholders in 2021.

The Annual General Meeting of Shareholders held on 13 May 2020 re-elected the incumbent members of the Audit Commission.

The elected members of the Audit Commission have the necessary business experience and expertise in accounting, finance and control to contribute to the Commission's effectiveness and its objectives.

Remuneration payable to members of the Audit Commission who are not Nornickel employees was approved by the Annual General Meeting of Shareholders on 13 May 2020. Members who are Nornickel employees are remunerated for performing their roles under their employment contracts.

In 2020, remuneration of the Audit Commission totalled RUB 8.1 million (USD 112 thousand). No bonuses or other rewards were paid.

MEMBERS OF THE AUDIT COMMISSION

Name	Primary employment and position
Alexey Dzybalov	Analyst, UC RUSAL, IPJSC (until 25 September 2020: United Company RUSAL Plc)
Anna Masalova	Chief Financial Officer, Pizza Restaurants
Georgy Svanidze	Head of the Financial Department, member of the Management Board at Interros Holding Company
Vladimir Shilkov	CEO of AG, CIS Investment Advisers, and Orion Property; Deputy Project Manager at the Financial Control Service of MMC Norilsk Nickel
Elena Yanevich	CEO of Interpromleasing

INTERNAL CONTROL

The Company has in place an internal control framework covering key business processes and all management levels across the Group. The framework comprises the following supervisory bodies:

- Internal Control and Risk Management, comprising the Internal Control Department, Financial Control Service, Risk Management Service, and Inspectorate for Monitoring Technical, Production and Environmental Risks
- Audit Commission
- Audit and Sustainable Development Committee
- Internal Audit Department

The Internal Control Department regularly monitors the reliability of the Company's system of accountings of metal-bearing products, as well as high-risk business processes – procurement and investment operations, capital construction and corporate insurance transactions. The Department also continuously monitors compliance with regulatory requirements to counter the misuse of insider information and combat money laundering and the financing of terrorism.

The performance and maturity of internal control framework elements is evaluated annually as part of a financial statement audit and internal control framework self-evaluation. Reports containing the internal control framework evaluation results are reviewed by Nornickel's management and the Audit and Sustainable Development Committee of the Board of Directors.

The Financial Control Service audits financial and business operations of Nornickel and its subsidiaries to make updates and recommendations for the President and members of the Board of Directors. The Head of the Financial Control Service is appointed by resolution of the Board of Directors..

CORPORATE TRUST SERVICE

Nornickel runs the Corporate Trust Service speak-up programme established within the Internal Control Department to respond promptly to reports of non-compliance, wrongdoing or embezzlement. Employees, shareholders and other stakeholders can report any actions that cause or may cause financial or reputational damage to Nornickel. The key principles underlying the operation of the Corporate Trust Service include guaranteed anonymity for whistleblowers, and timely and unbiased review of all reports. Nornickel will in no circumstances retaliate against an employee who raises a concern via the Corporate Trust Service, meaning that no disciplinary action will be taken (dismissal, demotion, forfeiture of bonuses, etc.).

Reports can be submitted via toll-free hotlines 8,800,700 1941 and 8,800,700 1945, via e-mail skd@nornik.ru or the reporting form on Nornickel's website.

REPORT STATISTICS

Indicator	2018	2019	2020
Total number of reports	961	1,181	1,037
Total number of reports that triggered investigation	394	481	451
Percentage of corruption reports	1.5% (6 reports, including 0 substantiated)	0.2% (1 report, including 1 substantiated)	0% (0 reports)

FOR MORE DETAILS ON REPORT STATISTICS, PLEASE SEE THE SUSTAINABILITY REPORT.

INTERNAL AUDIT

Internal audits are aimed at assisting the Board of Directors and senior management in enhancing Nornickel's management efficiency and improving its financial and business operations through a systematic and consistent approach to the analysis and evaluation of risk management and internal controls as tools providing reasonable assurance that Nornickel will achieve its goals.

In order to ensure independence and objectivity, the Internal Audit Department functionally reports to the Board of Directors through the Audit and Sustainable Development Committee and has an administrative reporting line to Nornickel's President.

The Internal Audit Department conducts objective and independent audits to assess the effectiveness of the internal control framework and risk management framework. Based on the audits, the Department prepares reports and proposals for the management on improving internal controls, and monitors the development of remedial action plans.

IN 2020, THE DEPARTMENT:

- performed 19 audits of production management, IT asset management, activities of the Russian division, and corporate governance processes
- performed an annual evaluation of Nornickel's corporate risk management framework and internal control framework in 2020. The review concluded that the corporate risk management framework and internal control framework remain effective overall, with some minor improvements required.

Based on the recommendations issued during the audits, the management developed corrective actions and implemented a total of 322 such actions in 2020. The actions included updating regulatory documents, developing new or amending existing control procedures, communicating them to employees, training employees, identifying and assessing risks. The Internal Audit Department continuously monitors the implementation of initiatives developed by management, with the resulting insights on types and number of initiatives regularly reviewed by the Audit and Sustainable Development Committee.

DIGITALISATION OF INTERNAL AUDIT

In 2020, the Internal Audit Department adopted the SAP Audit Management information system. The successful implementation enabled the Company to:

- create a tool to automate standard procedures for planning, auditing, reporting, making and following up on recommendations, preparing analytical and statistical reports
- create a single point of access to the Internal Audit Department's data, ensure convenient storage of documents and monitoring of audits, increase the transparency of internal audit activities by introducing a single workspace
- ensure the management of databases on controls and risks for internal audit.

In 2020, the Department started preparing for rolling out the SAP Audit Management system across internal audit units of the Russian division and the Company's branches. The system's implementation is planned for 2021.

The Internal Audit Department focuses on expanding the use of data analysis tools in audits. In 2020, in addition to IT audits, the Internal Audit Department used digital data processing methods to audit procurement processes and transportation services.

ANTI-CORRUPTION

Nornickel complies with anti-corruption laws of the Russian Federation and other countries in which it operates, as well as any applicable international laws and Nornickel's own internal documents. This commitment enhances Nornickel's reputation and boosts trust and confidence among our shareholders, investors, business partners, and other stakeholders.

Nornickel openly declares its zero tolerance to corruption in any form or manifestation. Members of Nornickel's Board of Directors/Management Board and senior management role model a zero-tolerance approach to corruption in any form or manifestation at all levels across the organisation. Facilitation payments and political contributions to obtain or reward the retention of a business advantage are strictly prohibited by Nornickel's policy. Nornickel will not tolerate any retaliation against an employee who reports a concern about suspected bribery or corruption, or refuses to offer a bribe, facilitate bribery, or take part in any other corrupt activities, even if their refusal to do so has resulted in a lost opportunity or a failure to obtain a business or competitive advantage for Nornickel.

The corporate Anti-Corruption Policy is Nornickel's key anti-corruption document, setting out the main objectives, principles and scope of anti-corruption efforts.

As part of its anti-corruption efforts, Nornickel has developed and approved the following key anti-corruption documents:

- Code of Business Ethics of MMC Norilsk Nickel
- Code of Conduct and Ethics for Members of Board of Directors
- Regulations on the Product Procurement Procedure for Norilsk Nickel Group Enterprises
- Standard anti-corruption agreement – an appendix to the employment contract
- Regulations on Information Security
- Regulations on the Prevention and Management of Conflicts of Interest
- Regulations on Business Gifts
- Procedure for Anti-Corruption Due Diligence of Internal Documents by the Head Office of MMC Norilsk Nickel
- Regulations on the Conflict of Interest Commission
- Regulations on the Information Policy

Having joined the Russian Anti-Corruption Charter for Business, Nornickel is implementing a range of dedicated anti-corruption measures based on the Charter and set forth in Nornickel's Anti-Corruption Policy. In January 2020, the Company submitted its Declaration on Compliance with the Russian Anti-Corruption Charter for Business to the Russian Union of Industrialists and Entrepreneurs, and its participation in the Charter was extended until 2021.

The Company regularly informs its employees on corruption prevention and combating. Starting from 2015, all Nornickel employees make their personal anti-corruption commitments by signing a relevant form. The corporate Anti-Corruption Policy and related regulations are communicated to all employees upon commencement of employment. Norilsk Nickel Group provides training for employees on an ongoing basis, including anti-corruption induction briefings for all new hires, regular anti-corruption distance learning courses, and individual advice on compliance with anti-corruption requirements.

Nornickel maintains a Preventing and Combating Corruption section on its corporate intranet, providing information on anti-corruption regulations and measures taken to combat and prevent corruption, provide legal education, and promote lawful behaviours among employees.

CORPORATE SECURITY

Nornickel's corporate security system management is based on a set of programmes to ensure economic, corporate, information, on-site, and transport security, as well as transparency of procurement and counterparty selection procedures. Particular emphasis is placed on supporting the Company's socially significant investment and environmental projects.

The Company continues to cooperate with the United Nations Interregional Crime and Justice Research Institute (UNICRI) and the United Nations Office on Drugs and Crime (UNODC) in areas including the implementation of the UN Economic and Social Council Resolution 2019/23 on combating transnational organised crime, illicit trafficking in precious metals, and illegal mineral extraction.

Nornickel's representatives co-chair the Security Committee of the International Platinum Group Metals Association. The Security Committee guides its members to ensure security and combat illicit trafficking in platinum group metals. The International Platinum Group Metals Association is the only international industry association of PGM producers.

The Company cooperates with law enforcement and supervisory bodies, sits on public and scientific advisory councils at the Ministry of Internal Affairs, Investigative Committee, Transport Prosecutor's Office, Federal Security Service of the Russian Federation, and interdepartmental working groups.

In 2020, Nornickel collaborated with the Federal Security Service, Ministry of Internal Affairs and EMERCOM to conduct a total of 127 trainings, 65 general and 12 tactical and special drills.

The protection of human rights is reflected in the by-laws of the Corporate Security Unit (MMC Norilsk Nickel's Anti-Embezzlement Regulations, In-House Investigation Regulations, etc.).

INFORMATION SECURITY

SHIFT TO WORK FROM HOME

The COVID-19 pandemic has affected virtually every industry in Russia and globally, including information security. To mitigate potential health risks for the Company's employees and prevent the potential consequences for operations, Nornickel's management decided to shift a significant part of its personnel to remote work. Along with providing employees with the necessary equipment to work from home, additional measures were taken to enhance the information security of corporate resources and infrastructure. The Company tightened security requirements and controls for remote computers and devices used in audio and video conferencing. Remote work is monitored on a daily basis, and reminders and guidelines for users are updated.

IMPLEMENTING INFORMATION SECURITY PROGRAMMES

Despite the pandemic-induced restrictions, the Company continues implementing its scheduled measures and programmes to protect corporate information systems and automated process control systems (APCS) at its Head Office and in the regions of operation. Nornickel continued providing project support for its IT initiatives programme and to introduce security tools to build the target information security architecture.

The Company has approved information security standards and plans to bring all information systems and APCSs into compliance with these standards in the medium term.

IMPLEMENTATION OF POLICIES FOR EMPLOYEES

The principle information security rules for employees are summarised in a single document – Guidelines on Permitted Use of Information Assets. The information security procedures which involve the Company employees include:

- identification and classification of information assets
- raising information security awareness
- managing access to information assets
- managing information security incidents
- assessing IT projects for compliance with information security requirements.

TRAINING AND EDUCATION

Employee information security training and upskilling, along with raising information security awareness (beyond dedicated units) are directly linked to the implementation of the corporate HR policy. New hires are requested to take a respective test and complete an induction briefing. Nornickel developed and approved the Procedure for Raising Information Security Awareness and has in place annual employee training plans compiled with account for current trends, new risks and cyber threats. All employees of the Company's Head Office and facilities located across its regions of operation undergo training and knowledge checks. The Company conducts training courses on the Digital Academy corporate platform. A total of 47 video conference trainings were held in 2020, covering 7,000 employees.

SUSPICIOUS ACTIVITY REPORTING PROCESS

Nornickel improves the corporate information security system through regular trainings and drills, including simulations of phishing attacks and other illegal schemes to affect the corporate IT infrastructures. Following the trainings, instructions and guidelines for employees are updated, and relevant information is also included in the quarterly bulletin forwarded to heads of the Company's structural units. All Nornickel's internal documents on information security prompt employees to report suspicious activities to the corporate Information Security Incident Response Centre using available communication channels.

CYBER INCIDENT RESPONSE SYSTEM

The Company has an Information Security Incident Response Centre which uses advanced technical solutions as well as Russian and global best practices for managing cyber defence. Processes and procedures in place to ensure information security continuity in case of emergency are tested regularly, at least once per quarter.

COMPLIANCE WITH REGULATORY REQUIREMENTS

In accordance with Federal Law No. 187-FZ dated 26 July 2017 the Group categorised critical IT infrastructure facilities (APCSs) and submitted the results to the Federal Service for Technical and Export Control. Nornickel obtained licences for information security monitoring activities, and signed a number of data sharing agreements with state regulatory authorities to counteract cyberattacks on IT resources and infrastructure of leading Russian industrial corporations.

The Company also improved its methodology and regulations covering personal data and trade secret protection, which are rolled out across its regions of operation.

The Group consistently implements the Information Security Management System across its facilities, covering operational production management, procurement of feedstock and process materials, and control over the achievement of targets in production and shipment of finished products. In 2020, Nadezhda Metallurgical Plant and Copper Plant (Nornickel's Polar Division) implemented the information security management systems certified to ISO/IEC 27001:2013. In the course of the year, Nornickel engaged BSI (British Standards Institution), a leading international standards body, to conduct four audits, which confirmed the effectiveness of Nornickel's efforts and compliance of its information security management systems with international standards and global best practices.

The Company regularly passes external information security audits for compliance with the requirements to personal data and critical information infrastructure protection, international cyber security management standards, as well as testing and security assessments, vetting inspections to control information security in maritime and river navigation, etc.

Nornickel's efforts to develop and implement advanced cyber security solutions for industrial assets have been repeatedly acknowledged by the professional community and industry associations.

ENGAGEMENT OF THE BOARD OF DIRECTORS AND SENIOR MANAGEMENT

Nornickel's Information Security Policy outlines the respective engagement boundaries and responsibility of governance bodies, including the Board of Directors and the Management Board. Their responsibilities include setting up an information security risk management system, reviewing and approving the budgets of relevant programmes and projects.

The Company's senior management regularly reports to the Board of Directors on information security at meetings of the Audit and Sustainable Development Committee.

PARTICIPATION IN CONFERENCES AND FORUMS

The Information Security and IT Infrastructure Department took part in the 8th international conference Kaspersky Industrial Cybersecurity Conference 2020, one of Russia's leading dedicated forums, to share their experience and solutions in industrial cybersecurity and cyber protection of technology processes. Nornickel's achievements and willingness to share its solutions as models to be deployed by Russia's industrial majors were highly praised by the professional community. The Company received a badge of honour For Leadership, Openness and Responsible Approach to Protecting Industrial Facilities.

For its contribution to the development of the Russian Privacy Professionals Association, the Department won a Russian Privacy Award in the Expert of the Year category.

In addition, throughout 2020, employees of the Information Security and IT Infrastructure Department spoke at events such as the international conference TB Forum (co-organised by the Federal Service for Technical and Export Control), the 8th Conference on Information Security of Automated Control Systems for Critical Facilities, etc.

INDEPENDENT AUDIT

Competitive bidding to select an independent auditor for MMC Norilsk Nickel's financial statements is carried out as per the Company's existing procedure. The Board's Audit and Sustainable Development Committee reviews the pre-selection results and makes a recommendation to the Board of Directors regarding a proposed auditor to be approved by the Annual General Meeting of Shareholders of MMC Norilsk Nickel.

In 2020, the General Meeting of Shareholders approved JSC KPMG as the auditor for MMC Norilsk Nickel's RAS and IFRS financial statements for 2020.

The fee paid to JSC KPMG for its audit and non-audit services in 2020 totalled RUB 305.8 million (USD 4.2 million), net of VAT, with the share of non-audit services accounting for 45% of the total amount.

To avoid conflicts of interest, JSC KPMG has in place a policy covering different types of services provided to audited companies, which complies with the requirements of the International Ethics Standards Board for Accountants (IESBA), the Russian Rules for the Independence of Auditors and Audit Organisations, and other applicable standards.

AUDITOR'S FEE

Service type	RUB mln, net of VAT	USD mln, net of VAT
Audit and related services	168.1	2.3
Non-audit services	137.7	1.9
Total auditor's fee	305.8	4.2
Share of non-audit services	45%	

RISK MANAGEMENT

Nornickel continuously manages risks that can affect its strategic and operational goals.

This process comprises the following stages:

- Identification of risks that have external and/or internal sources
- Risk assessment based on their impact on key financial and non-financial metrics
- Development and implementation of measures to prevent risks and/or minimise their implications

Nornickel pursues the following key risk management objectives:

- Increase the likelihood of achieving the Group's goals
- Improve resource allocation
- Boost Nornickel's investment case and shareholder value

The risk management framework is based on the principles and requirements set out in Russian and international laws, as well as professional standards, including the Corporate Governance Code recommended by the Bank of Russia, GOST R ISO 31000–2019 Risk Management. Principles and Guidelines, and COSO ERM Enterprise Risk Management – Integrating with Strategy and Performance.

To manage production and infrastructure risks, Nornickel develops, approves and updates business continuity plans which in case of emergency consecutively set out:

1. a procedure for interaction between business units in rescuing people, minimising property damage, and ensuring process sustainability
2. a current operations support or resumption plan
3. a restoration or retrofit plan for affected assets.

In 2020, Nornickel improved its risk management framework as follows:

- The President-led Risk Management Committee was set up under the Management Board, along with a number of dedicated function-level risk management committees. The roles of the Risk Management Committee under the Management Board are focused on improving and developing the corporate risk management framework
- A project to automate the risk management system based on a GRC solution was moved into the implementation phase. The solution's functionality includes defining key risk indicators
- Risk trainings for Group employees were offered on a regular basis
- In order to update the development roadmap, a self-diagnostic and an external maturity assessment were carried out to assess the compliance of the corporate risk management framework and risk management within certain business areas with global best practices
- Quantitative risk assessments for investment projects were regularly reviewed at Nornickel's investment committees to enable risk-based decision making
- As part of rolling out the approach implying the use of simulation modeling for investment project risk assessment, the aggregate impact of the risks related to key investment projects on the Company's financial and physical performance was assessed (the assessment took into account the opportunities related to each of the investment projects)
- A dedicated inspectorate was set up within the Internal Control and Risk Management vertical to monitor technical and production risks as well as environmental risks. It will focus on improving the processes of identifying, analysing and assessing technical, production and environmental risks
- A scenario-based assessment was carried out for investment projects to assess risk impacts, including the impact of the COVID-19 spread
- A number of tasks were accomplished as part of developing scoring assessment methods for certain categories of technical and production risks

In line with risk management framework improvement plans for 2021 and beyond, the following areas have been prioritised:

- Development of a target quantitative model for assessing equipment failure risks at Kola MMC, including the development of an IT system to monitor buildings and structures within the Norilsk Division, ensuring automated risk management and prevention
- Regular self-diagnostic of the risk management framework's performance and its assessment for compliance with global best practices
- Improvement of risk management practices in strategic and operational planning
- Improvement of the approach implying the use of simulation modelling for investment project risk assessment
- Enhancement of the methodology to analyse and manage various categories of technical and production risks
- Development of a methodology for capturing a range of climate-related risk factors
- Analysis of risks within Nornickel's logistics and operations supply chain
- Implementation of a project to automate the risk management process based on a GRC solution

Risk management framework

BOARD OF DIRECTORS

AUDIT AND SUSTAIABLE DEVELORMENT COMMITTEE OF THE BOARD OF DIRECTORS

Key roles

- Approves the Corporate Risk Management Policy
- Supervises the building of the risk management system
- Prepares the Corporate Appetite Statement (annually)
- Manages strategic risks on an ongoing basis
- Reviews and aproves the risk management development roadmap and assesses its implementation status (annually)
- Reviews report on strategic and key risks (annually/quarterly)
- Assesses risk management performance at Nornickel (annually)

RISK MANAGEMENT SERVICE

Key roles

- Develops and updates the risk management methodology
- Prepares report on Nornickel's Top 20 risks (annually)
- Prepares report on strategic risks (annually)
- Enhances quantitative risk assessment using simulation modelling tools
- Improves the business continuity management system
- Ensures emloyee development and training in practical approaches to risk management

MANAGEMENT BOARD

RISK MANAGEMENT COMMITTEE UNDER THE MANAGEMENT BOARD

Key roles

- Reviews strategic risks and reports on key risks
- Reviews materialised risks and lessons learned
- Reviews risk appetite metrics
- Makes decisions related to key risk management
- Reviews business continuity plans
- Reviews the strategy and development plans for the Corporate Risk Management Framework (CRMF) and Internal Control System (ICS)
- Reviews the perfomance of dedicatedvrisk management committees within business verticals

RISK OWNERS

HEADS OF BUSINESS UNITS

Key roles

- Day-to-day risk management within the integrated risk management model
- Risk-based decision making

INTERNAL AUDIT

Key roles

- Makes independent assessments of the effectiveness of risk management, internal control and corporate governance (annually)

NEW EMERGING RISKS

Nornickel's new emerging risks typically have external sources. It is hard to identify these risks and mitigate their negative impact due to the lack of predictive information. Management of new emerging risks is critical to fostering Nornickel's long-term sustainability and maintaining the Company's competitive edge in the metals market. Nornickel assesses new emerging risks and manages them based on their potential implications while considering how fast they can materialise, as well as the Company's actual capabilities to prevent and/or curb their impact.

A team of internal risk champions identifies and monitors new emerging risks, ensuring the preliminary identification and assessment of risks related to all activities of Nornickel. Once the severity of a new emerging risk is assessed and mitigation measures are identified, risk owners become responsible for managing the risk.

New emerging risks are assessed on a regular basis, including their reassessment and evaluation of their criticality to Nornickel, with an emphasis on preventing risk occurrence and mitigating potential negative implications. Controls used by Nornickel include the implementation of business continuity plans to manage external risks that can have a disastrous impact on Nornickel's operations and business processes. These controls increase Nornickel's resilience to external shocks.

In 2020, Nornickel completed a project to improve its approach to managing strategic risks that could affect its long-term performance. Trend analysis tools and questionnaires targeting a wide range of management-level respondents were used to identify, assess and prioritise risks. The results of these efforts were discussed by the Risk Management Committee under Nornickel's Management Board and the Audit and Sustainable Development Committee. Nornickel sees the following groups of risks as its key risks: aggressive expansion of the Company's investment programme, the aging of its production assets, and the mismatch between skills supply in the labour market and the Company's needs in the context of advances in new technology and digitalisation.

INSURANCE

Insurance is an essential tool used to manage risks while protecting the property interests of Nornickel and its shareholders against any unforeseen losses related to operations, including due to external effects.

Nornickel has centralised its insurance function to ensure the consistent implementation of its uniform insurance policy and standards. Nornickel annually approves a comprehensive programme that defines key parameters by insurance type, key business area and project. Nornickel has implemented a corporate insurance programme that covers assets, equipment failures and business interruptions across the Group. Nornickel maintains corporate insurance policies with major Russian insurers under the corporate insurance programme, involving an international broker to ensure that Nornickel's risks are underwritten by highly reputable international re-insurers.

Nornickel's freight, construction and installation, aircraft and watercraft insurance programmes are also based on the principle of centralisation. The Group's entities, directors and officers carry relevant liability insurance. Nornickel applies industry best practice and takes into account insurance market trends to negotiate the best insurance and insured risk management terms.

CLIMATE RISKS

Repercussions of climate change, including abnormal weather or lasting changes in weather patterns, may affect Nornickel's operations in the longer run. Physical consequences of climate change can include soil thawing, changes in water levels in water bodies, precipitation amounts and wind loads, which can have a material adverse effect on Nornickel's operations. As part of its risk management strategy, Nornickel implements a full range of measures to monitor and control these risks, including the introduction of a system to monitor buildings and structures in the Norilsk Industrial District. The measures taken by Nornickel to mitigate these risks are outlined in the Key Risks section.

CLIMATE RISK MANAGEMENT

Climate risk management is part of the corporate risk management framework. Nornickel's governance bodies review risk information on a quarterly basis, including on risks associated with climate change.

Nornickel's plans for 2021 and beyond include the implementation of a unit- and asset-level climate change risk management strategy. Nornickel intends to collaborate with the scientific community to launch a comprehensive study of factors affecting climate in the Norilsk Industrial District; to work out proposals to expand and upgrade the climate monitoring system in the Norilsk Industrial District; to identify key initiatives to mitigate climate change risks; to improve energy efficiency and keep CO2 emissions within its stated GHG emission targets; and to develop a relevant capex plan and determine capex project timelines.

The Company also plans to develop a list of measures to ensure compliance with TCFD[1] standards.

IMPACT OF CLIMATE RISKS ON PRODUCT PORTFOLIO

Climate-related risks may offer additional opportunities for Nornickel driven by the changing structure of demand for metals required in a future low-carbon economy. Nornickel has recently assessed climate change risks based on the International Energy Agency's Sustainable Development Scenario envisaging the temperature rise in 2100 limited to 1.5 °C. In general, Nornickel expects a positive impact on its product portfolio under this scenario, driven by the development of the electric vehicle sector: a neutral impact on PGMs and a positive impact on base metals.

Decarbonisation of the global economy: risk assessment for Nornickel's metals

2040	Ni	PGMs	Cu
Growth of market share of BEVs	↗	↘	↗
Growth of hybrids	↗	↗	↗
Fuel cells	→	↗	→
Growth of renewables/low carbon fuel in power generation	↗	↗	↗
Storage and grid expansion to support grouth of xEVs	↗	→	↗
Net impact	↗	→	↗

[1] The Task Force on Climate-related Financial Disclosures

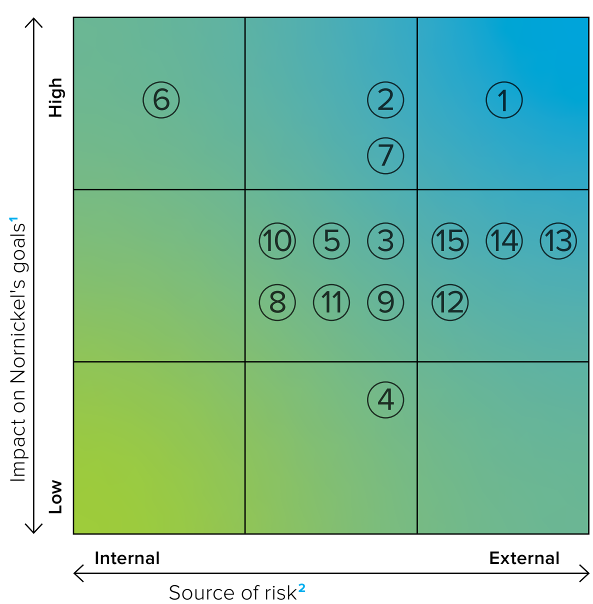
MAP OF NORNICKEL'S MATERIAL RISKS WITH YEAR-ON-YEAR CHANGE IN 2020

A high-level map of Nornickel's material risks reflects global best practices in risk management. The risk map ranks material risks by their impact on the Group's goals and by source.

In 2020, a technical and production risk occurrence was recorded – the destruction of above-ground emergency diesel fuel storage tank No. 5 at CHPP-3. Risk assessment had been carried out at CHPP-3 facilities including storage tank No. 5 on a regular basis. The storage tank destruction risk had been identified, with its probability assessed as low. The risk assessment relied on a number of documents prepared by experts (including the conclusions presented in the industrial safety review and declaration prepared by an expert organisation and registered with the Federal Environmental, Industrial and Nuclear Supervision Service (Rostekhnadzor)), as well as NTEK's internal regulations on risk management.

An investigation into the incident suggested that its main causes included an increase in permafrost temperature and the fact that some of the piles were not installed into hard rock, as required by the design. In addition to a thorough reassessment of the risks associated with hazardous production facilities and an increase in the scope of the energy infrastructure upgrades programme, a range of measures were identified, including the implementation of a project to create an IT system for geotechnical and satellite monitoring of the Company's facilities located within the permafrost zone.

RISK MAP



Risk

1. Price risk (decline in market prices for Nornickel metals) ⊖
2. Market risk (lower competitiveness of Nornickel products) ⊖
3. Tighter environmental regulations ⊖
4. FX risk ⊖
5. Investment risk ⊖
6. Work-related injury risk ⊖
7. Information security risk ⊖
8. Technical and production risk[3] ⊖
9. Power outages at production and social facilities in the Norilsk Industrial District ⊖
10. Compliance risk ⊖
11. Social risk ⊖
12. Changes in legislation law-enforcement ⊖
13. Lack of water resources ⊖
14. Permafrost thawing ⊖
15. Risk of epidemick[4] ↗

↗ Risk increased year-on-year.

↘ Risk decreased year-on-year.

⊖ Risk has not changed year-on-year

[1] Risk an impact of uncertainty on the goals (ISO / GOST P 31000).

[2] Source of risk: an element which, alone or in combination with other elements, may cause a risk (ISO / GOST P 31000).

[3] The information on the risk occurrence is disclosed in the Annual Report.

[4] The description of the risk is provided in the Annual Report.

KEY RISKS

Nornickel's risks are all inherent to its strategic and operational development and business continuity goals. Key risks have a varying degree of impact on Nornickel's ability to achieve its goals. Some risks also affect several goals at a time.

PRICE RISK

Potential decrease in sales revenues due to lower prices for Nornickel metals is subject to actual or potential changes in demand and supply in certain metals markets, global macroeconomic trends, and the financial community's appetite for speculative/investment transactions in the commodity markets.

Impact on goals: **high**

Source of risk: **external**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Lower demand for metals produced by Nornickel. A slowdown in the global economy in general and in the economies consuming Nornickel metals in particular. Supply and demand imbalance in metals markets.	Enhancing Nornickel's leadership in the nickel and palladium markets.	Nornickel is consciously accepting the existing price risk for now. To manage this risk, Nornickel: • continuously monitors and forecasts supply and demand dynamics for key metals • secures feedstock supplies for key consumers through long-term contracts to supply metals in fixed volumes • as a member of the global Nickel Institute and the International Platinum Group Metals Association, works with other nickel and PGM producers to maintain and expand the demand for these metals. Should the price risk materialise, Nornickel will consider cutting capital expenditures (revising the investment programme for projects that do not have a material impact on Nornickel's development strategy).

MARKET RISK

Lower competitiveness of Nornickel products in the market may result in their lower liquidity, discounts to the market price and a decrease in Nornickel's income.

Impact on goals: **high**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Stricter market requirements on product quality and ESG compliance. Competition from producers of cheaper nickel. More aggressive transport decarbonisation programmes. Changes in consumption patterns for high-tech products. Foreign regulators imposing new foreign trade restrictions that impact Nornickel's activities (tariff and non-tariff regulatory measures).	Enhancing Nornickel's leadership in the nickel and palladium markets.	To manage this risk, Nornickel: • cooperates with other market participants to monitor and analyse changes in market requirements on product quality and ESG compliance • promotes global industrial and investment demand for its metals • monitors the development of transport electrification • searches for new applications and uses for palladium • diversifies its metal product sales across industries and geographies • improves and diversifies its product range • cooperates with industry institutions to maintain access to relevant sales markets for its metals • cooperates with Russian ministries and agencies to prevent/mitigate negative impacts of local or international regulation • implements an ESG road map • seeks partnership opportunities with key producers of batteries for electric vehicles • maintains strategic partnerships with car makers based on guarantees of long-term palladium supplies.

TIGHTER ENVIRONMENTAL REGULATIONS

Environmental regulations are tightening, including environmental permitting process and stricter governmental control over environmental compliance.

Impact on goals: **medium**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Domestic and international focus on environmental protection and sustainability. Extensive changes in environmental laws and regulations. For example, the environmental permitting framework for category 1 facilities was amended on 1 January 2019, introducing a single environmental permit and a new system of standards setting out technological limits. Technological restrictions related to mine water and industrial wastewater treatment. An experiment to use emission allowances run across 12 Russian cities (Federal Law No. 195-FZ dated 26 July 2019), including Norilsk and Krasnoyarsk in 2020–2024. Tighter environmental control: use of a risk-based approach to industrial facility audits, spot checks during unfavourable weather conditions no longer require authorisation from prosecuting authorities.	Compliance by Nornickel and Norilsk Nickel Group entities with the applicable laws, regulatory requirements, corporate standards, and business codes.	To manage this risk, Nornickel: • carries out an environmental action plan to reduce emissions and discharges, as well as to ensure timely waste management • has in place the Environmental Performance Improvement Programme for category 1 facilities in the Polar Division. Nornickel's Environmental Performance Improvement Programme was approved by the relevant state interdepartmental commission • has prepared documentation packages to obtain a single environmental permit for category 1 facilities in the Polar Division and filed them with the relevant authorities • takes measures to reduce emissions during unfavourable weather conditions as per the plan agreed with the Ministry of Ecology and Environmental Management of the Krasnoyarsk Region • ensures the collection and transfer of baseline data on emissions across the Polar Division and the Russian division to provide inputs for summary estimates of emission concentrations for Norilsk as part of the experiment to use emission allowances run across 12 Russian cities • involves its employees in working groups of dedicated committees, regional ministries, and government agencies • takes part in joint projects with nature reserves located within Nornickel's regions of operation.

FX RISK

US dollar depreciation against the rouble, including due to changes in the Russian economy and the policy of the Bank of Russia, may adversely affect Nornickel's financial performance, as most of its revenues are denominated in US dollars, while most of its expenses are denominated in roubles..

Impact on goals: **low**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Increase in Russia's balance of payments, relatively lower imports, and steadily growing oil exchange prices. Country-specific macroeconomic changes, sovereign credit rating upgrade. Lower volatility in the financial markets of Russia and other emerging markets, making the rouble more attractive to investors.	Maintaining investment-grade credit ratings. A debt portfolio with a well-balanced profile in terms of maturity, currency composition, and sources of financing.	To manage this risk, Nornickel: • maintains a balanced debt portfolio with USD-denominated borrowings prevailing • implements regulations that limit pricing for expenditure contracts with prices fixed in foreign currencies • uses derivatives to mitigate its exposure by balancing USD-denominated cash flows from revenues and cash flows from liabilities denominated in currencies other than the US dollar.

INVESTMENT RISK

Risk related to time and budget overruns, and performance targets of Nornickel's major investment projects.

Impact on goals: **medium**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Changes in forecasts of ore volumes, grades and properties resulting from follow-up exploration. Changes in investment project timelines (including due to the pandemic). Further changes to budgets of investment projects. Amendments to project performance targets in the course of implementation	Strategic goal: growth driven by Tier 1 assets. Developing the mining, concentration and metallurgical assets. Developing the mineral resource base and upgrading core production processes at Nornickel's Tier 1 assets.	To manage this risk, Nornickel: • carries out proactive exploration and updates performance targets and the mining plan (a long-term production plan) based on the progress of its major investment projects developing the mineral resource base • conducts resource, geomechanical and hydrogeological modelling • holds external expert audits of geological data • develops an in-house geological and mining information system • models mining options in geological and mining information systems • as part of the project assurance process, conducts internal (cross-functional) audits of major investment projects at each stage in their life cycle • improves incentives to drive project delivery and build skills and capabilities (including staff certification, identification of improvement areas and provision of tailored training) • improves project delivery standards, develops tools to digitise technical document management and project controls • promotes the use of pilot units across all technically challenging and unique processing stages.

WORK-RELATED INJURY RISK

Failure to comply with Nornickel's health and safety (H&S) rules may result in threats to health and life or temporary suspension of operations, or cause property damage.

Impact on goals: **high**

Source of risk: **internal**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Suboptimal methods of work organisation. Disruptions in technological processes. Exposure to hazards.	Health and safety.	Pursuant to the Occupational Health and Safety Policy approved by the Board of Directors, Nornickel: • continuously monitors compliance with H&S requirements • improves the working conditions for its employees and contractors deployed at Nornickel's production facilities, including by implementing new technologies and labour-saving solutions, and enhancing industrial safety at production facilities • provides employees with certified state-of-the-art personal protective equipment • improves the system of stationary gas analysers, provides employees with portable gas analysers • carries out preventive and therapeutic interventions and enforces hygiene protocols to reduce the potential impact of harmful and hazardous production factors • regularly trains and briefs employees on health and safety, assesses their health and safety performance and conducts corporate workshops, including by deploying special simulator units • enhances methodological support for H&S functions, including through the development and implementation of corporate standards • improves the risk assessment and management framework at the Group's production facilities as part of the Risk Control project • reviews the competencies of line managers at Nornickel's production facilities, develops H&S training programmes and arranges relevant trainings • holds H&S competitions • communicates the circumstances and causes of accidents to all Nornickel employees, conducts ad-hoc safety briefings • introduces frameworks to manage technical, technological, organisational and HR changes.

RISK OF EPIDEMICS

Risk related to the spread of infectious diseases and the subsequent preventive, safety and response measures.

Impact on goals: **medium**

Source of risk: **external**

Change in risk: **increasing**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Spread of viral infections. Anti-epidemic restrictive measures imposed by federal and regional authorities.	Social responsibility: comfort and safety of people living in Nornickel's regions of operation. Efficient delivery of finished products (metals) in line with the production programme. Timely supply of products to consumers.	Nornickel has implemented a range of measures to mitigate the risk impact, including: • 100% of salaries maintained, with additional compensation for employees working on sites and in offices • work from home for office employees • personal protective equipment, tests, medical devices, sanitisers, etc. provided to all sites • purchases of medicines and medical equipment (including 412 ventilators, 15 mobile and 2 stationary labs, 7 ambulances, and over 372 thousand tests) • assistance in expanding local hospital capacity • support for SMEs • support for local volunteers who help employees requiring regular health monitoring • arrangements for mandatory COVID-19 testing • establishment of an emergency response team • two-week quarantine for employees coming to the Norilsk Industrial District • increased shifts for shift workers in Chita and Norilsk.

INFORMATION SECURITY RISK

Potential cybercrimes may result in an unauthorised transfer, modification or destruction of information assets, disruption or reduced efficiency of Nornickel's IT services, business, technological and production processes.

Impact on goals: **high**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Growing external threats. Unfair competition. Rapid development of Nornickel's IT infrastructure and automation of technological and business processes. Unlawful acts by employees and/or third parties. Shift to work from home and hiring remote employees outside Nornickel's regions of operation	Mitigation of the information security risk and risk of cyberattacks on Nornickel's information systems and automated process control systems.	To manage this risk, Nornickel: • ensures compliance with applicable Russian laws and regulations with respect to the protection of personal data, insider information, trade secrets and critical information infrastructure • implements MMC Norilsk Nickel's Information Security Policy • categorises information assets and makes information security risk assessments • embeds and monitors compliance with corporate information security standards within information systems and automated process control systems • raises information security awareness among employees • uses technical means to ensure information security of assets and manage access to information assets • ensures information security of the automated process control system • monitors threats to information security and the use of technical protection means, including vulnerability analysis, penetration testing, cryptographic protection of communication channels, controlled access to removable media, protection from confidential data leaks, and mobile device management • develops an information security framework • sets up and certifies the Company's information security management system • implements measures to ensure safe remote access.

TECHNICAL AND PRODUCTION RISK

Technical, production, or natural phenomena which, once materialised, could have a negative impact on the implementation of the production programme and cause equipment breakdown or to need to compensate damage to third parties and the environment.

Impact on goals: **medium**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Harsh natural and climatic conditions, including low temperatures, storm winds, and snow load. Unscheduled stoppages of core equipment caused by fixed assets' wear and tear. Release of explosive gases and flooding of mines. Collapse of buildings and structures. Infrastructure breakdowns.	Efficient delivery of finished products (metals) in line with the production programme.	To manage this risk, Nornickel: • ensures proper and safe operation of its assets in line with the requirements of technical documentation, as well as technical rules and regulations as prescribed by local laws across Nornickel's geographic footprint • develops ranking criteria and criticality assessment for the Norilsk Nickel Group's key industrial assets • implements an automated system for managing reliability, efficiency, and production asset risks • ensures timely replacement of fixed assets to consistently achieve production safety targets • regularly monitors the condition of Nornickel's buildings and structures via an information system for conducting geotechnical surveys • uses satellite technology to monitor Nornickel's assets and further analyse the data • implements automated systems to control equipment process flows, uses state-of-the art engineering controls • improves the maintenance and repair system • trains and educates its employees both locally, on site, and centrally, through its corporate training centres • systematically identifies, assesses and monitors technical and production risks, implements a programme of organisational and technical measures to mitigate relevant risks • develops the technical and production risk management system, including by engaging independent experts to assess the system's performance and completeness of risk data • develops and tests business continuity plans which set out a sequence of actions to be taken by Nornickel's personnel and internal contractors in case of technical and production risk causing maximum damage. These plans are aimed at the earliest resumption of Nornickel's production operations • engages, on an annual basis, independent surveyors to analyse Nornickel's exposure to disruptions in the production chain and make assessments of related risks. In 2020, insurance was taken out against key technical and production risks as part of the property and business interruption (downtime) insurance programme, with emphasis on best risk management practices in the mining and metals industry.

POWER OUTAGES

Failure of core equipment at generating facilities and transmission grid facilities may result in power, heat or water shortages at key production and social facilities in the Norilsk Industrial District.

Impact on goals: **medium**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Isolation of the Norilsk Industrial District's power grid from the national grid (Unified Energy System of Russia). Harsh natural and climatic conditions, including low temperatures, storm winds, and snow load. Length of power, heat and gas transmission lines. Wear and tear of core production equipment and grid infrastructures.	Efficient delivery of finished products (metals) in line with the production programme. Timely supply of products to consumers. Social responsibility: comfort and safety of people living in Nornickel's regions of operation.	To manage this risk, Nornickel: • operates and maintains generating and mining assets as required by the technical documentation, industry rules and standards, and applicable laws • monitors the technical condition of linear facilities, including with the involvement of external experts • ensures timely construction and launch of transformer facilities, as well as timely replacement of transmission towers • ensures timely retrofits (equipment replacement) of TPP and HPP power units • ensures timely upgrades and repairs to trunk gas and condensate pipelines and gas distribution networks.

COMPLIANCE RISK

The risk of legal liability and/or legal sanctions, significant financial losses, suspension of production, revocation/suspension of a licence, loss of reputation, or other adverse effects arising from Nornickel's non-compliance with the applicable laws, regulations, instructions, rules, standards or codes of conduct.

Impact on goals: **medium**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Discrepancies in rules and regulations. Considerable powers and a high degree of discretion exercised by supervision agencies	Compliance by Nornickel and Norilsk Nickel Group entities with the applicable laws, regulations, corporate standards, and business codes	To manage this risk, Nornickel: • ensures its compliance with the applicable laws • defends its interests during regulatory inspections and administrative proceedings • uses pre-trial and trial remedies to defend its interests • ensures that agreements signed by Nornickel contain clauses safeguarding its interests • implements anti-corruption, anti-money laundering, counter terrorist financing, and counter proliferation financing initiatives • takes actions to prevent unlawful use of insider information and market manipulation • ensures timely and reliable information disclosures as required by the applicable Russian and international laws • has its employees attend insider information management and anti-corruption training courses • ensures that all employees receive anti-corruption induction briefing. In addition, the following internal documents have been developed and approved in 2020: • Regulations on Claims Management at MMC Norilsk Nickel (new version) • Procedure for Payables and Receivables Management at MMC Norilsk Nickel Nickel (new version) • Guidelines for Disclosing Performance Results of MMC Norilsk Nickel in the Unified State Federal Register of Information about Corporate Developments of Legal Entities (new version) • MMC Norilsk Nickel's Internal Control Rules for Preventing, Detecting and Stopping the Unlawful Use of Insider Information and/or Market Manipulation • Regulations on Procedures for Access to Insider Information of PJSC MMC NORILSK NICKEL, and Rules for Protection of Insider Information Confidentiality and Control over Compliance with the Requirements of Laws Related to Combating Insider Information Unlawful Use and Market Manipulation (new version)

SOCIAL RISK

Tensions may escalate among the workforce due to the deterioration of social and economic conditions in Nornickel's regions of operation.

Impact on goals: **medium**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Headcount/staff composition optimisation projects. Rejection of Nornickel's values by individual employees and/or third parties. Limited ability to perform annual wage indexation. Dissemination of false and inaccurate information about Nornickel's plans and operations among the Group's employees. Reallocation of funds originally intended for social programmes and charity.	Social responsibility: • Partnering with regional and local authorities to develop a social infrastructure that supports a safe and comfortable living environment for local communities • Facilitating the employees' professional and cultural development and building up talent pools across Nornickel's regions of operation • Implementing long-term charity programmes and projects	To manage this risk, Nornickel: • strictly adheres to the terms and conditions of collective bargaining agreements between the Group entities and their employees (the Group has signed a total of 23 collective bargaining agreements) • actively interacts with regional authorities, municipalities and civil society institutions • fulfils its social obligations under public-private partnership agreements • implements the World of New Opportunities charity programme aimed at supporting and promoting regional civil initiatives, including by indigenous peoples of Taimyr • implements infrastructure projects to support the accelerated development of the service economy and improved living standards across Nornickel's regions of operation through the Norilsk Development Agency, the Second School Centre for community initiatives in the Pechengsky District, and the Monchegorsk Development Agency • implements regular sociological monitoring across its operations • surveys Norilsk residents on living standards, employment, migration trends, and general social sentiment to identify major issues • implements social projects and programmes aimed at supporting employees and their families, as well as Nornickel's former employees • maintains dialogues with stakeholders and conducts questionnaire surveys when preparing the Group's public sustainability reports • provides a range of social support measures to redundant staff under Kola MMC's social programmes and develops the Social and Economic Development Strategy of the Pechengsky District.

CHANGES IN LEGISLATION AND LAW-ENFORCEMENT PRACTICES

Changes in legislation may cause financial damages (extra costs to ensure compliance with stricter requirements, a heavier tax and levy burden, etc.). Changes in law-enforcement and judicial practices, uncertain legal treatment of certain matters may hamper Nornickel's business, entail extra expenses and delay or raise the cost of its investment projects.

Impact on goals: **medium**

Source of risk: **external**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Unstable legal environment (including lack of codified/uniform regulations in various areas). Frequent changes to legislation. Complicated geopolitical situation. Lack of treasury funds (the government needs to boost its tax and other revenues).	Compliance by Nornickel and Norilsk Nickel Group entities with the applicable laws, regulations, corporate standards, and business codes.	To manage this risk, Nornickel: • continuously monitors changes in legislation and law-enforcement practices across all of its business areas • conducts legal review of draft laws and regulations as well as relevant amendments • participates in discussions of draft laws and regulations, both publicly and as part of expert groups • engages its employees in relevant professional and specialist training programmes, corporate workshops, and conferences • cooperates with government agencies to ensure that new laws and regulations take into account Nornickel's interests.

LACK OF WATER RESOURCES

Water shortages in storage reservoirs of Nornickel's hydropower facilities may result in failure to achieve required water pressures at HPP turbines, leading to lower power output and to drinking water shortages in Norilsk.

Impact on goals: **medium**

Source of risk: **external**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Extreme weather events (droughts) caused by climate change.	Efficient delivery of finished products (metals) in line with the production programme. Timely supply of products to consumers. Social responsibility: comfort and safety of people living in Nornickel's regions of operation.	To manage this risk, Nornickel: • implements a closed water circuit to reduce water withdrawal from external sources • carries out regular hydrological observations to forecast water levels in rivers and other water bodies • cooperates with the Federal Service for Hydrometeorology and Environmental Monitoring (Rosgidromet) on setting up permanent hydrological and meteorological monitoring stations in order to improve the accuracy of water level forecasts for major rivers across Nornickel's regions of operation • dredges the Norilskaya River and prepares its production facilities for reducing their energy consumption in case of risk occurrence • refurbishes its hydropower plants to increase power output through improving the hydroelectric units' performance (implementation period: 2012–2021).

PERMAFROST THAWING

Loss of bearing capacity by pile foundation beds may lead to deformation and collapse of buildings and structures.

Impact on goals: **medium**

Source of risk: **external**

Year-on-year change in risk: **stable**

Key risk factors	Impact on Nornickel's development goal and strategy	Mitigation
Climate change, average annual temperature increases over the last 15 to 20 years. Increased depth of seasonal permafrost thawing.	Efficient delivery of finished products (metals) in line with the production programme. Social responsibility: comfort and safety of people living in Nornickel's regions of operation.	To manage this risk, Nornickel: • regularly monitors the condition of foundation beds underneath buildings and structures built on permafrost • performs geodetic monitoring of the movement of buildings • uses satellite technology to monitor Nornickel's assets and further analyse the data • regularly monitors the condition of Nornickel's buildings and structures via an information system for conducting geotechnical surveys • monitors soil temperature in buildings' foundations • monitors the compliance of its facilities with operational requirements for crawl spaces • takes corrective actions to ensure safe operating conditions for buildings and structures.

SHARE CAPITAL

Nornickel’s authorised capital is made up of 158,245,476 ordinary shares with a par value of RUB 1 each. No preferred shares are issued. All shares in the Company are voting shares, with each voting share counted as one vote.

The following shareholders with non-zero balances in their accounts were listed on the shareholder register as of 31 December 2020:
- 37,982 individuals
- 30 legal entities, including three nominee holders

The total number of the Company’s shareholders at year-end of 2020 exceeded 38 thousand people (excluding disclosures by nominee holders).

Nornickel’s market capitalisation was USD 49.4 billion at year-end 2020, up 2% year-on-year.

SHARE CAPITAL STRUCTURE AS AT CALENDAR YEAR-END (%)

Shareholder	2018	2019	2020
Olderfrey Holdings Ltd (indirect ownership via controlled entities)	34.6	34.6	34.6
UC RUSAL, IPJSC (Direct and indirect ownership via controlled persons. IPJSC EN+ Group owns 56.88% of voting shares in UC RUSAL, IPJSC)	27.8	27.8	27.8
Free float	37.6	37.6	37.6

MARKET CAP AS OF CALENDAR YEAR-END (USD BN)

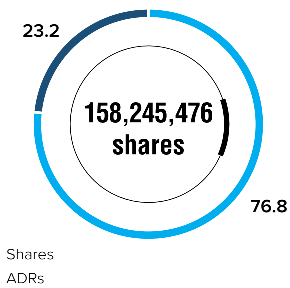
SECURITIES

Nornickel shares have been traded in the Russian stock market since 2001. Since 2014, the shares are included on the First Level quotation list of the Moscow Exchange (ticker: GMKN).

In 2001, Nornickel issued American depositary receipts (ADRs) to represent its shares. Currently, shares are convertible into ADRs at a ratio of 1:10. The number of ADRs traded on stock exchanges is not constant, as depositary receipt holders may convert their securities into shares and vice versa.

Nornickel is included in key Russian and a number of international indices.

SHARE AND ADR SPLIT AS OF 31 DECEMBER 2020 (%)



Type	Shares (ordinary)	ADRs (10 ADRs = 1 share)
Registered number	1–01–40155-F	n/a
Amount	158,245,476	
Custodian	Registrar IRC – R.O.S.T., nominee holders	The Bank of New York Mellon as depository, VTB Bank (PJSC) as custodian
ISIN	RU0007288411	US55315J1025
Ticker	GMKN	MNOD, NILSY
Key trading platforms	Moscow Exchange	London Stock Exchange (OTC section), OTC Markets (the US OTC market)

MOEX INDEX AND RTS INDEX
(7.7%)

MOEX METALS AND MINING INDEX
(15.0%)

BLUE CHIP INDEX
(10.1%)

MOEX 10 INDEX
(10.1%)

MOEX BROAD MARKET INDEX
(7.8%)

SUSTAINABILITY VECTOR INDEX
(7.6%)

MSCI RUSSIA INDEX
(8.2%)

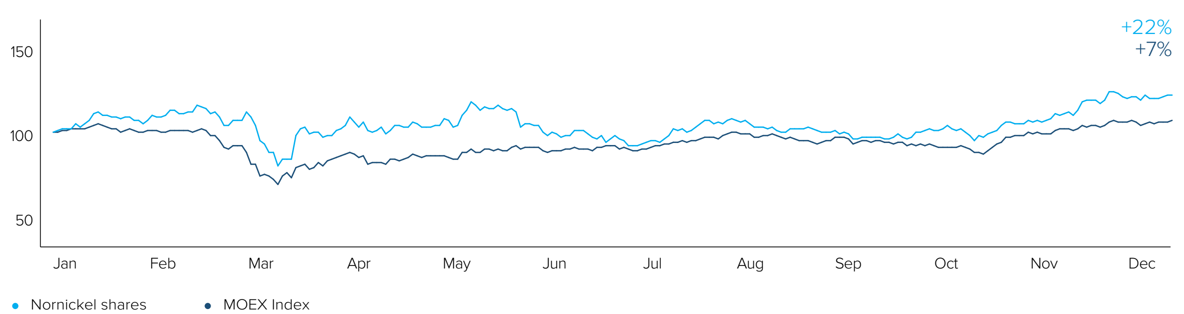
MSCI EMERGING MARKET INDEX
(0.5%)

SHARE AND ADR PERFORMANCE ON STOCK EXCHANGES

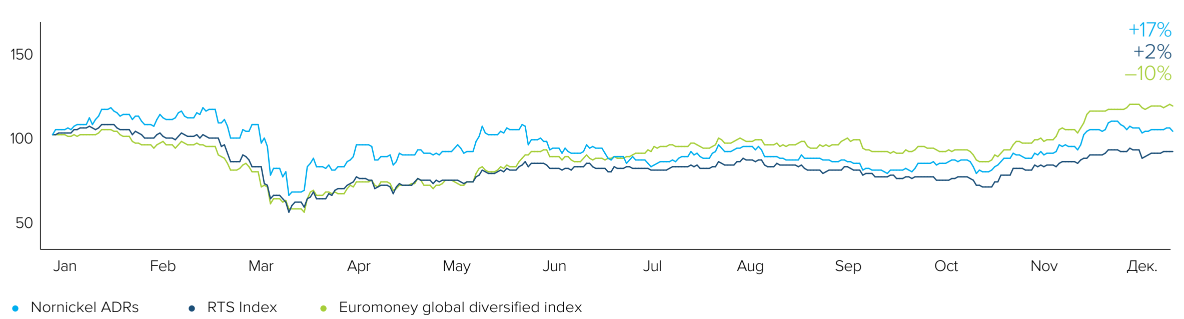
Item	2018	2019	2020
MMC Norilsk Nickel shares on the Moscow Exchange			
Low, RUB	9,170	12,993	15,500
High, RUB	13,349	19,890	24,056
Year-end price, RUB	13,039	19,102	23,696
Market cap as at the period end, RUB bn	2,063	3,023	3,750
MMC Norilsk Nickel ADRs on the London Stock Exchange			
Low, USD	14.9	18.8	19.5
High, USD	21.2	31.5	35.4
Year-end price, USD	18.8	30.6	31.2
Market cap as at the period end, USD bn	29,687	48,344	49,373

Source: Nornickel's estimates based on the stock exchange prices

NORNICKEL SHARE PRICE AND MOEX INDEX IN 2020 (%)



NORNICKEL ADR PRICE AND STOCK INDICES IN 2020 (%)



Source: Bloomberg

FOR MORE DETAILS ON TRADING PERFORMANCE, PLEASE SEE THE SECTION OF OUR WEBSITE. INTERACTIVE DATABASE

REGISTRAR

IRC – R.O.S.T. is the Company's registrar. The Shareholder's Personal Account service developed by the registrar, has enabled shareholders, including those owning shares via nominal holders, to participate in general meetings via e-voting ballots. To get access to the Personal Account, shareholders need to contact an IRC – R.O.S.T. office. Individual shareholders with a verified Public Services Portal account can access their personal account remotely. The access procedure for the Shareholder's Personal Account is detailed on the registrar's website.

SHAREHOLDER RIGHTS

All shareholders enjoy equal rights and treatment in their relations with Nornickel, in particular the rights to:

- participate in General Meetings of Shareholders and vote on all matters within their competence, unless otherwise provided for by Federal Law No. 208-FZ On Joint Stock Companies dated 26 December 1995
- receive dividends if the General Meeting of Shareholders passes the relevant resolution
- receive part of Nornickel's property in case of its liquidation
- have access to information about Nornickel's operations.

Nornickel's Regulations on the General Meeting of Shareholders detail procedures to convene, prepare and conduct its general meetings.

The Annual General Meeting of Shareholders is held once a year, between 1 April and 30 June of the year following the reporting year. General Meetings of Shareholders other than the Annual General Meeting of Shareholders are considered extraordinary meetings. They are convened as per resolution of the Board of Directors at its discretion, or at the request of the Audit Commission, Nornickel's auditor, or shareholders owning at least 10% of Nornickel voting shares as of the date of the request.

Shareholders can exercise other rights as prescribed by the federal laws On Joint Stock Companies and On the Securities Market, as well as other regulations of the Russian Federation.

PUBLIC SERVICES PORTAL

REGULATIONS ON THE GENERAL MEETING OF SHAREHOLDERS

DIVIDEND POLICY

MMC Norilsk Nickel's Dividend Policy aims to balance the interests of the Company and its shareholders, enhance the Company's investment case, boost its market cap and protect shareholder rights.

The Company's Regulations on the Dividend Policy approved by the Board of Directors seek to ensure the transparency of the mechanism for determining the amount of dividend and the dividend payout procedure.

The decision to pay dividends is made by the General Meeting of Shareholders based on recommendations of the Board of Directors. The General Meeting of Shareholders determines the dividend amount and record date, which, as per Russian law, shall be set no earlier than 10 days before and no later than 20 days after the General Meeting of Shareholders.

Dividends to a nominee shareholder listed on the shareholder register shall be paid within 10 business days, while dividends to other persons listed on the shareholder register shall be paid within 25 business days after the record date.

REGULATIONS ON THE DIVIDEND POLICY

THE DECISION TO PAY DIVIDENDS

DIVIDEND REPORT

Individuals/entities whose rights to shares are recorded in the shareholder register are paid dividends by the registrar, IRC – R.O.S.T., upon Nornickel's instruction.

Individuals/entities whose rights to shares are recorded by a nominee shareholder are paid dividends via their nominee shareholder.

Any person who has not received the declared dividend due to the fact that their accurate address or banking details were not available to the Company or the registrar as required, or due to any other delays on the part of the creditor, may, in accordance with Clause 9 of Article 42 of Federal Law No. 208-FZ On Joint Stock Companies dated 26 December 1995, request payment of unpaid dividend within three years from the date of the resolution to pay dividends.

DIVIDENDS IN 2020

On 13 May 2020, the Annual General Meeting of Shareholders approved a dividend of RUB 557.2 per share for 2019. The amount of dividend payout totalled RUB 88 billion (about USD 1.2 billion).

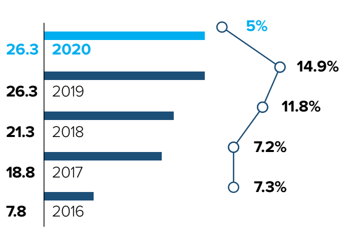
On 10 December 2020, the Extraordinary General Meeting of Shareholders approved a dividend of RUB 623.35 per share for 9M 2020, with the amount of dividend payout totalling close to RUB 98 billion (about USD 1.4 billion).

On 9 April 2021, the Board of Directors recommended that the Annual General Meeting of Shareholders approve a dividend of RUB 1,021 per share (about USD 13.25) for FY2020.

DIVIDEND HISTORY[1]

Period	Declared dividend		Dividends paid[2]	
	RUB mln	USD mln[3]	RUB mln	USD mln[3]
Total for 2020	**260,246**	**3,320**	**n/a**	**n/a**
FY2020[4]	161,603	2,096	n/a	n/a
9M 2020	98,642	1,346	98,290	1,334
Total for 2019	**323,647**	**4,909**	**323,482**	**5,011**
FY2019	88,174	1,201	88,166	1,264
9M 2019	95,595	1,529	95,430	1,567
6M 2019	139,878	2,179	139,886	2,180
Total for 2018	**248,214**	**3,741**	**248,983**	**3,827**
FY2018	125,413	1,928	125,298	1,986
6M 2018	122,802	1,813	122,685	1,841
Total for 2017	**131,689**	**2,131**	**131,546**	**2,137**
FY2017	96,210	1,524	96,117	1,527
6M 2017	35,479	607	35,429	610
Total for 2016	**140,894**	**2,379**	**140,758**	**2,360**
FY2016	70,593	1,239	70,509	1,188
9M 2016	70,301	1,141	70,249	1.72

DIVIDEND YIELDS



- Dividend per share paid in the calendar year, USD
- Dividend yield[5]

[1] Earlier dividend history is available at our website.

[2] Dividends are paid out to shareholders within three years from the respective dividend resolution date. The dividend payouts are shown as of 31 December 2020 accordinf IFRS reporting.

[3] Calculated at the exchange rate of the Bank of Russia as of the declaration date or payment date, respectively.

[4] On 9 April 2021, the Company's Board of Directors recommended that the Annual General Meeting of Shareholders approve a dividend for FY2020.

[5] Recommended dividend to average ADR price (Bloomberg) in the calendar year.

SECURITIES TAXATION

Income from securities is taxable pursuant to the applicable tax laws of the Russian Federation (Chapter 23, Personal Income Tax, and Chapter 25, Corporate Income Tax, of the Russian Tax Code).

Under international double taxation treaties to which the Russian Federation is a party, non-Russia tax residents can claim a reduced rate of withholding tax on Russia source income, or relief from tax in Russia.
To claim these benefits, non-residents need to submit relevant confirmations to their Russian tax agent paying the income:

- A confirmation of permanent residence in a state with which the Russian Federation has a double taxation treaty (tax residency certificate)
- A confirmation that they meet other conditions for application of a reduced rate, if such conditions (or restrictions) are set forth in the applicable treaty
- Should they fail to provide such confirmations by the date of income payment, the tax shall be withheld at the standard rates stipulated by the Russian Tax Code.

DIVIDEND TAX FORMULA[1]

$$AT = P \times TR \times (D_1 - D_2)$$

AT — amount of tax to be withheld from the income of the recipient of dividends

P — proportion of the dividend amount payable to one recipient to the total dividend amount to be distributed

TR — tax rate stipulated by Subclauses 1–2, Clause 3, Article 284 or Clause 1, Article 224 of the Russian Tax Code

D_1 — dividend amount to be distributed among all recipients

D_2 — dividend amount[2] received by Nornickel, provided that previously this amount was not included in the taxable income

TAXATION OF INCOME FROM SECURITIES

Shareholder	Income from transactions	Interest income	Dividend income
Individuals			
Residents	13%[3,4]	13%[4]	13%[4]
Non-residents	30%[3]	30%	15%
Legal entities			
Residents	20%[3]	20%	13%[5]
Non-residents	20%[6]	20%	15%

1 The formula is not applicable to dividends paid to Russia non-residents.
2 Excluding the dividend amount eligible for a zero tax rate pursuant to Subclause 1, Clause 3, Article 284 of the Russian Tax Code.
3 Or 0% if Nornickel shares are sold, provided that by the selling date such shares have been held for more than five years and the requirements are met for the share of real estate in Nornickel's assets as outlined in Clause 2, Article 284.2 of the Russian Tax Code.
4 If the income is paid after 1 January 2021, a tax rate of 15% applies to amounts over RUB 5 mln for the reporting period.
5 Or 0% if as of the date of the dividend resolution a Russian entity has been owning 50% (and more) of shares in Nornickel's authorised capital for 365 days (and more).
6 If the income is classified as income of a foreign entity from sources in Russia in accordance with Clause 1, Article 309 of the Russian Tax Code.

DEBT INSTRUMENTS

CREDIT RATINGS

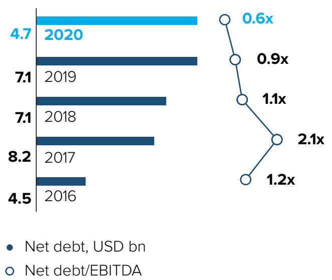
As of the end of 2020, Nornickel held investment-grade credit ratings from all three major international rating agencies and Russian Expert RA:

- Fitch Ratings: BBB–/Stable
- Standard & Poor's: BBB–/Stable
- Moody's: Baa2/Negative
- Expert RA: ruAAA/Stable

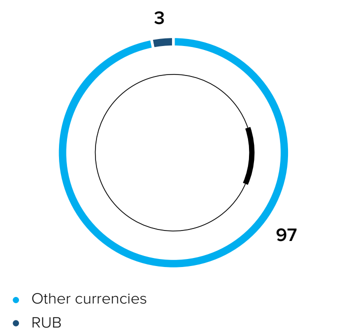
A DETAILED OVERVIEW OF NORNICKEL'S DEBT INSTRUMENTS IS AVAILABLE IN THE SECTION OF OUR WEBSITE.INVESTORS

DEBT PORTFOLIO MANAGEMENT

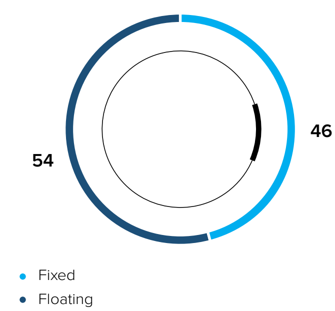
DEBT



DEBT PORTFOLIO BY CURRENCY (%)[1]



DEBT PORTFOLIO BY INTEREST RATE (%)[1]



BONDS

In 2020, Nornickel successfully completed a USD 500 million Eurobond issue maturing in 2025 and locked in the lowest coupon ever achieved by a Russian or CIS issuer for a public placement of USD-denominated Eurobonds, at 2.55% p.a.

As of the end of 2020, Nornickel had five Eurobond issues outstanding for a total of USD 3.75 billion and two rouble exchange-traded bonds for a total of RUB 40 billion.

On 12 February 2021, the Company made an early repayment of exchange-traded bonds in the amount of RUB 15 billion (USD 203 million at the exchange rate as of 31 December 2020).

[1] RUB loans with currency swap applied disclosed as USD loans at the rate of swap initiation.

EUROBONDS

Instrument	Eurobonds 2022 (LPN)	Eurobonds 2022 (LPN)	Eurobonds 2023 (LPN)	Eurobonds 2024 (LPN)	Eurobonds 2025 (LPN)
Issuer: MMC Finance D.A.C.	MMC Finance D.A.C.				
Offering date	08.06.2017	14.10.2015	11.04.2017	28.10.2019	11.09.2020
Maturity date	08.04.2022	14.10.2022	11.04.2023	28.10.2024	11.09.2025
Issue size, USD mln	500	1,000	1,000	750	500
Coupon rate, %	3.849	6.625	4.100	3.375	2.55
Coupon dates	8 October/ 8 April	14 October/ 14 April	11 October/ 11 April	28 October/ 28 April	11 September/ 11 March
Issue rating (F/M/S)	BBB–/–/BBB–	BBB–/Baa2/BBB–	BBB–/–/BBB–	BBB–/Baa2/BBB–	BBB–/Baa2/–

ROUBLE BONDS

Instrument	Exchange-traded bonds, BO-05[2]	Exchange-traded bonds, BO-001P-01
Issuer	MMC Norilsk Nickel	
ISIN	RU000A0JW5C7	RU000A100VQ6
Offering date	19.02.2016	01.10.2019
Maturity date	06.02.2026	24.09.2024
Issue size, RUB bn	15	25
Coupon rate, %	11.60	7.20
Coupon frequency	Every 182 days starting from the offering date	

[2] Early repaid on 12 February 2021.

Nornickel

NO. 9 IFRS FINANCIAL STATEMENTS

CONSOLIDATED FINANCIAL STATEMENTS

for the years ended 31 December 2020, 2019 and 2018

STATEMENT OF MANAGEMENT'S RESPONSIBILITIES FOR THE PREPARATION AND APPROVAL OF THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED 31 DECEMBER 2020, 2019 AND 2018

The following statement, which should be read in conjunction with the auditors' responsibility stated in the auditors' report set out on pages 2–5, 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 Public Joint Stock Company "Mining and Metallurgical Company "Norilsk Nickel" and its subsidiaries (the "Group").

Management of the Group is responsible for the preparation of the consolidated financial statements that present fairly in all material aspects the consolidated financial position of the Group at 31 December 2020, 2019 and 2018 and the consolidated statements of income, comprehensive income, cash flows and changes in equity for the years ended 31 December 2020, 2019 and 2018, 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 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.

The consolidated financial statements for the years ended 31 December 2020, 2019 and 2018 were approved by:

President
V.O. Potanin

Senior Vice President Chief Financial Officer
S.G. Malyshev

Moscow, Russia
16 February 2021

INDEPENDENT AUDITORS' REPORT

TO THE SHAREHOLDERS AND BOARD OF DIRECTORS OF PJSC "MINING AND METALLURGICAL COMPANY "NORILSK NICKEL"

OPINION

We have audited the consolidated financial statements of PJSC "Mining and Metallurgical Company "Norilsk Nickel" (the "Company") and its subsidiaries (the "Group"), which comprise the consolidated statements of financial position as at 31 December 2020, 2019 and 2018, the consolidated income statements, the consolidated statements of comprehensive income, changes in equity and cash flows for the years ended
31 December 2020, 2019 and 2018, 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, 2019 and 2018, and its consolidated financial performance and its consolidated cash flows for the years ended 31 December 2020, 2019 and 2018 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: PJSC "Mining and Metallurgical Company "Norilsk Nickel"
Registration number. in the Unified State Register of Legal Entities: No. 1028400000298.
Dudinka, Krasnoyarsk region, 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.

KPMG

FUEL LEAKAGE IN NORILSK

Please refer to the Note 26 in the consolidated financial statements.

THE KEY AUDIT MATTER	HOW THE MATTER WAS ADDRESSED IN OUR AUDIT
In May 2020, an incident resulting in contamination of water bodies and land as well as damage to biological resources occurred at the heat and power plant of the Group in Norilsk. On 5 February 2021 the court ruled to partially satisfy the claim filed by Rosprirodnadzor in relation to compensation of damages to water bodies and soil. As at 31 December 2020 the Group recognized an environmental provision relating to reimbursement of environmental damage and forecast clean-up and rehabilitation expenses in the amount of USD 2,076 million. Given the materiality of the provision, inherent uncertainty around the ultimate outcome of the litigation since the court decision has not yet come into force, this matter required significant judgement including interpretation of laws and regulations. Therefore, we consider the measurement and disclosure of the environmental provision to be a key audit matter	Our audit procedures included the following: • We reviewed the correspondence with Rosprirodnadzor and documentation considered by the court during the court hearings; • We involved KPMG legal and environmental experts to gain an understanding of the disputed matter; • We analysed decision issued by the court partially satisfying the claim filed by Rosprirodnadzor; • We inquired management of the Group about further steps with regard to the court ruling; • We obtained Group's and its in-house legal counsel's assessment of other existing and potential claims and analysed their interpretation of the relevant laws and regulation. • We involved KPMG tax specialists to assess Group's tax treatment in respect of recognized environmental provision. We also considered the appropriateness and completeness of the disclosures in the consolidated financial statements.

OTHER INFORMATION

Management is responsible for the other information. The other information comprises the Financial Overview (MD&A) (but does not include the consolidated financial statements and our auditors' report thereon), which we obtained prior to the date of this auditors' report, and the information included in other sections of Annual Report for 2020, which is expected to be made available to us after that date.

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 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.

If, based on the work we have performed on the other information that we have obtained prior to the date of this auditors' report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

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.

KPMG

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.

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:

Natalia Velichko

JSC "KPMG"
Moscow, Russia
16 February 2021

CONSOLIDATED INCOME STATEMENT FOR THE YEARS ENDED 31 DECEMBER 2020, 2019 AND 2018

US DOLLARS MILLION

	Notes	For the year ended 31 December		
		2020	2019	2018
REVENUE				
Metal sales	7	14,977	12,851	10,962
Other sales		568	712	708
Total revenue		**15,545**	**13,563**	**11,670**
Cost of metal sales	8	(4,500)	(4,499)	(4,505)
Cost of other sales		(575)	(684)	(622)
Gross profit		**10,470**	**8,380**	**6,543**
General and administrative expenses	9	(869)	(938)	(890)
Selling and distribution expenses	10	(156)	(127)	(92)
Impairment of non-financial assets	15	(308)	24	(50)
Other operating expenses, net	11, 26	(2,737)	(303)	(95)
Operating profit		**6,400**	**7,036**	**5,416**
Foreign exchange gain/(loss), net		(1,034)	694	(1,029)
Finance costs, net	12	(879)	(306)	(580)
Gain from disposal of subsidiaries	21	19	2	–
Income from investments	13	73	98	95
Profit before tax		**4,579**	**7,524**	**3,902**
Income tax expense	14	(945)	(1,558)	(843)
Profit for the year		**3,634**	**5,966**	**3,059**
Attributable to:				
Shareholders of the parent company		3,385	5,782	3,085
Non-controlling interests		249	184	(26)
		3,634	**5,966**	**3,059**
EARNINGS/(LOSS) PER SHARE				
Basic and diluted earnings/(loss) per share attributable to shareholders of the parent company (US Dollars per share)	22	21.4	36.5	19.5

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEARS ENDED 31 DECEMBER 2020, 2019 AND 2018

US DOLLARS MILLION

	For the year ended 31 December		
	2020	2019	2018
PROFIT FOR THE YEAR	**3,634**	**5,966**	**3,059**
OTHER COMPREHENSIVE INCOME/(LOSS)			
Items to be reclassified to profit or loss in subsequent periods:			
Effect of translation of foreign operations	(9)	(4)	(2)
Other comprehensive loss to be reclassified to profit or loss in subsequent periods, net	**(9)**	**(4)**	**(2)**
Items not to be reclassified to profit or loss in subsequent periods:			
Effect of translation to presentation currency	(690)	488	(905)
Other comprehensive income/(loss) not to be reclassified to profit or loss in subsequent periods, net	**(690)**	**488**	**(905)**
Other comprehensive income/(loss) for the year, net of tax	**(699)**	**484**	**(907)**
TOTAL COMPREHENSIVE INCOME/(LOSS) FOR THE YEAR, NET OF TAX	**2,935**	**6,450**	**2,152**
Attributable to:			
Shareholders of the parent company	2,763	6,226	2,232
Non-controlling interests	172	224	(80)
	2,935	**6,450**	**2,152**

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AT 31 DECEMBER 2020, 2019 AND 2018

US DOLLARS MILLION

		At 31 December		
	Note	2020	2019	2018
ASSETS				
Non-current assets				
Property, plant and equipment	15	10,762	11,993	9,934
Intangible assets		222	215	163
Other financial assets	16	81	223	141
Deferred tax assets	14	755	98	73
Other non-current assets	18	327	370	386
		12,147	**12,899**	**10,697**
Current assets				
Inventories	18	2,192	2,475	2,280
Trade and other receivables	19	537	362	204
Advances paid and prepaid expenses		79	74	75
Other financial assets	16	58	51	147
Income tax receivable		7	68	92
Other taxes receivable	17	444	644	271
Cash and cash equivalents	20	5,191	2,784	1,388
Other current assets		51	117	97
		8,559	**6,575**	**4,554**
TOTAL ASSETS		**20,706**	**19,474**	**15,251**
EQUITY AND LIABILITIES				
Capital and reserves				
Share capital	22	6	6	6
Share premium		1,254	1,254	1,254
Translation reserve		(5,521)	(4,899)	(5,343)
Retained earnings	30	8,290	7,452	7,306
Equity attributable to shareholders of the parent company		**4,029**	**3,813**	**3,223**
Non-controlling interests	23	646	474	250
		4,675	**4,287**	**3,473**

	Note	At 31 December 2020	2019	2018
Non-current liabilities				
Loans and borrowings	24	9,622	8,533	8,208
Lease liabilities	25	203	180	16
Provisions	26	644	674	365
Trade and other long-term payables		32	37	200
Derivative financial instruments	29	52	–	61
Deferred tax liabilities	14	43	60	385
Other long-term liabilities	35	23	281	185
		10,619	**9,765**	**9,420**
Current liabilities				
Loans and borrowings	24	12	1,087	209
Lease liabilities	25	59	44	6
Trade and other payables	27	1,427	1,706	1,551
Dividends payable	30	47	1,553	6
Employee benefit obligations	28	401	393	307
Provisions	26	2,258	100	77
Derivative financial instruments	29	93	–	5
Income tax payable		358	36	35
Other taxes payable	17	329	503	162
Other current liabilities	35	428	–	–
		5,412	**5,422**	**2,358**
TOTAL LIABILITIES		**16,031**	**15,187**	**11,778**
TOTAL EQUITY AND LIABILITIES		**20,706**	**19,474**	**15,251**

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEARS ENDED 31 DECEMBER 2020, 2019 AND 2018

US DOLLARS MILLION

	For the year ended 31 December		
	2020	2019	2018
OPERATING ACTIVITIES			
Profit before tax	**4,579**	**7,524**	**3,902**
Adjustments for:			
Depreciation and amortisation	943	911	765
Impairment of non-financial assets	308	(24)	50
Loss on disposal of property, plant and equipment	19	19	1
Gain from disposal of subsidiaries (Note 21)	(19)	(2)	–
Change in provisions and allowances (Note 26)	2,464	220	61
Finance costs and income from investments, net	806	208	485
Foreign exchange (gain)/loss, net	1,034	(694)	1,029
Other	120	64	46
	10,254	**8,226**	**6,339**
Movements in working capital:			
Inventories	(119)	48	297
Trade and other receivables	(161)	(122)	102
Advances paid and prepaid expenses	(32)	14	(5)
Other taxes receivable	125	(331)	(15)
Employee benefit obligations	20	62	11
Trade and other payables	(239)	(247)	676
Provisions	(186)	(35)	(28)
Other taxes payable	(70)	304	(97)
Cash generated from operations	**9,592**	**7,919**	**7,280**
Income tax paid	(1,304)	(1,910)	(787)
Net cash generated from operating activities	**8,288**	**6,009**	**6,493**

	For the year ended 31 December		
	2020	**2019**	**2018**
INVESTING ACTIVITIES			
Purchase of share in associates	(14)	–	–
Purchase of property, plant and equipment	(1,686)	(1,262)	(1,480)
Purchase of intangible assets	(74)	(62)	(73)
Purchase of non-current assets	–	–	(104)
Loans issued	(3)	(3)	(7)
Proceeds from repayment of loans issued	36	54	13
Net change in deposits placed	(4)	78	5
Proceeds from disposal of property, plant and equipment	2	10	3
Net cash inflow/(net cash outflow) from disposal of subsidiaries (Note 21)	28	(20)	–
Interest and other investment income received	67	85	81
Net cash used in investing activities	**(1,648)**	**(1,120)**	**(1,562)**
FINANCING ACTIVITIES			
Proceeds from loans and borrowings	2,903	3,212	2,173
Repayments of loans and borrowings	(2,552)	(2,163)	(2,547)
Payments of lease liabilities	(46)	(45)	(9)
Dividends paid (Note 30)	(4,165)	(4,166)	(3,369)
Dividends paid to non-controlling interest	–	(1)	(1)
Interest paid	(472)	(460)	(551)
Net cash used in financing activities	**(4,332)**	**(3,623)**	**(4,304)**
Net increase in cash and cash equivalents	**2,308**	**1,266**	**627**
Cash and cash equivalents at the beginning of the year	**2,784**	**1,388**	**852**
Effects of foreign exchange differences on balances of cash and cash equivalents	99	130	(91)
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	**5,191**	**2,784**	**1,388**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEARS ENDED 31 DECEMBER 2020, 2019 AND 2018

US DOLLARS MILLION

	Notes	Share capital	Share premium	Translation reserve
BALANCE AT 1 JANUARY 2018		**6**	**1,254**	**(4,490)**
Profit/(loss) for the year		–	–	–
Other comprehensive loss		–	–	(853)
Total comprehensive income/(loss) for the year		**–**	**–**	**(853)**
Dividends	30	–	–	–
BALANCE AT 31 DECEMBER 2018		**6**	**1,254**	**(5,343)**
Profit for the year		–	–	–
Other comprehensive income		–	–	444
Total comprehensive income for the year		**–**	**–**	**444**
Dividends	30	–	–	–
BALANCE AT 31 DECEMBER 2019		**6**	**1,254**	**(4,899)**
Profit for the year		–	–	–
Other comprehensive loss		–	–	(622)
Total comprehensive income for the year		**–**	**–**	**(622)**
Dividends	30	–	–	–
BALANCE AT 31 DECEMBER 2020		**6**	**1,254**	**(5,521)**

	Equity attributable to shareholders of the parent company			
	Retained earnings	Total	Non-controlling interests	Total
	7,557	**4,327**	**331**	**4,658**
	3,085	**3,085**	(26)	**3,059**
	–	**(853)**	(54)	**(907)**
	3,085	**2,232**	**(80)**	**2,152**
	(3,336)	**(3,336)**	(1)	**(3,337)**
	7,306	**3,223**	**250**	**3,473**
	5,782	**5,782**	184	**5,966**
	–	**444**	40	**484**
	5,782	**6,226**	**224**	**6,450**
	(5,636)	**(5,636)**	–	**(5,636)**
	7,452	**3,813**	**474**	**4,287**
	3,385	**3,385**	249	**3,634**
	–	**(622)**	(77)	**(699)**
	3,385	**2,763**	**172**	**2,935**
	(2,547)	**(2,547)**	–	**(2,547)**
	8,290	**4,029**	**646**	**4,675**

1. GENERAL INFORMATION

Organisation and principal business activities

Public Joint Stock Company “Mining and Metallurgical Company “Norilsk Nickel” (the “Company” or “MMC “Norilsk Nickel”) was incorporated in the Russian Federation on 4 July 1997. The principal activities of the Company and its subsidiaries (the “Group”) are exploration, extraction, refining of ore and nonmetallic minerals and sale of base and precious metals produced from ore. Further details regarding the nature of the business and structure of the Group are presented in note 36.

Major production facilities of the Group are located in Taimyr and Kola Peninsulas and the Zabaikalsky region of the Russian Federation, and in Finland.

2. BASIS OF PREPARATION

Statement of compliance

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (“IFRS”).

The entities of the Group maintain their accounting records in accordance with the laws, accounting and reporting regulations of the jurisdictions in which they are incorporated and registered. Accounting principles in certain jurisdictions may differ from those generally accepted under IFRS. Financial statements of such entities have been adjusted to ensure that the consolidated financial statements are presented in accordance with IFRS.

The Group issues a separate set of IFRS consolidated financial statements to comply with the requirements of Russian Federal Law No 208-FZ On consolidated financial statements (“Law 208-FZ”) dated 27 July 2010.

Basis of measurement

The consolidated financial statements of the Group are prepared on the historical cost basis, except for mark-to-market valuation of certain classes of financial instruments, in accordance with IFRS 9 Financial Instruments.

3. CHANGES IN ACCOUNTING POLICIES

The accounting policies applied in the preparation of these consolidated financial statements are generally consistent with those applied in the preparation of the Group’s consolidated financial statements at and for the year ended 31 December 2019.

The accounting policies applied in the preparation of consolidated financial statements at and for the year ended 31 December 2019 are generally consistent with those applied in the preparation of the Group’s consolidated financial statements at and for the year ended 31 December 2018 except for changes related to the adoption of IFRS 16 Leases from 1 January 2019.

Adoption of new and revised standards and interpretations during the year ended 31 December 2020

Adoption of amendments to the following Standards did not have material impact on the accounting policies, financial position or results of the Group:

- IFRS 3 Business combinations (amended);
- IFRS 7 Financial Instruments: Disclosures (amended);
- IFRS 9 Financial Instruments (amended);
- IFRS 16 Leases (amended);
- IAS 1 Presentation of Financial Statements (amended);
- IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors (amended);
- IAS 39 Financial Instruments: Recognition and Measurement (amended);
- Revised Conceptual Framework for Financial Reporting.

Adoption of new and revised standards and interpretations during the year ended 31 December 2019

The Group initially adopted IFRS 16 Leases from 1 January 2019. In accordance with the modified retrospective approach on the initial application of the standard the comparative information for the year ended 31 December 2018 has not been restated

In accordance with modified retrospective approach as of the date of initial application:
- for leases previously classified as operating lease in line with IAS 17 Leases lease liabilities were recognised at the present value of the remaining lease payments, discounted using the weighted average incremental borrowing rate at that date (at 1 January 2019: 5.55% per annum);
- right-of-use assets were recognised in the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to the respective lease contracts.

On the initial application of IFRS 16 Leases the Group has recognised additional lease liabilities (both current and non-current) in the amount of USD 204 million (see below). These leases were classified as operating lease applying IAS 17 Leases and not recognised as lease liabilities before 1 January 2019.

	At 1 January 2019
FUTURE MINIMUM LEASE PAYMENTS DUE UNDER NON-CANCELLABLE OPERATING LEASE AGREEMENTS AT 31 DECEMBER 2018	**611**
Less	
Current leases	(13)
Variable lease payments that do not depend on an index or a rate	(103)
Future lease payments for leased items not transferred to the lessee at 1 January 2019	(158)
Effect of discounting of payments	(133)
LEASE LIABILITIES ADDITIONALLY RECOGNISED AT 1 JANUARY 2019	**204**
Plus	
Finance lease liabilities recognised at 31 December 2018	22
Lease liabilities recognised at 1 January 2019	**226**

The Group applied the following practical expedients on the initial application of IFRS 16 Leases:
- applied this standard to the contracts that were previously identified as leases in line with IAS 17 Leases and IFRIC 4 Determining whether an Arrangement contains a Lease;
- did not recognise lease liabilities in respect of the current leases expiring within 12 months of the date of the initial application;
- did not perform impairment review of right-of-use assets due to the absence of the onerous lease contracts according to IAS 37 Provisions, Contingent Liabilities and Contingent Assets immediately before the date of initial application;
- excluded initial direct costs from the measurement of right-of-use assets;
- used hindsight, such as determination of the lease term if the contract contains options to extend or terminate the lease.

Adoption of other new and revised standards and interpretations during the year ended 31 December 2019

Adoption of amendments to the following Standards did not have material impact on the accounting policies, financial position or results of the Group:
- IFRIC 23 Uncertainty over Income Tax Treatments;
- IFRS 9 Financial Instruments (amended);
- IAS 28 Investments in Associates and Joint Ventures (amended);
- IAS 19 Employee Benefits (amended);
- Annual Improvements to IFRSs 2015-2017 Cycle.

Adoption of new and revised standards and interpretations during the year ended 31 December 2018

Adoption of amendments to the following Standards for annual periods from 1 January 2018 did not have material impact on the accounting policies, financial position or results of the Group:

- IFRS 1 First-time Adoption of International Financial Reporting Standards (amended);
- IFRS 2 Share-based Payment (amended);
- IFRS 4 Insurance Contracts (amended);
- IAS 28 Investments in Associates and Joint Ventures (amended);
- IAS 40 Investment Property (amended);
- IFRIC 22 Foreign Currency Transactions and Advance Consideration.

Standards and interpretations in issue but not yet effective

The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

Standards and Interpretations	Effective for annual periods beginning on or after
IAS 16 Property, plant and equipment	1 January 2022
IAS 37 Provisions, contingent liabilities and contingent assets	1 January 2022
IAS 41 Agriculture (amended)	1 January 2022
IFRS 1 First-time Adoption of International Financial Reporting Standards (amended)	1 January 2022
IFRS 3 Business Combinations (amended)	1 January 2022
IFRS 9 Financial Instruments (amended)	1 January 2022
IFRS 16 Leases (amended)	1 January 2022
IAS 1 Presentation of financial statements (amended)	1 January 2023
IFRS 17 Insurance Contracts	1 January 2023

Management of the Group plans to adopt all of the above standards and interpretations in the Group's consolidated financial statements for the respective periods. These standards are not expected to have a material impact on the Group in the future reporting periods and on foreseeable future transactions.

Reclassification

Finance lease liabilities recognised in line with IAS 17 Leases are presented as lease liabilities in the consolidated statement of financial position at 31 December 2018 (previously presented in loans and borrowings).

At 31 December 2020 management reassessed reclassification between cost of metal sales and selling and distribution expenses (refer to notes 8 and 10). Information for the year ended 31 December 2019 has been reclassified to conform with the current period presentation.

4. SIGNIFICANT ACCOUNTING POLICIES

Basis of consolidation

Subsidiaries

The consolidated financial statements incorporate financial statements of the Company and its subsidiaries, from the date that control effectively commenced until the date that control effectively ceased. Control is achieved where the Company 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.

Non-controlling interests in net assets (excluding goodwill) of the consolidated subsidiaries are identified separately from the equity of the shareholders of the Company therein. Non-controlling interests include interests at the date of the original business combination and a non-controlling share of changes in net assets since the date of the combination. Total comprehensive income must be attributed to the shareholders of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Non-controlling interests may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis.

All intra-group balances, transactions and any unrealised profits or losses arising from intra-group transactions are eliminated in full on consolidation.

Changes in the Group's ownership interest in a subsidiary that do not result in the Group losing control are accounted for within the equity.

When the Group loses control of a subsidiary it derecognises the assets and liabilities and related equity components of the former subsidiary. Any gain or loss is recognised in the consolidated income statement. Any investment retained in the former subsidiary is measured at its fair value at the date when control is lost.

Joint arrangements

Investments in joint arrangements are classified as either joint operations or joint ventures, depending on the contractual rights and obligations of each investor. The Group recognises in relation to its interest in a joint operation: its assets, including its share of any assets held jointly; its liabilities, including its share of any liabilities incurred jointly; its revenue from the sale of its share of the output arising from the joint operation; its share of the revenue from the sale of the output by the joint operation; and its expenses, including its share of any expenses incurred jointly. The Group accounts for its investments in joint ventures using the equity method.

Business combinations

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group at the date of acquisition in exchange for control of the acquiree.

Where an investment in a subsidiary, an associate or a joint venture is made, any excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the fair value of the identifiable assets acquired and the liabilities assumed at the acquisition date is recognised as goodwill. Goodwill in respect of subsidiaries and joint operations is disclosed separately and goodwill relating to associates and joint ventures is included in the carrying value of the investment in associates or joint ventures. Goodwill disclosed separately is reviewed for impairment at least annually. If impairment has occurred, it is recognised in the consolidated income statement during the period in which the circumstances are identified and is not subsequently reversed.

If, after reassessment, the fair value of the identifiable assets acquired and liabilities assumed at the acquisition date exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised in the consolidated income statement immediately as a bargain purchase gain.

Acquisition-related costs are recognised in the consolidated income statement as incurred.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are retrospectively adjusted during the measurement period (a maximum of twelve months from the date of acquisition), or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognised at that date.

Functional and presentation currency

The individual financial statements of each Group entity are presented in its functional currency.

The Russian Rouble ("RUB") is the functional currency of the Company, all of its subsidiaries located in the Russian Federation and all foreign subsidiaries of the Group, except for the following subsidiaries operating with a significant degree of autonomy. The functional currency of Norilsk Nickel Harjavalta Oy is US Dollar, and the functional currency of Norilsk Nickel Africa Proprietary Limited and Nkomati Nickel Mine is South African Rand.

The presentation currency of the consolidated financial statements of the Group is US Dollar ("USD"). Using USD as a presentation currency is common practice for global mining companies. In addition, USD is a more relevant presentation currency for international users of the consolidated financial statements of the Group. The Group also issues consolidated financial statements to comply with Law 208-FZ, which use the Russian Rouble as the presentation currency.

The translation of Components of the consolidated statement of financial position, consolidated income statement, consolidated statement of cash flows and consolidated statement of changes in equity are translated into presentation currency using the following applicable exchange rates:

Components of consolidated statements	Applicable exchange rates
Assets and liabilities	Period-end rate
Income, expenses and cashflows	Date of underlying transaction or an average approximating exchange rates prevailing at the dates of the transactions
Equity	Historical rates

All resulting exchange differences from translation of the consolidated income statement and consolidated statement of financial position components are recognised as a separate component in other comprehensive income/loss.

Revenue recognition

Metal sales revenue

Revenue from metal sales is recognised at a point of time when control over the asset is transferred to a customer and represents the invoiced value of all metal products shipped to customers, net of value added tax (if any).

Revenue from contracts that are entered into and continue to meet the Group's expected sale requirements designated for that purpose at their inception and are expected to be settled by physical delivery of the goods, is recognised in the consolidated financial statements as and when they are delivered. A gain or loss on forward contracts expected to be settled by physical delivery or on net basis is measured at fair value recognised in revenue and disclosed separately from revenue from contracts with customers.

As a practical expedient, the Group does not adjust the promised amount of consideration for the effects of a significant financing component, if the expected period between when the Group transfers a promised good or service to a customer and the customer pays for that good or service will be one year or less.

Certain contracts are provisionally priced so that price is not settled until a predetermined future date based on the market price at that time. Revenue from these transactions is initially recognised at the market price at the time of sale. Price adjustment on provisionally priced contracts is recorded in revenue.

Other revenue

Revenue from contracts with customers on sale of goods, other than metals, is recognised at a point of time when control over the asset is transferred to the customer in accordance with the shipping terms specified in the sales agreements.

Revenue from service contracts is recognised over-time when the services are rendered.

DIVIDEND AND INTEREST INCOME

Dividend income from investments is recognised when the Group's right to receive payment has been established. Interest income is accrued using the effective interest method.

Leases

Accounting policies after 1 January 2019

The Group assesses at the inception of a contract whether it or its components is, or contains, a lease. The Group recognises a right-of-use asset and a corresponding lease liability, if a lease contract transfers to the lessee the right to control the use of the identified asset for a period of time in exchange for a consideration, except for current leases with the term of 12 months or less. The Group recognises lease payments associated with current leases as an expense on a straight-line basis over the lease term. Land plots lease payments are treated as variable payments, if they are linked to land cadastral value and changes in the latter do not depend on market rental rates. The Group recognises variable lease payments as an expense in the period when the event that triggers those payments occurs.

Right-of-use assets are initially recognised at cost that comprise when applicable:
- the initial amount of the lease liability;
- any lease payments made at or before the lease commencement date;
- any initial direct costs incurred by the lessee;
- an estimate of costs to be incurred by the lessee for retirement of the underlying asset and restoration of the site on which it is located.

Right-of-use assets are subsequently measured at cost less any accumulated depreciation and any accumulated impairment losses, adjusted for any remeasurement of the lease liability. Right-of-use assets are depreciated on a straight-line basis over their estimated economic useful lives or over the term of the lease, if shorter. Right-of-use assets are presented in property, plant and equipment in the consolidated statement of financial position.

Lease liabilities (refer to note 25) are initially measured at the present value of the lease payments that are not paid at the commencement date and subsequently remeasured to reflect changes to the lease payments. The lease payments are discounted using interest rate implicit in the lease (if that rate can be readily determined) or using Group incremental borrowing rate at the commencement date determined based on lease term and currency of the lease payments.

Accounting policies before 1 January 2019

Leases under which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. Assets subject to finance leases are capitalised as property, plant and equipment at the lower of fair value or present value of future minimum lease payments at the date of acquisition. Simultaneously, related lease obligation is recognised at the same value. Assets held under finance leases are depreciated over their estimated economic useful lives or over the term of the lease, if shorter. If there is reasonable certainty that the lessee will obtain ownership at the end of the lease term, the period of expected use is the useful life of the asset.

Finance lease payments are allocated using the effective interest rate method, between the lease finance cost, which is included in finance costs, and the capital repayment, which reduces the related lease obligation to the lessor.

Leases where the lessor retains substantially all the risks and benefits of ownership of the asset are classified as operating leases. Operating lease payments are recognised as an expense in the consolidated income statement on a straight-line basis over the lease term, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rentals arising under operating and finance leases are expensed in the period in which they are incurred.

Finance costs

Finance costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time when the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

Government grants

Government grants are recognised when there is reasonable assurance that the grant will be received and all conditions and requirements attaching to the grant will be met. Government grants related to assets are deducted from the cost of these assets in arriving at their carrying value.

Employee benefits

Remuneration to employees in respect of services rendered during a reporting period is recognised as an expense in that period. Deferred costs under housing programmes for employees Our Home/My Home and Your Home are recognised as other non-current assets and amortised over the certain period of employee participation in the programme (five to ten years). Long-term employee benefits obligations are discounted to present value.

Defined contribution plans

The Group contributes to the following major defined contribution plans:

- Pension Fund of the Russian Federation;
- Mutual accumulated pension plan.

The only obligation of the Group with respect to these and other defined contribution plans is to make specified contributions in the period in which they arise. These contributions are recognised in the consolidated income statement when employees have rendered respective services.

Income tax expense

Income tax expense represents the sum of the current and deferred tax.

Income tax is recognised as an expense or income in the consolidated income statement unless it relates to other items recognised directly in other comprehensive income, in which case the tax is also recognised directly in other comprehensive income. Where current or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

Current tax

Current tax is based on taxable profit for the year. Taxable profit differs from profit before tax as reported in the consolidated income statement because it excludes items of income or expense that are taxable or deductible in other years and it also excludes items that are never taxable or deductible.

Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in computation of taxable profit. As a general rule, deferred tax liabilities are recognised for all taxable temporary differences, and deferred tax assets are recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Deferred tax assets and liabilities are not recognised, if temporary differences arise from goodwill or from the initial recognition of assets and liabilities other than in a business combination which, at the time of the transaction, affects neither taxable profit nor accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries, joint ventures, associates and interests in joint operations, unless the Group is able to control the reversal of the temporary difference, and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and adjusted to the extent that it is probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

The measurement of deferred tax liabilities and assets reflects the tax consequences of the manner in which the Group expects at the reporting date to recover or settle the carrying amount of its assets and liabilities. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority.

Property, plant and equipment and mine development costs

Mining assets

Mine development costs are capitalised and comprise expenditures directly related to:

- acquiring mining and exploration licences;
- developing new mining operations;
- estimating revised content of minerals in the existing ore bodies; and
- expanding capacity of a mine.

Mine development costs include directly attributable borrowings costs.

Mine development costs are transferred to mining assets and start to be depreciated when a new mine reaches commercial production quantities.

Mining assets are recorded at cost less accumulated depreciation and impairment losses. Mining assets include cost of acquiring and developing mining properties, pre-production expenditure, mine infrastructure, plant and equipment that process extracted ore, mining and exploration licenses and present value of future decommissioning costs and borrowing costs eligible for capitalisation.

Carrying value of mining assets is depreciated over the lesser of their individual economic useful lives on a straight-line basis, or the remaining life of mine based on the amount of the commercial ore reserves on a units of production basis. When determining the life of mine, assumptions valid at the time of estimation may change in case new information becomes available. Useful lives are in average varying from 1 to 49 years

Non-mining assets

Non-mining assets include metallurgical processing plants, buildings, infrastructure, machinery and equipment and other non-mining assets. Non-mining assets are stated at cost less accumulated depreciation and impairment losses.

Non-mining assets are depreciated on a straight-line basis over their economic useful lives.

Depreciation charge is calculated over the following economic useful lives:

- buildings, structures and utilities 2 – 50 years
- machinery, equipment and transport 2 – 30 years
- other non-mining assets 1 – 20 years

Capital construction-in-progress

Capital construction-in-progress comprises costs directly related to construction of buildings, processing plant, infrastructure, machinery and equipment, including:

- advances given for purchases of property, plant and equipment and materials acquired for construction of buildings, processing plant, infrastructure, machinery and equipment;
- irrevocable letters of credit opened for future fixed assets deliveries and secured with deposits placed in banks;
- borrowing costs eligible for capitalisation.

Depreciation of an asset begins when it is available for use and it is in the location and condition necessary for it to be capable of operating in the manner intended by management.

Exploration expenditure

Exploration expenditure, including geophysical, topographical, geological and similar types of expenditure made within research, mining and exploration licences acquired, is capitalised and begins to be amortised over the life of mine, when commercial viability of the project is proved. Otherwise it is expensed in the period in which it is incurred.

Exploration expenditure written-off before development and construction starts is not subsequently capitalised, even if a commercial discovery subsequently occurs.

Intangible assets, excluding goodwill

Intangible assets are recorded at cost less accumulated amortisation and impairment losses. Intangible assets mainly include patents, licences, software and rights to use software and other intangible assets.

Amortisation of patents, licenses and software is charged on a straight-line basis over 1 – 12 years.

Impairment of tangible and intangible assets, excluding goodwill

At each reporting date, the Group analyses the triggers of impairment of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not practical to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less cost to sell and value-in-use. In assessing value-in-use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or cash-generating unit. If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised in the consolidated income statement immediately.

Where an impairment loss subsequently reversed, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but only to the extent that the increased carrying amount does not exceed the original carrying amount that would have been determined had no impairment loss been recognised in prior periods. A reversal of an impairment loss is recognised in the consolidated income statement.

Inventories

Refined metals

Main jointly produced metals include nickel, copper, palladium, platinum; by-products include cobalt, gold, rhodium, silver and other metals. Main products are measured at the lower of cost of production or net realisable value. The cost of production of main products is determined as total production cost, allocated to each joint product by reference to their relative sales value. By-products are initially measured at net realisable value. These estimates take into consideration fluctuations of price or cost directly relating to events occurring subsequent to the consolidated statement of financial position date to the extent that such events confirm conditions existing at the end of the period

Work-in-process

Work-in-process includes all costs incurred in the normal course of business for producing each product including direct material and direct labour costs and allocation of production overheads, depreciation and amortisation and other costs, incurred for producing each product, given its stage of completion less allowance for adjustment to net realisable value. The change in allowance for work-in-process is recognised in the Cost of metal sales in the consolidated income statement.

Materials and supplies

Materials and supplies are valued at the weighted average cost less allowance for obsolete and slow-moving items.

Financial assets

Financial assets are recognised when the Group has become a party to the contractual arrangement of the instrument and are initially measured at fair value, plus transaction costs, except for those financial assets classified at fair value through profit or loss, which are initially measured at fair value.

Financial assets are classified into the following specified categories:
- financial assets at amortised cost;
- financial assets at fair value through other comprehensive income; and
- financial assets at fair value through profit or loss.

The classification of financial assets depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows and is determined at the time of initial recognition.

Effective interest method

The effective interest method is used for calculating the amortised cost of a financial asset and for allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts (including transaction costs and other premiums or discounts) through the expected life of the financial asset, or, where appropriate, a shorter period.

Income is recognised on an effective interest basis for debt instruments other than those financial assets designated at fair value through profit or loss or fair value through other comprehensive income.

Financial assets at amortised cost

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated at fair value though profit or loss:
- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The Group generally classifies cash and cash equivalents, trade and other receivables (excluding trade receivables under provisionally priced contracts), loans issued and bank deposits as financial assets at amortised cost.

Financial assets at fair value through other comprehensive income

A debt instrument is measured at fair value through other comprehensive income if it meets both of the following conditions and is not designated at fair value though profit or loss:
- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

At initial recognition the Group may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value of an investment in an equity instrument that is not held for trading. This election is made on an instrument-by-instrument basis.

Financial assets at fair value through profit or loss

All financial assets not classified as measured at amorised cost or fair value through other comprehensive income are classified as financial assets at fair value through profit or loss.

Trade receivables under provisionally priced contracts and derivative financial assets are measured at fair value through profit or loss. Trade receivables under provisionally priced contracts are remeasured at each reporting date using the forward price for the period till the price settlement dateoutlined in the contract.

Impairment of financial assets

The Group recognises an allowance for expected credit losses on a financial asset measured at amortised cost using one of the two methods

Lifetime expected credit losses	Trade and other receivables Financial assets other than trade and other receivables if the credit risk on that financial asset has increased significantly since initial recognition
12-month expected credit losses since the reporting date	Financial assets other than trade and other receivables at initial recognition Financial assets other than trade and other receivables for which credit risk has not increased significantly since initial recognition

When determining whether the credit risk of the financial asset has increased significantly since initial recognition and when estimating expected credit losses, the Group considers reasonable and supportable information that is relevant and available, including both quantitative and qualitative information and analysis based on Group's historical experience and forward-looking information.

The Group applies the IFRS 9 Financial Instruments simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables. The Group assumes that expected credit loss for all trade and other receivables, which are overdue in excess of 365 days is equal to their carrying amount. To measure the expected credit losses, trade and other receivables that are past due for less than 365 days are grouped based on the length of the overdue period to which respective expected loss rates are applied. The expected loss rates are based on the historical credit loss experience, adjusted to reflect current and forward-looking information on the ability of the customers to settle the receivables.

When trade and other receivables are considered uncollectible, they are written off against the allowance for expected credit losses. Changes in the allowance are recognised in the consolidated income statement.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire; or it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for the amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

Financial liabilities

The Group classifies financial liabilities into loans and borrowings, trade and other payables. Such financial liabilities are recognised initially at fair value less any directly attributable transaction costs. Subsequent to initial recognition, these financial liabilities are measured at amortised cost using the effective interest method. Derivative financial liabilities are measured at fair value through profit or loss.

Effective interest method

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash outflows through the expected life of the financial liability, or where appropriate, a shorter period.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or they expire.

Cash and cash equivalents

Cash and cash equivalents comprise cash balances, cash deposits in banks, brokers and other financial institutions and highly liquid investments with original maturities of three months or less and on demand deposits, which are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value.

Provisions

Provisions are recognised when the Group has a legal or constructive obligation as a result of past events for which it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be reliably estimated. The Group creates provisions for social commitments, tax and other provisions.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the reporting date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

Decommissioning obligations and environmental provisions

Decommissioning obligations include direct asset decommissioning costs as well as related land restoration costs.

Future decommissioning and other related obligations, discounted to present value, are recognised at the moment when the legal or constructive obligation in relation to such costs arises and the future costs can be reliably estimated. These costs are capitalised as part of the initial cost of the related asset (i.e. a mine) and is depreciated over the useful life of the asset. The unwinding of the discount on decommissioning obligations is included in the consolidated income statement as finance costs. Decommissioning obligations are periodically reviewed in light of current laws and regulations, and adjustments are made as necessary.

Environmental provisions include expenses for clean-up, rehabilitation works and legal claims and penalties of government authorities on environmental incidents and consequences of the incidents, settlement of environment damages.

Environmental provisions are recognised at the moment when respective legal or constructive obligation arises.

5. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In order to prepare the consolidated financial statements in accordance with IFRS the Group's management have to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the reporting date, and the reported amounts of revenues and expenses for the reporting period. Making estimates may require judgement based on historical experience, current and expected economic conditions, and all other available information. Actual results may differ from such estimates. Descriptions of key estimates and assumptions made by the Group's management are stated in current or other respective Notes.

The most significant areas requiring the use of management estimates and assumptions are as follows:
- useful economic lives of property, plant and equipment;
- impairment of non-financial assets;
- decommissioning obligations and environmental provisions;
- income taxes.

Useful economic lives of property, plant and equipment

The factors, that may affect the estimation of the life of mine, which determines useful economic lives of mining assets, classified within property, plant and equipment, include the following:
- changes in proved and probable ore reserves;
- the grade of ore reserves varying significantly from time to time;
- differences between actual commodity prices and commodity price assumptions used in the estimation and classification of ore reserves;
- unforeseen operational issues at mine sites; and
- changes in capital, operating, mining, processing and decommissioning costs, discount rates and foreign exchange rates could possibly adversely affect the economic viability of ore reserves.

Useful economic lives of non-mining property, plant and equipment are reviewed by management periodically. The review is based on the current condition of the assets and the estimated length of the period during which they will continue to bring economic benefit to the Group.

Impairment of non-financial assets

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible non-financial assets for an indication that these assets may be impaired or that a previously recognised impairment loss may have decreased. For the purpose of the impairment test, the assets that do not generate independent cash flows are allocated to an appropriate cash-generating unit. To calculate the value in use, management necessarily applies judgement in allocating assets that do not generate independent cash flows to appropriate cash-generating units, and in estimating the timing and value of the underlying cash flows. Subsequent changes to the assets allocation to cash generating units or the timing of cash flows may affect the carrying value of the respective assets.

Decommissioning obligations and environmental provisions

The Group's mining and exploration activities are subject to various environmental laws and regulations. The Group estimates decommissioning obligations and environmental provisions based on management's understanding of the current legal requirements in the various jurisdictions in which it operates, terms of the license agreements and internally generated engineering estimates. Provisions are recognised, based on present values, for decommissioning and land restoration costs as soon as the obligations arise.

Environmental provisions are recognised based on the best estimate of the consideration required to settle the environmental obligation at the reporting date, taking into account the risks and uncertainties surrounding the present obligation, including possible compensations under civil lawsuits and costs to be incurred under corresponding ecological and ethnological programs. Where it is possible to set accurate period of maturity of the environmental obligation, estimation is determined using the present value of cash flows directed to settlement of those obligation, otherwise management uses best estimate of the future cash outflows, which relates to the environmental obligation.

Actual costs incurred in future periods may differ materially from the amounts of provided provisions. Additionally, future changes to environmental laws and regulations, life of mine estimates and discount rates may affect the carrying amount of this provision.

Income taxes

The Group is subject to income taxes in numerous jurisdictions. Significant judgement is required in determining provision for income taxes due to the complexity of legislation in some jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain. The Group recognises provisions for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

Deferred tax assets are reviewed at each reporting date and adjusted to the extent that it is probable that sufficient taxable income will be available to allow all or part of the deferred tax asset to be utilised. The estimation of that probability includes judgements based on the expected performance.

Various factors are considered to assess the probability of the future utilisation of deferred tax assets, including past operating results, operational plans, expiration of tax losses carried forward, and tax planning strategies. If actual results differ from these estimates or if these estimates must be adjusted in future periods, the financial position, results of operations and cash flows may be affected.

6. SEGMENT INFORMATION

Operating segments are identified on the basis of internal reports on components of the Group that are regularly reviewed by the Management Board.
Management has determined the following operating segments:

- GMK Group segment includes main mining, processing and metallurgy operations as well as transport services, energy, repair and maintenance services located in Taimyr Peninsula. GMK Group metal sales to external customers include metal volumes produced from semi-products purchased from South Cluster segment starting May 2019. Intersegment revenue from metal sales for 2019 included primarily sale of semi-products to KGMK Group segment for further processing (previously processed under intersegment tolling arrangements). GMK Group other sales to external customers primarily include revenue for energy and utilities services provided in Taimyr Peninsula.
- South Cluster segment includes certain ore mining and processing operations located in Taimyr Peninsula which were reviewed within GMK Group segment in 2018. The Group did not restate the corresponding items of respective segment information for the year ended 31 December 2018 since the necessary information is not practically available. Intersegment revenue from metal sales included sale of semi-products to GMK Group for further processing starting May 2019 (previously processed under intersegment tolling arrangements). South Cluster segment revenue from other sales includes intersegment ore processing services under tolling arrangements provided to GMK Group segment.
- KGMK Group segment includes ore mining and processing operations, metallurgy operations, energy, exploration activities located in Kola Peninsula. KGMK Group metal sales to external customers included metal produced from semi-products purchased from GMK Group segments starting in 2019. Intersegment revenue from metal sales includes sale of semi-products to GMK Group and NN Harjavalta for further processing. KGMK Group revenue from other sales includes intersegment metal processing services under tolling arrangements provided to other segments and energy and utilities services provided to external customers in Kola Peninsula.
- NN Harjavalta segment includes refinery operations located in Finland. NN Harjavalta metal sales to external customers primarily include metal produced from semi-products purchased from GMK Group and KGMK Group segments.
- GRK Bystrinskoye segment includes ore mining and processing operations located in the Zabaikalsky region of the Russian Federation.
- Other mining segment primarily includes 50% Group interest in metal mining and processing joint operations of Nkomati Nickel Mine (“Nkomati”), as well as certain other mining and exploration activities located in Russia and abroad. Other mining segment sales primarily include Group 50% share in sales of metal semi-products produced by Nkomati.
- Other non-metallurgical segment includes resale of third party metal products, other trading operations, supply chain management, transport services, energy and utility, research and other activities located in Russia and abroad. Other non-metallurgical segment also includes resale of 50% metal semi-products produced by Nkomati. Other sales of Other non-metallurgical segment primarily include revenue from passenger air transportation, freight transportation services and fuel sales.

Corporate activities of the Group do not represent an operating segment, include primarily headquarters’ general and administrative expenses and treasury operations of the Group and are presented as Unallocated.
The amounts in respect of reportable segments in the disclosure below are stated before intersegment eliminations, excluding:

- balances of intercompany loans and borrowings and interest accruals;
- intercompany investments;
- accrual of intercompany dividends.

Amounts are measured on the same basis as those in the consolidated financial statements.

The following tables present revenue, measure of segment profit or loss (EBITDA) and other segment information from continuing operations regarding the Group's reportable segments for the years ended 31 December 2020, 2019 and 2018, respectively.

For the year ended 31 December 2020	GMK Group	South cluster	KGMK Group	NN Harjavalta
Revenue to external customers				
Metal sales	5,427	–	6,897	949
Other sales	156	–	27	5
Inter-segment revenue				
Metal sales	6,907	532	2,001	354
Other sales	210	162	1	–
TOTAL REVENUE	**12,700**	**694**	**8,926**	**1,308**
Segment EBITDA	6,171	407	1,757	70
Unallocated				
CONSOLIDATED EBITDA				
Depreciation and amortisation				
Impairment of non-financial assets				
Finance costs, net				
Foreign exchange loss, net				
Income from investments and disposal of subsidiaries				
PROFIT BEFORE TAX				
OTHER SEGMENT INFORMATION				
Purchase of property, plant and equipment and intangible assets	1,275	114	155	17
Depreciation and amortisation	596	28	152	32
Impairment of non-financial assets, net	43	–	264	–
Environmental provisions	2,242	–	–	–

GRK Bystrinskoye	Other mining	Other non-metallurgical	Elimination	Tota
897	129	678	–	**14,977**
3	8	369	–	**568**
98	–	–	(9,892)	**–**
6	–	340	(719)	**–**
1,004	**137**	**1,387**	**(10,611)**	**15,545**
717	(14)	31	(556)	**8,583**
				(932)
				7,651
				(943)
				(308)
				(879)
				(1,034)
				92
				4,579
98	2	99	–	**1,760**
110	1	24	–	**943**
1	–	–	–	**308**
–	–	–	–	**2,242**

For the year ended 31 December 2019	GMK Group	South cluster	KGMK Group	NN Harjavalta
Revenue to external customers				
Metal sales	8,208	349	2,271	1,145
Other sales	171	–	36	6
Inter-segment revenue				
Metal sales	5,177	336	608	21
Other sales	280	179	200	–
TOTAL REVENUE	**13,836**	**864**	**3,115**	**1,172**
Segment EBITDA	9,522	475	58	74
Unallocated				
CONSOLIDATED EBITDA				
Depreciation and amortisation				
Reversal of impairment of non-financial assets				
Finance costs, net				
Foreign exchange gain, net				
Income from investments				
PROFIT BEFORE TAX				
Other segment information				
Purchase of property, plant and equipment and intangible assets	839	76	221	18
Depreciation and amortisation	669	25	104	26
Impairment of non-financial assets, net	(43)	–	(1)	–

For the year ended 31 December 2019	GMK Group	KGMK Group	NN Harjavalta
Revenue to external customers			
Metal sales	8,787	361	1,020
Other sales	160	33	6
Inter-segment revenue			
Metal sales	720	154	–
Other sales	75	363	–
TOTAL REVENUE	**9,742**	**911**	**1,026**
Segment EBITDA	6,602	190	71
Unallocated			
CONSOLIDATED EBITDA			
Depreciation and amortisation			
Impairment of non-financial assets			
Finance costs, net			
Foreign exchange loss, net			
Income from investments			
PROFIT BEFORE TAX			
Other segment information			
Purchase of property, plant and equipment and intangible assets	1,016	292	18
Depreciation and amortisation	612	82	24
Impairment of non-financial assets, net	8	3	–

	GRK Bystrinskoye	Other mining	Other non-metallurgical	Eliminations	Total
	182	133	563	–	**12,851**
	4	–	495	–	**712**
	12	–	4	(6,158)	**–**
	3	–	350	(1,012)	**–**
	201	**133**	**1,412**	**(7,170)**	**13,563**
	349	(31)	31	(1,770)	**8,708**
					(785)
					7,923
					(911)
					24
					(306)
					694
					100
					7,524
	103	5	62	–	**1,324**
	54	1	32	–	**911**
	–	13	7	–	**(24)**

	GRK Bystrinskoye	Other mining	Other non-metallurgical	Eliminations	Total
	–	107	687	–	**10,962**
	6	1	502	–	**708**
	–	–	–	(874)	**–**
	2	–	325	(765)	**–**
	8	**108**	**1,514**	**(1,639)**	**11,670**
	96	(6)	50	(13)	**6,990**
					(759)
					6,231
					(765)
					(50)
					(580)
					(1,029)
					95
					3,902
	168	21	38	–	**1,553**
	13	6	28	–	**765**
	–	39	–	–	**50**

The following table presents segment metal sales to external customers breakdown by metal for the years ended 31 December 2020, 2019 and 2018, respectively.:

For the year ended 31 December 2020	GMK Group	South cluster	KGMK Group
Nickel	6	–	2,181
Copper	2,293	–	389
Palladium	2,283	–	3,399
Platinum	266	–	338
Rhodium	259	–	423
Gold	260	–	85
Other metals	60	–	82
	5,427	**–**	**6,897**

For the year ended 31 December 2019	GMK Group	South cluster	KGMK Group
Nickel	1,079	30	1,269
Copper	2,417	35	246
Palladium	3,634	209	588
Platinum	484	39	78
Rhodium	281	–	10
Gold	240	–	26
Other metals	73	36	54
	8,208	**349**	**2,271**

For the year ended 31 December 2018	GMK Group	KGMK Grou
Nickel	1,827	275
Copper	2,824	51
Palladium	2,990	1
Platinum	574	3
Rhodium	118	19
Gold	206	–
Other metals	248	12
	8,787	**361**

NN Harjavalta	GRK Bystrinskoye	Other mining	Other non-metallurgical	Total
839	–	59	59	**3,144**
12	364	10	10	**3,078**
44	–	43	596	**6,365**
4	–	7	7	**622**
–	–	–	–	**682**
–	331	–	–	**676**
50	202	10	6	**410**
949	**897**	**129**	**678**	**14,977**

NN Harjavalta	GRK Bystrinskoye	Other mining	Other non-metallurgical	Total
880	–	65	65	**3,388**
83	76	10	10	**2,877**
106	–	31	475	**5,043**
12	–	8	7	**628**
–	–	–	–	**291**
–	62	–	–	**328**
64	44	19	6	**296**
1,145	**182**	**133**	**563**	**12,851**

NN Harjavalta	Other mining	Other non-metallurgical	Total
805	53	53	**3,013**
86	8	8	**2,977**
55	18	610	**3,674**
7	6	6	**596**
–	–	–	**137**
–	–	–	**206**
67	22	10	**359**
1,020	**107**	**687**	**10,962**

The following tables present assets and liabilities of the Group's reportable segments at 31 December 2020, 2019 and 2018, respectively.

At 31 December 2020	GMK Group	South cluster	KGMK Group	NN Harjavalta
Inter-segment assets	2,848	162	720	165
Segment assets	10,150	412	3,440	480
TOTAL SEGMENT ASSETS	**12,998**	**574**	**4,160**	**645**
Unallocated				
TOTAL ASSETS				
Inter-segment liabilities	350	24	2,645	266
Segment liabilities	3,794	129	322	84
Total segment liabilities	**4,144**	**153**	**2,967**	**350**
Unallocated				
TOTAL LIABILITIES				

At 31 December 2019	GMK Group	South cluster	KGMK Group	NN Harjavalta
Inter-segment assets	3,286	163	315	100
Segment assets	10,416	375	4,177	486
TOTAL SEGMENT ASSETS	**13,702**	**538**	**4,492**	**586**
Unallocated				
TOTAL ASSETS				
Inter-segment liabilities	305	39	3,227	138
Segment liabilities	1,732	108	348	102
Total segment liabilities	**2,037**	**147**	**3,575**	**240**
Unallocated				
TOTAL LIABILITIES				

At 31 December 2018	GMK Group	KGMK Group	NN Harjavalta	GRK Bystrinskoye
Inter-segment assets	292	114	140	24
Segment assets	9,903	996	451	1,492
TOTAL SEGMENT ASSETS	**10,195**	**1,110**	**591**	**1,516**
Unallocated				
TOTAL ASSETS				
Inter-segment liabilities	139	63	122	39
Segment liabilities	1,756	134	100	68
Total segment liabilities	**1,895**	**197**	**222**	**107**
Unallocated				
TOTAL LIABILITIES				

GRK Bystrinskoye	Other mining	Other non-metallurgical	Elimination	Total
109	14	45	(4,063)	–
1,526	49	1,150	(2,020)	**15,187**
1,635	**63**	**1,195**	**(6,083)**	**15,187**
				5,519
				20,706
8	–	770	(4,063)	–
107	79	1,139	–	**5,654**
115	**79**	**1,909**	**(4,063)**	**5,654**
				10,377
				16,031

GRK Bystrinskoye	Other mining	Other non-metallurgical	Elimination	Total
28	5	38	(3,935)	–
1,791	78	984	(1,983)	**16,324**
1,819	**83**	**1,022**	**(5,918)**	**16,324**
				3,150
				19,474
11	–	215	(3,935)	–
107	54	1,197	–	**3,648**
118	**54**	**1,412**	**(3,935)**	**3,648**
				11,539
				15,187

Other mining	Other non-metallurgical	Elimination	Total
–	57	(627)	–
88	792	(56)	**13,666**
88	**849**	**(683)**	**13,666**
			1,585
			15,251
5	259	(627)	–
26	1,028	–	**3,112**
31	**1,287**	**(627)**	**3,112**
			8,666
			11,778

7. METAL SALES

The Group's metal sales to external customers are detailed below (based on external customers' locations):

For the year ended 31 December 2020	Total	Nickel	Copper
Europe	**6,755**	1,277	1,826
Asia	**5,266**	1,366	1,027
North and South America	**2,400**	260	23
Russian Federation and CIS	**556**	241	202
	14,977	**3,144**	**3,078**
FOR THE YEAR ENDED 31 DECEMBER 2019			
Europe	**6,680**	1,399	2,354
Asia	**3,243**	1,329	226
North and South America	**2,289**	427	77
Russian Federation and CIS	**639**	233	220
	12,851	**3,388**	**2,877**
FOR THE YEAR ENDED 31 DECEMBER 2018			
Europe	**5,868**	1,323	2,356
Asia	**2,929**	1,090	386
North and South America	**1,619**	348	26
Russian Federation and CIS	**546**	252	209
	10,962	**3,013**	**2,977**

Revenue from metal sales for the year ended 31 December 2020 included net loss of USD (104) million in respect of forward contracts measured at fair value that are expected to be settled by physical delivery or on a net basis (for the year ended 31 December 2019: net loss in the amount of USD (47) million and for the year ended 31 December 2018: net gain in the amount of USD 12 million).

Palladium	Platinum	Rhodium	Gold	Other metals
2,353	543	275	341	140
2,292	27	51	308	195
1,715	46	339	–	17
5	6	17	27	58
6,365	**622**	**682**	**676**	**410**
1,892	574	85	261	115
1,476	32	14	47	119
1,595	14	137	1	38
80	8	55	19	24
5,043	**628**	**291**	**328**	**296**
1,216	514	41	199	219
1,313	41	17	6	76
1,111	34	76	1	23
34	7	3	–	41
3,674	**596**	**137**	**206**	**359**

For the year ended 31 December 2020, metal revenue included net gain of USD 38 million from price adjustments in respect of certain provisionally priced contracts, primarily for sale of palladium and other metals in Europe, Asia, North and South America (for the year ended 31 December 2019: net loss in the amount of USD (1) million and for the year ended 31 December 2018: net loss in the amount of USD (5) million).

8. COST OF METAL SALES

	For the year ended 31 December		
	2020	2019	2018
CASH OPERATING COSTS			
Labour	1,307	1,295	1,283
Materials and supplies	731	712	727
Purchases of refined metals for resale	482	438	430
Purchases of raw materials and semi-products	298	402	436
Third party services	276	239	200
Mineral extraction tax and other levies	248	221	212
Electricity and heat energy	151	155	143
Fuel	109	101	87
Transportation expenses	90	78	70
Sundry costs	194	167	155
Total cash operating costs	**3,886**	**3,808**	**3,743**
Depreciation and amortisation	845	735	653
(Increase)/decrease in metal inventories	(231)	(44)	109
TOTAL	**4,500**	**4,499**	**4,505**

9. GENERAL AND ADMINISTRATIVE EXPENSES

	For the year ended 31 December		
	2020	2019	2018
Staff costs	529	601	569
Third party services	134	117	96
Taxes other than mineral extraction tax and income tax	69	77	103
Depreciation and amortisation	67	69	38
Transportation expenses	18	15	9
Rent expenses	2	5	23
Other	50	54	52
TOTAL	**869**	**938**	**890**

10. SELLING AND DISTRIBUTION EXPENSES

	For the year ended 31 December		
	2020	2019	2018
Transportation expenses	71	53	39
Marketing expenses	44	45	31
Staff costs	18	15	14
Other	23	14	8
TOTAL	**156**	**127**	**92**

11. OTHER OPERATING EXPENSES, NET

	For the year ended 31 December		
	2020	2019	2018
Environmental provisions (Note 26)	2,242	1	–
Social expenses	500	224	207
Change in other provisions	24	39	21
Change in provision on production facilities shut down (Note 26)	(10)	190	
Net income earned during the pre-commissioning stage	–	(192)	(106)
Other, net	(19)	41	(27)
TOTAL	**2,737**	**303**	**95**

12. FINANCE COSTS, NET

	For the year ended 31 December		
	2020	2019	2018
Interest expense, net of amounts capitalised	364	340	382
Changes in fair value of other long-term and other current liabilities	262	64	46
Fair value (gain)/loss on the cross-currency interest rate swap	182	(199)	51
Unwinding of discount on provisions and payables	61	84	100
Interest expense on lease liabilities	12	12	2
Other, net	(2)	5	(1)
TOTAL	**879**	**306**	**580**

13. INCOME FROM INVESTMENTS

	For the year ended 31 December		
	2020	2019	2018
Interest income on bank deposits	43	64	59
Other, net	30	34	36
TOTAL	**73**	**98**	**95**

14. INCOME TAX EXPENSE

	For the year ended 31 December		
	2020	2019	2018
Current income tax expense	1,685	1,924	812
Deferred tax (benefit)/expense	(740)	(366)	31
TOTAL INCOME TAX EXPENSE	**945**	**1,558**	**843**

A reconciliation of theoretic income tax, calculated at the statutory rate in the Russian Federation, the location of major production assets of the Group, to the amount of actual income tax expense recorded in the consolidated income statement is as follows:

	For the year ended 31 December		
	2020	2019	2018
Profit before tax	**4,579**	**7,524**	**3,902**
Income tax at statutory rate of 20%	916	1,505	780
Allowance for deferred tax assets	14	25	29
Non-deductible impairment of non-financial assets	–	–	4
Non-deductible social expenses	93	64	54
Effect of different tax rates of subsidiaries	(38)	(62)	(39)
Tax effect of other permanent differences	(40)	26	15
TOTAL INCOME TAX EXPENSE	**945**	**1,558**	**843**

The corporate income tax rates in other countries where the Group has a taxable presence vary from 0% to 30%.

DEFERRED TAX BALANCES

	At 31 December 2019	Recognised in income statement	Effect of translation to presentation currency	At 31 December 2020
Property, plant and equipment, right-of use assets	**492**	(9)	(94)	**389**
Inventories	**(279)**	(258)	89	**(448)**
Trade and other receivables	**(10)**	16	–	**6**
Decommissioning obligations	**(113)**	7	12	**(94)**
Environmental provisions	**–**	(439)	23	**(416)**
Other provisions	**–**	(50)	(1)	**(51)**
Loans and borrowings, trade and other payables, lease liabilities	**(153)**	1	35	**(117)**
Other assets	**22**	(5)	4	**21**
Other liabilities	**36**	(6)	(9)	**21**
Tax loss carry-forwards	**(33)**	3	7	**(23)**
NET DEFERRED TAX (ASSETS)	**(38)**	**(740)**	**66**	**(712)**

	At 31 December 2018, prior to adoption of IFRS 16	Adjustments on IFRS 16 adoption	At 1 January 2019, adjusted on IFRS 16 adoption	Recognised in income statement	Effect of translation to presentation currency	At 31 December 2019
Property, plant and equipment,right-of use assets	**386**	41	**427**	15	50	**492**
Inventories	**107**	–	**107**	(377)	(9)	**(279)**
Trade and other receivables	**(7)**	–	**(7)**	(3)	–	**(10)**
Decommissioning obligations	**(53)**	–	**(53)**	(51)	(9)	**(113)**
Loans and borrowings,trade and other payables,lease liabilities	**(82)**	(41)	**(123)**	(15)	(15)	**(153)**
Other assets	**24**	–	**24**	(3)	1	**22**
Other liabilities	**(2)**	–	**(2)**	38	–	**36**
Tax loss carry-forwards	**(61)**	–	**(61)**	30	(2)	**(33)**
NET DEFERRED TAX LIABILITIES/ (ASSETS)	**312**	**–**	**312**	**(366)**	**16**	**(38)**

	At 31 December 2017	Recognised in income statement	Effect of translation to presentation currency	At 31 December 2018
Property, plant and equipment	**368**	86	(68)	**386**
Inventories	**124**	–	(17)	**107**
Trade and other receivables	**(3)**	(5)	1	**(7)**
Decommissioning obligations	**(69)**	5	11	**(53)**
Loans and borrowings,trade and other payables	**(69)**	(28)	15	**(82)**
Other assets	**46**	(18)	(4)	**24**
Other liabilities	**8**	(10)	–	**(2)**
Tax loss carry-forwards	**(75)**	1	13	**(61)**
NET DEFERRED TAX LIABILITIES	**330**	**31**	**(49)**	**312**

Certain deferred tax assets and liabilities have been offset to the extent they relate to taxes levied on the Group's entities which entered into the tax consolidation group. Deferred tax balances (after offset) presented in the consolidated statement of financial position were as follows:

	At 31 December		
	2020	2019	2018
Deferred tax liability	43	60	385
Deferred tax asset	(755)	(98)	(73)
NET DEFERRED TAX (ASSETS)/LIABILITIES	**(712)**	**(38)**	**312**

Unrecognised deferred tax assets

Deferred tax assets have not been recognised as follows:

	At 31 December		
	2020	2019	2018
Deductible temporary differences	218	164	100
Tax loss carry-forwards	182	240	191
TOTAL	**400**	**404**	**291**

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

At 31 December 2020 deferred tax asset in the amount of USD 136 million related to tax loss arising on disposal of OJSC "Third Generation Company of the Wholesale Electricity Market" ("OGK-3") (31 December 2019: USD 162 million and 31 December 2018: USD 145 million) was not recognised as it was incurred by the Company prior to setting up of the tax consolidation group. This deferred tax asset can be utilised without expiry only if the Company exits the tax consolidation group.

At 31 December 2020 deferred tax assets in the amount of USD 46 million related to other non-expiring tax losses were not recognised due to specific rules stated by art. 283 of the Tax code of the Russian Federation (31 December 2019: USD 78 million and 31 December 2018: USD 46 million).

At 31 December 2020, the Group did not recognise a deferred tax liability in respect of taxable temporary differences of USD 2,031 million (31 December 2019: USD 628 million and 31 December 2018: USD 1,558 million) associated with investments in subsidiaries, because management believes that it is in a position to control the timing of reversal of such differences and does not expect its reversal in foreseeable future.

15. PROPERTY, PLANT AND EQUIPMENT

		Non-mining assets and right-of-use assets				
	Mining assets and mine development cost	Buildings, structures and utilities	Machinery, equipment and transport	Other	Capital construction-in-progress	Total
COST						
Balance at 1 January 2018	**8,994**	**3,134**	**3,507**	**289**	**1,484**	**17,408**
Additions	925	–	–	–	798	**1,723**
Transfers	–	304	348	9	(661)	–
Change in decommissioning provision	(6)	(1)	–	–	–	**(7)**
Disposals	(67)	(4)	(43)	(4)	(12)	**(130)**
Other	(12)	(13)	20	5	–	–
Effect of translation to presentation currency	(1,589)	(542)	(586)	(50)	(251)	**(3,018)**
BALANCE AT 31 DECEMBER 2018, BEFORE THE ADOPTION OF IFRS 16	**8,245**	**2,878**	**3,246**	**249**	**1,358**	**15,976**
Effect of adoption of IFRS 16 (Note 2)	**–**	**137**	**62**	**5**	**–**	**204**
BALANCE AT 1 JANUARY 2019, AFTER THE ADOPTION OF IFRS 16	**8,245**	**3,015**	**3,308**	**254**	**1,358**	**16,180**
Additions	614	–	–	–	855	**1,469**
Transfers	–	177	513	11	(701)	–
Change in decommissioning provision	79	4	–	–	–	**83**
Additions of right-of-use assets andremeasurement of the lease liability	–	9	15	5	–	**29**
Disposals	(52)	(43)	(69)	(6)	(32)	**(202)**
Other	91	38	(43)	–	(86)	**–**
Effect of translation to presentation currency	999	360	382	31	166	**1,938**
BALANCE AT 31 DECEMBER 2019	**9,976**	**3,560**	**4,106**	**295**	**1,560**	**19,497**
Additions	943	–	–	–	942	**1,885**
Transfers	–	192	361	21	(574)	**–**
Change in decommissioning provision	42	2	–	–	–	**44**

	Mining assets and mine development cost	Non-mining assets and right-of-use assets: Buildings, structures and utilities	Machinery, equipment and transport	Other	Capital construction-in-progress	Total
Additions of right-of-use assets and remeasurement of the lease liability	–	(9)	69	5	–	**65**
Disposed on disposal of subsidiary (Note 21)	(68)	–	–	–	–	**(68)**
Acquired on acquisition of subsidiaries	–	25	1	–	–	**26**
Disposals	(32)	(25)	(29)	(2)	(12)	**(100)**
Other	(31)	10	20	(1)	(9)	**(11)**
Effect of translation to presentation currency	(1,557)	(567)	(645)	(46)	(244)	**(3,059)**
BALANCE AT 31 DECEMBER 2020	**9,273**	**3,188**	**3,883**	**272**	**1,663**	**18,279**

	Mining assets and mine development cost	Non-mining assets and right-of-use assets: Buildings, structures and utilities	Machinery, equipment and transport	Other	Capital construction-in-progress	Total
ACCUMULATED DEPRECIATION AND IMPAIRMENT						
Balance at 1 January 2018	**(2,600)**	**(1,637)**	**(1,876)**	**(96)**	**(239)**	**(6,448)**
Charge for the year	(350)	**(108)**	**(291)**	**(24)**	–	**(773)**
Disposals	62	**3**	**38**	**3**	**2**	**108**
Impairment loss, net	(33)	**(31)**	**(19)**	**(2)**	**35**	**(50)**
Other	9	**6**	**(12)**	**(3)**	–	–
Effect of translation to presentation currency	460	**274**	**329**	**19**	**39**	**1,121**
BALANCE AT 31 DECEMBER 2018	**(2,452)**	**(1,493)**	**(1,831)**	**(103)**	**(163)**	**(6,042)**
Charge for the year	(437)	**(145)**	**(314)**	**(27)**	–	**(923)**
Disposals	41	**36**	**54**	**4**	**15**	**150**
Impairment loss, net	(32)	**42**	–	**(1)**	**15**	**24**
Other	7	**(18)**	**19**	**1**	**(9)**	–
Effect of translation to presentation currency	(286)	**(182)**	**(214)**	**(13)**	**(18)**	**(713)**
BALANCE AT 31 DECEMBER 2019	**(3,159)**	**(1,760)**	**(2,286)**	**(139)**	**(160)**	**(7,504)**
Charge for the year	(466)	**(175)**	**(338)**	**(24)**	–	**(1,003)**
Disposals	27	**18**	**25**	**1**	**9**	**80**
Impairment loss, net	(247)	**(41)**	**(18)**	_	**(2)**	**(308)**
Disposed on disposal of subsidiary (Note 21)	50	–	–	–	–	**50**
Other	28	**(9)**	**(10)**	–	–	**9**
Effect of translation to presentation currency	463	**289**	**359**	**23**	**25**	**1,159**
BALANCE AT 31 DECEMBER 2020	**(3,304)**	**(1,678)**	**(2,268)**	**(139)**	**(128)**	**(7,517)**
Carrying value						
AT 31 DECEMBER 2018	**5,793**	**1,385**	**1,415**	**146**	**1,195**	**9,934**
AT 31 DECEMBER 2019	**6,817**	**1,800**	**1,820**	**156**	**1,400**	**11,993**
AT 31 DECEMBER 2020	**5,969**	**1,510**	**1,615**	**133**	**1,535**	**10,762**

At 31 December 2020 capital construction-in-progress included USD 14 million of irrevocable letters of credit opened for property, plant and equipment purchases (31 December 2019: USD 52 million and 31 December 2018: USD 197 million), representing security deposits placed in banks.

For the year ended 31 December 2020 purchases of property, plant and equipment in the consolidated statement of cash flows include USD 1 million of irrevocable letters of credit (for the year ended 31 December 2019: USD 221 million and for the year ended 31 December 2018: USD 192 million).

Capitalised borrowing costs for the year ended 31 December 2020 amounted to USD 118 million (for the year ended 31 December 2019: USD 174 million and for the year ended 31 December 2018: USD 172 million). The capitalisation rate used to determine the amount of borrowing costs was 4.10% per annum for the year ended 31 December 2020 (for the year ended 31 December 2019: 5.12% and for the year ended 31 December 2018: 5.15%).

At 31 December 2020 mining assets and mine development cost included USD 2,593 million of mining assets under development (31 December 2019: USD 2,750 million and 31 December 2018: USD 2,868 million).

At 31 December 2020 non-mining assets included USD 39 million of investment property (31 December 2019: USD 48 million and 31 December 2018: USD 44 million).

Impairment

During the year ended 31 December 2015, the Group revised its intention on the further use of the gas extraction assets. As a result, these assets are assessed as a separate cash-generating unit with its value-in-use being determined using a discounted cash flow model approach at each subsequent reporting date.

As a result of the performed assessment of the value-in-use, an impairment loss of USD 41 million was recognised in the consolidated income statement for the year ended 31 December 2020 (for the year ended 31 December 2019: impairment loss reversal of USD 70 million and for the year ended 31 December 2018: impairment loss of USD 8 million). Accumulated impairment loss, net of respective accumulated depreciation had no impairment been recognised, amounted to USD 152 million at 31 December 2020 (31 December 2019: USD 153 million and 31 December 2018: USD 243 million).

During the years ended 31 December 2018 and 31 December 2019 the Group identified indicators of further impairment of Nkomati assets and performed impairment tests using a discounted cash flow model approach. As a result, the carrying value of the Group's share in Nkomati property, plant and equipment was impaired in full at 31 December 2019 (the value-in-use of the Group's share in Nkomati property, plant and equipment at 31 December 2018: USD 12 million). Impairment loss in the amount of USD 12 million was recognised in impairment of non-financial assets in the consolidated income statement for the year ended 31 December 2019 (31 December 2018: USD 39 million).

In 2020 the Federal law set increase of mineral extraction tax in 3.5 on the types of ore mined by the Group. The Group assessed the change in tax legislation as an indicator for impairment of one of cash-generating units within JSC "Kolskaya GMK": ore mining and processing production KGMK.

The recoverable amount of the cash generating unit was determined based on value in use calculations. As a result ore mining and processing production KGMK assets were fully impaired as at 31 December 2020. The impairment loss in the amount of USD 264 million was recognised in impairment of non-financial assets in the consolidated income statement.

The most significant estimates and assumptions used in determination of value in use are as follows:

- Future cash flows were projected based on budgeted amounts, taking into account actual results for the previous years. Forecasts were assessed up to 2031. Measurements were performed based on discounted cash flows expected to be generated by separate cash-generating unit.
- Management used adjusted commodities price forecasts for copper-nickel concentrate price forecast. Prices adjustments were made based on current contract terms.
- Production information was primarily based on internal production reports available at the date of impairment test and management's assumptions regarding future production levels.
- Inflation indices and foreign currency trends in general consistent with external sources of information. Inflation used was projected within 3.6-4.5%, exchange rates USD/RUB were within 72.02-84.76.
- A pre-tax nominal discount rate of 13.7% was calculated based on weighted average cost of capital and reflects management's estimates of the risks specific to production units.

The Group plans to develop in 2021 optimization actions on increase of ore mining and processing production KGMK future cash flows and partial elimination of mineral extraction tax rate increase effect.

During the year ended 31 December 2020 the Group recognised additional impairment losses in the amount of USD 3 million in respect of specific individual assets (for the year ended 31 December 2019: USD 34 million and for the year ended 31 December 2018: USD 3 million).

Right-of-use assets

	Buildings, structures and utilities	Machinery, equipment and transport	Other	Total
Balance at 1 January 2019, adjusted on IFRS 16 adoption	**137**	**62**	**5**	**204**
Additions of right-of-use assets and remeasurement of the lease liability	9	15	5	**29**
Depreciation	(23)	(18)	(3)	**(44)**
Effect of translation to presentation currency	16	7	–	**23**
BALANCE AT 31 DECEMBER 2019	**139**	**66**	**7**	**212**
Additions of right-of-use assets and remeasurement of the lease liability	(9)	69	5	**65**
Acquired on acquisition of subsidiaries	25	–	–	**25**
Depreciation	(20)	(12)	(3)	**(35)**
Effect of translation to presentation currency	(20)	(12)	(1)	**(33)**
BALANCE AT 31 DECEMBER 2020	**115**	**111**	**8**	**234**

16. OTHER FINANCIAL ASSETS

	At 31 December		
	2020	2019	2018
NON-CURRENT			
Loans issued and other receivables	56	113	130
Investments in associates	14	–	–
Bank deposits	11	8	8
Derivative financial instruments (Note 29)	–	102	3
Total non-current	**81**	**223**	**141**
CURRENT			
Loans issued	57	47	57
Bank deposits	–	–	83
Derivative financial instruments	1	4	7
Total current	**58**	**51**	**147**

17. OTHER TAXES

	At 31 December		
	2020	2019	2018
TAXES RECEIVABLE			
Value added tax recoverable	434	638	244
Other taxes	17	13	28
	451	**651**	**272**
Less: Allowance for value added tax recoverable	(7)	(7)	(1)
OTHER TAXES RECEIVABLE	**444**	**644**	**271**
TAXES PAYABLE			
Value added tax	199	397	74
Social security contributions	48	46	37
Mineral extraction tax	15	16	15
Property tax	12	15	23
Other	**55**	**29**	**13**
OTHER TAXES PAYABLE	**329**	**503**	**162**

18. INVENTORIES

	At 31 December		
	2020	2019	2018
Refined metals and other metal products	547	407	526
Work-in-process and semi-products	1,159	1,339	1,138
Less: Net realizable allowance for work-in-process	(84)	(5)	(4)
Total metal inventories	**1,622**	**1,741**	**1,660**
Materials and supplies	644	811	662
Less: Allowance for obsolete and slow-moving items	(74)	(77)	(42)
Materials and supplies, net	**570**	**734**	**620**
INVENTORIES	**2,192**	**2,475**	**2,280**

At 31 December 2020 part of metal semi-products stock in the amount of USD 73 million net of allowance in the amount of USD 57 million was presented in other non-current assets according to Group’s production plans (31 December 2019: USD 52 million net of allowance USD 52 million and 31 December 2018: USD 88 million net of allowance USD 38 million).

19. TRADE AND OTHER RECEIVABLES

	At 31 December		
	2020	2019	2018
Trade receivables from metal sales	411	277	143
Other receivables	150	151	131
Receivables from the registrar on transfer of dividends to shareholders (Note 30)	32	–	–
	593	**428**	**274**
Less: Allowance for expected credit losses	**(56)**	**(66)**	**(70)**
TRADE AND OTHER RECEIVABLES, NET	**537**	**362**	**204**

In 2020, 2019 and 2018, the average credit period on metal sales varied from 0 to 30 days. Trade receivables are generally non-interest bearing.

At 31 December 2020 trade and other receivables include USD 339 million of short-term trade accounts receivable measured at fair value through profit or loss, Level 2 of fair value hierarchy (31 December 2019: USD 196 million and 31 December 2018: USD 120 million).

At 31 December 2020, 2019 and 2018 there were no material trade accounts receivable which were overdue or individually determined to be impaired.

The average credit period on sales of other products and services for the year ended 31 December 2020 was 37 days (for the year ended 31 December 2019: 25 days and for the year ended 31 December 2018: 23 days). No interest was charged on these receivables.

Included in the Group's other receivables at 31 December 2020 were debtors with a carrying value of USD 83 million (31 December 2019: USD 43 million and 31 December 2018: USD 29 million) that were past due but not impaired. Management of the Group believes that these amounts are recoverable in full.

The Group did not hold any collateral for accounts receivable balances.

Ageing of other receivables past due but not impaired was as follows:

	At 31 December		
	2020	2019	2018
Less than 180 days	75	35	24
180-365 days	8	8	5
	83	**43**	**29**

Movement in the allowance for expected credit losses was as follows:

	At 31 December		
	2020	2019	2018
Balance at beginning of the year	**66**	**70**	**92**
Change in allowance	3	(8)	5
Accounts receivable written-off	(2)	(4)	(12)
Effect of translation to presentation currency	(11)	8	(15)
BALANCE AT END OF THE YEAR	**56**	**66**	**70**

20. CASH AND CASH EQUIVALENTS

	At 31 December		
	2020	2019	2018
Current accounts			
• RUB	41	72	49
• USD	3,744	918	398
• EUR	18	34	13
• other	102	60	64
Bank deposits			
• RUB	39	1,357	–
• USD	1,237	326	850
• other	8	9	10
Other cash and cash equivalents	2	8	4
TOTAL	**5,191**	**2,784**	**1,388**

Bank deposits

Interest rate on USD-denominated deposits held in banks at 31 December 2020 was in the range from 0.15% to 0.41% (31 December 2019: from 1.25% to 1.80% and 31 December 2018: from 1.70% to 3.95%) per annum. Interest rate on RUR-denominated deposits held in banks at 31 December 2020 was 3.75% (31 December 2019: from 5.90% to 6.26%) per annum.

21. DISPOSAL OF SUBSIDIARIES

In September 2020, the Group sold nickel assets in Australia, including Honeymoon Well project, held by the Group subsidiary MPI Nickel Pty Ltd for a consideration of USD 29 million (AUD 40 million). Net cash inflow from disposal of the subsidiary in the amount of USD 28 million were recognised in the consolidated statement of cash flows, net of costs to sell in the amount of USD 1 million. Gain on disposal in the amount of USD 19 million was recognised in the consolidated income statement.

On 4 July 2019 the Group sold its interest in a subsidiary which provides construction services for a cash consideration of USD 5 million, resulting in a net cash outflow from disposal of the subsidiary in the amount of USD 20 million. Gain on disposal in the amount of USD 2 million was recognised in the consolidated income statement.

22. SHARE CAPITAL

Authorised and issued ordinary shares

At 31 December 2020, 2019 and 2018 the Group’s number of authorised and issued ordinary shares was 158,245,476.

Earnings per share

	For the year ended 31 December		
	2020	2019	2018
BASIC EARNINGS PER SHARE (US DOLLARS PER SHARE):	**21.4**	**36.5**	**19.5**

The earnings and weighted average number of shares used in the calculation of earnings per share are as follows:

	For the year ended 31 December		
	2020	2019	2018
PROFIT FOR THE YEAR ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT COMPANY	**3,385**	**5,782**	**3,085**

Weighted average number of shares used in the calculation of basic and diluted earnings per share for the years ended 31 December 2020, 2019 and 2018 was 158,245,476 shares.

At 31 December 2020, 2019 and 2018, the Group had no issued financial instruments, which would have a dilutive effect on earnings per share of ordinary stock.

23. NON-CONTROLLING INTEREST

At 31 December 2020, 2019 and 2018 aggregate financial information relating to the subsidiary, LLC “GRK “Bystrinskoye”, that has material non-controlling interest, before any intra-group eliminations, is presented below:

	At 31 December		
	2020	2019	2018
Non-current assets	1,298	1,486	1,222
Current assets	762	407	195
Non-current liabilities	(718)	(824)	(790)
Current liabilities	(67)	(142)	(139)
Net assets	**1,275**	**927**	**488**
NET ASSETS ATTRIBUTABLE TO NON-CONTROLLING INTEREST	**656**	**464**	**244**

	For the year ended 31 December		
	2020	2019	2018
Net profit/(loss) for the year	497	362	(61)
Other comprehensive (loss)/income for the year	(147)	76	(104)
Total comprehensive income/(loss) for the year	**350**	**438**	**(165)**
Profit/(loss) attributable to non-controlling interest	248	181	(31)
OTHER COMPREHENSIVE (LOSS)/INCOME ATTRIBUTABLE TO NON-CONTROLLING INTEREST	**(73)**	**38**	**(52)**

	For the year ended 31 December		
	2020	2019	2018
Cash flows from operating activities	619	302	72
Cash flows used in investing activities	(413)	(252)	(190)
Cash flows from/(used in) financing activities	(215)	(4)	142
NET (DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS	**(9)**	**46**	**24**

24. LOANS AND BORROWINGS

	Currency	Fixed or floating interest rate	Average nominal % rate during the year ended 31 December			Maturity	At 31 December		
			2020	2019	2018		2020	2019	2018
Unsecured loans	USD	floating	1.99%	3.75%	3.45%	2021–2028	5,319	3,746	3,837
	RUB	fixed	–	8.30%	8.30%	2020	–	969	864
	EUR	floating	0.85%	0.85%	0.85%	2021–2028	30	30	19
Secured loans	RUB	fixed	9.75%	9.75%	9.75%	2021–2022	8	10	9
Total loans							**5,357**	**4,755**	**4,729**
Bonds	USD	fixed	4.39%	4.88%	5.24%	2022–2025	3,736	4,220	3,472
	RUB	fixed	8.85%	8.85%	11.60%	2024–2026	541	645	216
Total bonds							**4,277**	**4,865**	**3,688**
TOTAL LOANS AND BORROWINGS							**9,634**	**9,620**	**8,417**
Less: current portion due within twelve months and presented as current loans and borrowings							(12)	(1,087)	(209)
NON-CURRENT LOANS AND BORROWINGS							**9,622**	**8,533**	**8,208**

The Group is obliged to comply with a number of restrictive financial and other covenants, including maintaining certain financial ratios and restrictions on pledging and disposal of certain assets.

Changes in loans and borrowings and lease liabilities (refer to Note 25), including interest, for the year ended 31 December 2020 consist of changes from financing cash flows in the amount of USD (167) million, effect of changes in foreign exchange rates of USD (335) million and other non-cash changes of USD 545 million (for the year ended 31 December 2019: changes from financing cash flows in the amount of USD 544 million, effect of changes in foreign exchange rates of USD 164 million, adjustments on IFRS 16 adoption in the amount of USD 204 million and other non-cash changes of USD 505 million and for the year ended 31 December 2018: changes from financing cash flows in the amount of USD (934) million, effect of changes in foreign exchange rates of USD (230) million and other non-cash changes of USD 542 million).

At 31 December 2020 loans were secured by property, plant and equipment with a carrying amount of USD 8 million (31 December 2019: USD 10 million and 31 December 2018: USD 8 million).

25. LEASE LIABILITIES

	Currency	Average borrowing rate during the year ended 31 December, %		Maturity	At 31 December		
		2020	2019		2020	2019	2018
Lease liabilities	RUB	7.37%	8.21%	2021–2099	126	56	–
	USD	4.07%	4.57%	2021–2030	114	148	2
	other	1.56%	2.29%	2021–2024	22	20	20
Total lease liabilities					**262**	**224**	**22**
Less: current lease liabilities					**(59)**	**(44)**	**(6)**
NON-CURRENT LEASE LIABILITIES					**203**	**180**	**16**

At 31 December 2020 lease liabilities with original maturity in excess of 15 years amounted to USD 12 million (31 December 2019: USD 15 million).

26. PROVISIONS

	At 31 December		
	2020	2019	2018
CURRENT PROVISIONS			
Environmental provisions	2,072	–	–
Provision for social commitments	96	51	53
Decommissioning obligations	66	29	21
Tax provision	5	4	2
Other provisions	19	16	1
Total current provisions	**2,258**	**100**	**77**
NON-CURRENT PROVISIONS			
Decommissioning obligations	549	633	316
Provision for social commitments	84	38	49
Environmental provisions	9	–	–
Other provisions	2	3	–
Total non-current provisions	**644**	**674**	**365**
TOTAL	**2,902**	**774**	**442**

	Decommissioning	Environmental provisions	Social commitments	Tax	Other	Total
Balance at 1 January 2018	**422**	**–**	**96**	**134**	**1**	**653**
Accruals	–	–	47	21	2	**70**
Utilization	(22)	–	(29)	(144)	(3)	**(198)**
Change in estimates	(21)	–	(2)	–	–	**(23)**
Unwinding of discount	29	–	5	–	–	**34**
Effect of translation to presentation currency	(71)	–	(15)	(9)	1	**(94)**
BALANCE AT 31 DECEMBER 2018	**337**	**–**	**102**	**2**	**1**	**442**
Accruals	187	1	32	4	37	**261**
Utilization	(18)	(1)	(66)	(1)	(20)	**(106)**
Change in estimates	81	–	2	–	–	**83**
Unwinding of discount	30	–	8	–	–	**38**
Effect of translation to presentation currency	45	–	11	(1)	1	**56**
BALANCE AT 31 DECEMBER 2019	**662**	**–**	**89**	**4**	**19**	**774**
Accruals	26	2,136	223	1	17	**2,403**
Utilization	(16)	(48)	(132)	–	(9)	**(205)**
Change in estimate	17	106	11	–	(6)	**128**
Unwinding of discount	32	–	5	–	–	**37**
Effect of translation to presentation currency	(106)	(113)	(16)	–	–	**(235)**
BALANCE AT 31 DECEMBER 2020	**615**	**2,081**	**180**	**5**	**21**	**2,902**

Significant event – fuel leakage in Norilsk

On 6 July 2020 the Federal Environment Supervision Agency (Rosprirodnadzor) assessed the amount of environmental damages to the water bodies and land as RUB 147.78 billion. (USD 2,113 million at RUB/USD rate at 30 June 2020) and claimed this amount from the Group as voluntary reimbursement. The Group recognised the provision of USD 2,134 million as at 30 June 2020 taking into consideration actual and forecast clean-up and rehabilitation expenses with respective deferred tax benefit of USD 427 million. Based on the interpretation of the Russian tax law and current practice of its application the Group assesses recoverability of deferred tax assets recognised with respect to the environmental provision as probable taking into consideration taxable profit forecasts.

On 10 September 2020 Yenisei interregional administration of Rosprirodnadzor filed the lawsuit to the Krasnoyarsk Arbitrary Court against JSC "Norilsk-Taimyr Energy Company" (JSC "NTEK") claiming compensation of damages to water bodies and soil caused by diesel fuel spill at HPP-3 in Norilsk for the amount of RUB 147.78 billion (USD 1,943 million at RUB/USD at the date of filing).

On 5 February 2021 the court ordered partial satisfaction of the lawsuit of Rosprirodnadzor. As per the court's decision, the amount of damages to be compensated equaled RUB 146.177 billion (USD 1,979 million at RUB/USD rate at 31 December 2020). The Group received the complete reasoned judgment of the Court on 13 February 2021 and as of the date the consolidated financial statements are authorised for issue its analysis is on-going. Having regard to its provisional view of the merits of an appeal, the Group's management considers that it would not be in the best interests of the Group to appeal the judgment. The final decision on the appeal will be made in accordance with all necessary corporate procedures before expiration of the term set by the Russian law for filing of an appeal: one month following the issuance of the complete reasoned decision. If the decision is not appealed by the expiration of the one-month term, the decision will come into force.

As of the reporting date the total expenditure for clean-up and rehabilitation equals RUB 10.6 billion (USD 144 million at RUB/USD rate at 31 December 2020). The environmental provision was increased by this amount in the consolidated financial statements in addition to the amount of environmental damages.

Based on the above, the Group recognised the change in estimates of the environmental provision of USD 102 million included in other operating expenses in the consolidated income statement with respective deferred tax benefit of USD 20 million.

As of the reporting date, the Group recognised utilization of the provision for the incurred clean-up expenses of USD 48 million. Therefore, at 31 December 2020 the amount of the environmental provision recognised within short-term and long-term liabilities of the Group's consolidated statement of financial position equals USD 2,076 million.

The Group will be updating its assessment of the possible amount of future expenses relating to environmental clean-up and rehabilitation, including their tax treatment.

On 11 February 2021 the Group received a claim from the Ministry for ecology and environmental management of Krasnoyarsk region to voluntary reimburse damages to wildlife, hunting resources and the respective habitat caused by the HPP-3 incident in Norilsk for the total amount of RUB 494 million (USD 7 million at RUB/USD rate 31 December 2020). The Group is currently analyzing the claim. With respect to damages to water biological resources there are no official claims, lawsuits or regulations filed against the Group as of the date the consolidated financial statements are authorised for issue, therefore the Group did not accrue any provision, as the amount of such liability, if any, cannot be assessed reliably.

All these factors could possibly influence the amount and expected settlement date of the obligations relating to the incident depending on the resolution of the above uncertainties.

Decommissioning obligations and environmental provisions

Key assumptions used in estimation of decommissioning obligations were as follows:

	At 31 December		
	2020	2019	2018
Discount rates Russian entities	4.2% - 7.0%	5.6% - 7.5%	7.7% - 8.9%
Discount rates non-Russian entities	3.64%	7.14%	8.17%
Expected closure date of mines	up to 2057	up to 2060	up to 2068
Expected inflation over the period from 2021 to 2040	2.8% - 4.1%	2.9% - 4.2%	2.9% - 4.1%
Expected inflation over the period from 2041 onwards	2.5%	2.9%	2.9% - 3.0%

Present value of expected cost to be incurred for settlement of decommissioning obligations and environmental provisions was as follows:

	At 31 December		
	2020	2019	2018
Due from second to fifth year	226	275	149
Due from sixth to tenth year	88	124	24
Due from eleventh to fifteenth year	62	102	27
Due from sixteenth to twentieth year	82	64	86
Due thereafter	100	68	30
TOTAL	**558**	**633**	**316**

At 31 December 2019 the Group recognised a provision for expenditure to shutdown certain production facilities located in the Kola Peninsula starting from 2021 (Note 11). The amount of decommissioning obligation was calculated based on the best estimate of the amount and timing of future expenditures included in the detailed asset retirement programme, and accounted for accordingly.

Social commitments

In 2010 the Group entered into multilateral agreements with the Government of the Russian Federation and the Krasnoyarsk Regional Government for construction of pre-schools and other social facilities in Norilsk and Dudinka till 2020, and for resettlement of families currently residing in Norilsk and Dudinka to other Russian regions with more favorable living conditions till 2020. In 2017 the Group entered into agreements with the Zabaikalsky Regional Government for construction and development of industrial, social and other infrastructure till 2026. In 2020 the Group entered into a number of agreements with Regional Governments including revision of current agreements under which the Company took additional financial commitments in respect to social and economic development of the regions including construction of social infrastructure facilities construction in the regions where the Group operates. The provisions are measured at the best estimate of the present value of future expenditures to settle these obligations.

27. TRADE AND OTHER PAYABLES

	At 31 December		
	2020	2019	2018
FINANCIAL LIABILITIES			
Trade payables	267	425	357
Payables for acquisition of property, plant and equipment	242	212	192
Other creditors	116	117	110
Total financial liabilities	**625**	**754**	**659**
NON-FINANCIAL LIABILITIES			
Advances received on contracts with customers	802	952	892
Total non-financial liabilities	**802**	**952**	**892**
TOTAL	**1,427**	**1,706**	**1,551**

The maturity analysis for the Group's financial liabilities that shows the remaining contractual maturities was as follows:

	At 31 December		
	2020	2019	2018
Due within one month	322	260	183
Due from one to three months	246	199	192
Due from three to twelve months	57	295	284
TOTAL	**625**	**754**	**659**

28. EMPLOYEE BENEFIT OBLIGATIONS

	At 31 December		
	2020	2019	2018
Accrual for annual leave	218	206	177
Wages and salaries	178	225	147
Other	27	32	22
Total obligations	**423**	**463**	**346**
Less: non-current obligations	(22)	(70)	(39)
CURRENT OBLIGATIONS	**401**	**393**	**307**

Defined contribution plans

Amounts recognised within continuing operations in the consolidated income statement in respect of defined contribution plans were as follows:

	For the year ended 31 December		
	2020	2019	2018
Pension Fund of the Russian Federation	283	281	278
Mutual accumulated pension plan	6	7	7
Other	5	5	7
TOTAL	**294**	**293**	**292**

29. DERIVATIVE FINANCIAL INSTRUMENTS

At 31 December 2020 the fair value of the cross-currency interest rate swap contracts was presented in non-current and current liabilities in the amount of USD 52 million and USD 84 million respectively (31 December 2019: other non-current financial assets (refer to Note 16) in the amount of USD 101 million and 31 December 2018: non-current liabilities in the amount of USD 61 million).

The fair value of cross-currency interest rate swap contracts (Level 2 of fair value hierarchy) is calculated as the present value of future cash flows discounted at the interest rates applicable to the currencies of the corresponding cash flows and available at the reporting date. The fair value is subject to a credit risk adjustment that reflects the credit risk of the Group and of the other party and is calculated based on credit spreads derived from current tradeable financial instruments (refer to Note 35).

30. DIVIDENDS

Dividends declared and paid in Russian roubles were translated to US dollars using prevailing RUB/USD rates at the declaration date or payment date, respectively, as presented in the table below.

Dividends for the period	Declaration period	Dividends declared			Dividends paid	
		Per share RUB	Per share USD	Total USD million	Payment period	Total USD million
9 months 2020	December 2020	623.35	8.50	**1,346**	December 2020	**1,334**
Annual 2019	May 2020	557.20	7.59	**1,201**	June 2020	**1,264**
9 months 2019	December 2019	604.09	9.66	**1,529**	January 2020	**1,567**
6 months 2019	September 2019	883.93	13.77	**2,179**	October 2019	**2,180**
Annual 2018	June 2019	792.52	12.19	**1,928**	July 2019	**1,986**
6 months 2018	September 2018	776.02	11.45	**1,813**	October 2018	**1,841**
Annual 2017	June 2018	607.98	9.63	**1,524**	July 2018	**1,527**

At 31 December 2020 dividends paid by the Company to the shareholders registrator but not transferred to shareholders bank accounts amounted to USD 32 million (refer to Note 19).

31. RELATED PARTIES TRANSACTIONS AND OUTSTANDING BALANCES

Related parties include major shareholders and entities under their ownership and control; associates, joint ventures and joint operation; and key management personnel. The Group defines major shareholders as shareholders, which have significant influence over the Group activities. The Company and its subsidiaries, in the ordinary course of their business, enter into various sale, purchase and service transactions with related parties. Transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed in this note. Details of transactions between the Group and other related parties are disclosed below.

Transactions with related parties	Sales of goods and services and participating shares		
	For the year ended 31 December 2020	For the year ended 31 December 2019	For the year ended 31 December 2018
Entities under ownership and control of the Group's major shareholders	–	–	7
Associates, joint ventures and joint operation	–	–	–
TOTAL	**–**	**–**	**7**

Transactions with related parties	Purchase of assets and services and other operating expenses		
	For the year ended 31 December 2020	For the year ended 31 December 2019	For the year ended 31 December 2018
Entities under ownership and control of the Group's major shareholders	92	89	64
Associates, joint ventures and joint operation	120	136	86
TOTAL	**212**	**225**	**150**

Outstanding balances with related parties	At 31 December 2020	At 31 December 2019	Accounts receivable At 31 December 2018
Entities under ownership and control of the Group's major shareholders	–	1	1
Associates, joint ventures and joint operation	7	10	8
TOTAL	**7**	**11**	**9**

Outstanding balances with related parties	Accounts payable and lease liabilities		
	At 31 December 2020	At 31 December 2019	At 31 December 2018
Entities under ownership and control of the Group's major shareholders	19	3	1
Associates, joint ventures and joint operation	15	8	3
TOTAL	**34**	**11**	**4**

During the year ended 31 December 2020, the Group acquired from related party the Company, which holds the right-of-use assets and lease liabilities in the amount of USD 25 million.

Transactions with related parties are made on terms equivalent to those that prevail in arm’s length transactions.

Compensation of key management personnel

Key management personnel of the Group consists of members of the Management Board and the Board of Directors. For the year ended 31 December 2020 remuneration of key management personnel of the Group included salary and performance bonuses amounted to USD 78 million (for the year ended 31 December 2019: USD 134 million and for the year ended 31 December 2018: USD 109 million).

32. COMMITMENTS

Capital commitments

At 31 December 2020, contractual capital commitments amounted to USD 2,021 million (31 December 2019: USD 930 million and 31 December 2018: USD 544 million).

Leases

The Group is a party to a number of lease contracts with variable lease payments that do not depend on an index or market rental rates, and hence are not recognised as lease liabilities. At 31 December 2020 total future non-discounted variable lease payments under such contracts with the maturity up to 2069 amounted to USD 316 million (31 December 2019: USD 310 million).

At 31 December 2020 future non-discounted lease payments for leased items not transferred to the lessee and not recognised as lease liabilities amounted to USD nil million (31 December 2019: USD 192 million).

Social commitments

The Group contributes to mandatory and voluntary social programs and maintains social facilities in the locations in which it operates. The Group's social assets as well as local social programme benefit the community at large and are not normally restricted to the Group's employees.

33. CONTINGENCIES

By their nature, contingencies will only be resolved when one or more future events occur or fail to occur. The assessment of such contingencies inherently involves the exercise of significant judgement and estimates of the outcome of future events.

Litigation

At 31 December 2020 the Group is involved in legal disputes in the ordinary course of its operations, with the probability of their unfavorable resolution being assessed as possible. At 31 December 2020, total claims under unresolved litigation (except legal claims from Rosprirodnadzor which are dislosed in Note 26) amounted to approximately USD 7 million (31 December 2019: USD 14 million and 31 December 2018: USD 13 million).

Taxation contingencies in the Russian Federation

The Russian Federation currently has a number of laws related to various taxes imposed by both federal and regional governmental authorities. Applicable taxes include value-added (VAT), income tax, mandatory social security contributions, mineral extraction tax and other levies. Tax returns, together with other legal compliance areas (for example, customs and currency control matters), are subject to review and investigation by government authorities, which are authorised by law to impose severe fines, penalties and interest charges. Generally, tax returns remain open and subject to inspection for a period of three years following the fiscal year.

While management of the Group believes that its has recognised adequate provisions for tax liabilities based on its interpretation of current and previous legislation, the risk remains that the tax authorities in the Russian Federation could take differing positions with regard to interpretive issues. This uncertainty may expose the Group to additional taxation, fines and penalties.

Transfer pricing legislation enacted in the Russian Federation starting from 1 January 2012 provides for major modifications making local transfer pricing rules closer to OECD guidelines, but creating additional uncertainty in practical application of tax legislation in certain circumstances.

A very limited number of publicly available transfer pricing court cases in Russia does not provide enough certainty as to the approach to applying transfer pricing rules in Russia. The impact of any transfer pricing assessment may be material to financial statements of the Group, however, the probability of such impact cannot be reliably assessed.

These transfer pricing rules provide for an obligation for the taxpayers to prepare transfer pricing documentation with respect to controlled transactions and prescribe the basis and mechanisms for accruing additional taxes and interest in case prices in the controlled transactions differ from the market level.

Current Russian transfer pricing legislation requires transfer pricing analysis for the majority of cross-border intercompany and major domestic intercompany transactions. Starting from 2019, transfer pricing control, as a general rule, is applied to domestic transactions only if both criteria are met: the parties apply different tax rates, and the annual turnover of transactions between them exceeds RUB 1 billion (USD 14 million at RUB/USD rate at 31 December 2020).

Russian tax authorities may review prices used in intra-group transactions, in addition to transfer pricing audits. They may assess additional taxes if they conclude that taxpayers have received unjustified tax benefits as a result of those transactions.

Russian tax authorities continue to exchange transfer pricing as well as other tax related information with tax authorities of other countries. This information may be used by the tax authorities to identify transactions for additional in-depth analysis.

Environmental matters

The Group is subject to extensive federal, state and local environmental controls and regulations in the countries in which it operates. The Group's operations involve pollutant emissions to air and water bodies as well as generation and disposal of production waste.

The Group periodically evaluates its environmental provisions pursuant to the environmental legislation in the countries, in which it operates. Such provisions are recognised in the consolidated financial statements as and when obligating events occur. Management of the Group believes that there are no material obligations for environmental damage other than those recognised in the consolidated financial statements. However, potential liabilities, which could arise due to changes in environmental laws and regulations, cannot be reliably estimated but may be material. The Group is unable to predict the timing or extent to which environmental laws and regulations may change. Such change, if it occurs, may require that the Group modernise technology to meet more stringent standards.

Russian Federation risk

As an emerging market, the Russian Federation does not possess a fully developed business and regulatory infrastructure including stable banking and judicial systems which would generally exist in a more mature market economy. The economy of the Russian Federation is characterised by a currency that is not freely convertible outside the country, currency controls, low liquidity levels for debt and equity markets, and continuing inflation. As a result, operations in the Russian Federation involve risks that are not typically associated with those in more developed markets. Stability and success of Russian economy and the Group's business mainly depend on the effectiveness of economic measures undertaken by the government as well as the development of legal system.

Starting 2014, the United States of America, the European Union and some other countries have imposed and expanded economic sanctions against a number of Russian individuals and legal entities. The imposition of the sanctions has led to increased economic uncertainty, including more volatile equity markets, a depreciation of the Russian rouble, a reduction in both local and foreign direct investment inflows and certain restrictions for operations with individuals and legal entities under sanctions, including financing and investment activities. Management assesses the changes in the Russian business environment did not significantly affect the operations, financial results and the financial position of the Group as of the date of issue of these consolidated financial statements. The longer-term effects of the imposed and possible additional sanctions are difficult to determine.

Impact of the COVID-19 outbreak on the Group's operations

On 11 March 2020, the World Health Organization declared COVID-19 outbreak a pandemic. The spread of COVID-19 led to lockdown and business disruption in many countries, which triggered increased volatility of financial markets, including commodity markets, and general economic uncertainty.

The Group operates primarily in exploration, extraction, refining of ore and nonmetallic minerals and sale of base and precious metals produced from ore, which have not been subject to significant adverse impact by the outbreak of coronavirus. Revenue from metal sales increased during the year ended 31 December 2020, with the relative decrease of demand in certain markets for the Group's products offset by higher market prices. Respectively finished goods balance increased at the end of the reporting period.

The activities of the Group, including products deliveries, were not interrupted. According to the analysis of the Group's financial position, its liquidity and access to debt financing, including compliance with debt covenants, the above factors did not have a material effect on the Group's financial stability, hence the management of the Group believes that there is no uncertainty related to the Group's going concern.

Based on the results of the analysis of possible outcomes and their consequences for the economic environment and operations of the Group, the Group's management has developed and implemented a number of measures to ensure normal operating activities, including:

- administrative arrangements to ensure timely response to threats, caused by COVID-19, continuity of production, procurement and marketing of the Group's products and protection of health and safety of employees;
- establishing remote workplaces for employees in administrative functions, sales and procurement departments whose presence in the office is not necessary;
- training employees in operations to ensure strict compliance with work safety measures including social distancing;
- procurement of supplies to ensure compliance with the requirements of government authorities relating to wearing personal protective equipment and the use of antiseptics;
- providing financial support to the regional healthcare, including significant funding allocated to healthcare institutions through procurement of necessary medical equipment and medicines to prevent further spread of the epidemic;
- uninterrupted deliveries of supplies for operating and investing activities as per arrangements with the Group suppliers.

For the year ended 31 December 2020 , the Group spent USD 157 million net of VAT to prevent and combat spread of COVID-19, including USD 123 million recognised as expenses for the year ended 31 December 2020, which are presented in the following line items of the consolidated income statement:

Line items of consolidated income statement for the year ended 31 December 2020		USD million
Cost of metal sales	Labour	45
	Materials and supplies	5
	Sundry costs	5
Cost of other sales	Labour	11
General and administrative expenses	Staff costs and other costs	8
Other operating expenses	Social expense	49

The remaining amount as at 31 December 2020 included capital expenditures of USD 12 million and inventories and prepayments for supplies in the amount of USD 22 million. The Group also granted rent waivers to businesses in the regions of its operations in the amount of USD 2 million.

Taking into account the above-mentioned measures and the Group's current operational and financial performance as well as other currently available public information, Group management does not expect a significant adverse impact on the financial position and operating results of the Group in a short-term perspective. The management will continue to monitor the situation closely and will implement necessary measures to respond to possible adverse events, as they occur.

34. FINANCIAL RISK MANAGEMENT

Capital risk management

The Group manages its capital in order to safeguard the Group's ability to continue as a going concern and to maximise the return to shareholders through the optimisation of debt (long and short-term borrowings) and equity (share capital and retained earnings) structure.

Management of the Group regularly reviews its level of leverage, calculated as the ratio of Net Debt to EBITDA, to ensure that it is in line with the Group's financial policy aimed at preserving investment grade credit ratings.

The Company maintains not lower than investment grade ratings, assigned by international rating agencies S&P's, Fitch and Moody's on BBB-/BBB-/Baa2 investment grade level.

Financial risk factors and risk management structure

In the normal course of its operations, the Group is exposed to a variety of financial risks: market risk (including interest rate and currency risk), credit risk and liquidity risk. The Group has an explicit risk management structure aligned with internal control procedures that enable it to assess, evaluate and monitor the Group's exposure to such risks.

Interest rate risk

Interest rate risk relates to changes in interest rates will adversely impact the financial results of the Group. The Group's interest rate risk arises from borrowings at floating rates.

The Group performs thorough analysis of its interest rate risk exposure regularly, primarily the sensitivity analysis of basic floating rate. In order to minimize and manage the risk, the Group carries out arrangements to maintain the structure of loans and borrowings with fixed and floating interest rates. The Group also considers impact of this factor together with macroeconomic environment changes, particularly stage of economic growth and increase in prices, generally leading to increase of base rates.

Management believes that the Group's exposure to interest rate risk fluctuations is at an acceptable level.

Currency risk

Currency risk relates to changes in the fair value or future cash flows of a financial instrument denominated in foreign currency because of changes in exchange rates.

The major part of the Group's revenue and related trade accounts receivable are denominated in US dollars while expenditure is primarily incurred in Russian roubles and therefore the Group is exposed to fluctuation of USD exchange rate.

Currency risk arising from other currencies is assessed by management of the Group as immaterial.

The currency risk is managed by analysis of currency position, efficiency control of currency exchange operations and the most possible matching of cash inflows and cash outflows denominated in the same currency.

The Group uses in appropriate cases derivative financial instruments primarily cross-currency interest rate swap to reduce exposure to currency risk by balancing revenue cash flows denominated in US Dollar and liabilities denominated in Russian Rouble.

The carrying amounts of monetary assets and liabilities denominated in foreign currencies other than functional currencies of the individual Group entities at 31 December 2020, 2019 and 2018 were as follows:

	At 31 December 2020			At 31 December 2019			At 31 December 2018		
	USD	EUR	Other currencies	USD	EUR	Other currencies	USD	EUR	Other c urrencies
Cash and cash equivalents	4,940	19	110	1,227	35	69	1,234	13	74
Trade and other receivables	638	15	–	398	13	4	265	3	4
Other assets	32	–	12	59	2	10	380	73	8
Total assets	**5,610**	**34**	**122**	**1,684**	**50**	**83**	**1,879**	**89**	**86**
Trade and other payables	277	99	7	213	66	8	249	114	10
Loans and borrowings	9,055	30	–	7,966	30	–	7,308	19	3
Lease liabilities	114	20	2	147	3	2	–	–	–
Other liabilities	16	2	–	11	16	–	14	19	–
TOTAL LIABILITIES	**9,462**	**151**	**9**	**8,337**	**115**	**10**	**7,571**	**152**	**13**

Given that the Group's exposure to currency risk for the net USD-denominated monetary liabilities is offset by the revenue denominated in USD, management believes that the Group's exposure to currency risk is at an acceptable level.

The sensitivity analysis of interest rate and currency risks

	Increase/(decrease) of profit before tax for the year ended 31 December		
	2020	2019	2018
INTEREST RATE RISK			
1 p.p. RUB rate increase impact	(18)	(33)	(20)
1 p.p. USD rate increase impact	(34)	(6)	(15)
CURRENCY RISK			
USD 20% STRENGTHENING AGAINST RUB	**(1,034)**	**(1,594)**	**(1,315)**

The sensitivity analysis is prepared including cross-currency interest rate swap effects and assuming that the amount of loans and borrowings at floating rates outstanding at the reporting date was outstanding for the whole year.

Credit risk

Credit risk refers to the risk that a debtor will default on its contractual obligations resulting in a financial loss to the Group. Credit risk arises from cash and cash equivalents, bank deposits as well as credit exposures to customers, including outstanding uncollateralised trade and other receivables as well as loans receivable.

The Group minimizes the credit risk through its allocation to a large number of customers and respective credit limits approval based on customers financial position analysis in addition to trade financing and insurance instruments, bank guarantees and documentary forms of payment.

The Group assesses customers creditworthiness using current and forecasted credit rating by international credit-rating agencies. In case of their absence, the Group performs the assessment of a customer's financial sustainability and general creditworthiness through analysis of its financial measures and financial statements of customers for several reporting periods.

The outstanding balances with 5 financial institutions and 5 largest customers are presented below. The banks have a minimum of BB+ credit rating.

	Outstanding balance at 31 December		
Cash and cash equivalents	**2020**	**2019**	**2018**
Cash and cash equivalents	2,512	821	417
Bank A	800	715	402
Bank B	712	485	214
Bank C	170	162	75
Bank D	160	152	64
Bank E	837	449	216
Other	**5,191**	**2,784**	**1,388**
TOTAL			
Trade and other receivables	108	31	50
Customer A	32	24	38
Customer B	26	22	34
Customer C	21	21	20
Customer D	21	21	15
Customer E	329	243	47
Other	**537**	**362**	**204**
Total			

The Group is not economically dependent on a limited number of customers because the majority of its products are industrial metals traded on the world commodity markets. Metal and other sales to the Group's customers are presented below:

	For the year ended 31 December 2020		For the year ended 31 December 2019		For the year ended 31 December 2018	
	Revenue USD million	%	Revenue USD million	%	Revenue USD million	%
Largest customer	2,541	16	2,363	17	1,564	13
Next 9 largest customers	5,596	36	4,176	31	3,461	30
Total 10 largest customers	**8,137**	**52**	**6,539**	**48**	**5,025**	**43**
Remaining customers	7,408	48	7,024	52	6,645	57
TOTAL	**15,545**	**100**	**13,563**	**100**	**11,670**	**100**

Management of the Group believes that with the exception of the cash and cash equivalents in banks indicated above there is no significant concentration of credit risk.

The following table provides information about the exposure to credit risk for financial assets:

	Note	At 31 December		
		2020	2019	2018
Cash and cash equivalents	20	5,191	2,784	1,388
Derivative financial instruments	16	1	106	10
Loans and other long-term receivables	16	113	160	187
Trade and other receivables	19	537	362	204
Cover for irrevocable letters of credit	15	14	52	197
Bank deposits not included in cash and cash equivalents	16	11	8	91

Liquidity risk

Liquidity risk is the risk that the Group will not be able to settle all liabilities as they fall due.

The Group's Centralised treasury continuously monitors actual and forecast cash flow and performs analysis of maturity profiles of financial liabilities to take in time appropriate actions to minimize possible negative effects. These actions include liquidity management and proactive management of credit portfolio to minimise short term debt and maintain weighted average period of credit portfolio.

Liquidity management includes detailed budgeting procedures, maintainance of daily payment position for each currency and bank account for 30 days period and monthly planning of the Group's finance model for a period up to 12 months.

The Group manages liquidity risk by maintainance of liquid funds level and a portfolio of confirmed credit lines and overdrafts with numerous banks, sufficient to cover possible revenue fluctuations based on price, currency and interest rate risks. In particular, the Group had available committed bank facilities for the management of its day to day liquidity requirements of USD 3,313 million at 31 December 2020 (31 December 2019: USD 5,044 million and 31 December 2018: USD 4,290 million).

The following table contains the maturity profile of the Group's borrowings and lease liabilities (maturity profiles for trade and other payables are presented in note 27) based on contractual undiscounted payments, including interest:

At 31 December 2020	Total	Due in the first year	Due in the second year	Due in the third year	Due in the fourth year	Due in the fifth year	Due there- after
FIXED RATE BANK LOANS AND BORROWINGS							
Principal	**4,299**	4	1,504	1,000	1,088	500	203
Interest	**656**	**213**	**203**	**106**	**86**	**36**	**12**
	4,955	**217**	**1,707**	**1,106**	**1,174**	**536**	**215**
FLOATING RATE BANK LOANS AND BORROWINGS							
Principal	**5,387**	7	345	2,558	2,055	400	22
Interest	**312**	**105**	**103**	**74**	**29**	**1**	**–**
	5,699	**112**	**448**	**2,632**	**2,084**	**401**	**22**
LEASE OBLIGATION							
Lease obligation	**288**	**61**	**61**	**48**	**41**	**26**	**51**
CROSS-CURRENCY INTEREST RATE SWAP							
Payable	**1,364**	938	12	12	402	–	
Receivable	**(1,305)**	**(893)**	**(24)**	**(24)**	**(364)**	**–**	
	59	**45**	**(12)**	**(12)**	**38**	**–**	
TOTAL	**11,001**	**435**	**2,204**	**3,774**	**3,337**	**963**	**288**

At 31 December 2019	Total	Due in the first year	Due in the second year	Due in the third year	Due in the fourth year	Due in the fifth year	Due there- after
FIXED RATE BANK LOANS AND BORROWINGS							
Principal	**5,860**	985	974	1,505	1,000	1,154	242
Interest	**1,050**	**346**	**277**	**200**	**103**	**82**	**42**
	6,910	**1,331**	**1,251**	**1,705**	**1,103**	**1,236**	**284**
FLOATING RATE BANK LOANS AND BORROWINGS							
Principal	**3,797**	104	1,204	1,541	833	100	15
Interest	**346**	**143**	**118**	**68**	**16**	**1**	**–**
	4,143	**247**	**1,322**	**1,609**	**849**	**101**	**15**
LEASE OBLIGATION							
Lease obligation	**274**	55	48	44	41	37	49
CROSS-CURRENCY INTEREST RATE SWAP							
Payable	**1,415**	51	938	12	12	402	
Receivable	**(1,665)**	(109)	(1,065)	(29)	(29)	(433)	
	(250)	**(58)**	**(127)**	**(17)**	**(17)**	**(31)**	
TOTAL	**11,077**	**1,575**	**2,494**	**3,341**	**1,976**	**1,343**	**348**

At 31 December 201	Total	Due in the first year	Due in the second year	Due in the third year	Due in the fourth year	Due in the fifth year	Due there- after
FIXED RATE BANK LOANS AND BORROWINGS							
Principal	**4,595**	5	987	871	1,507	1,003	222
Interest	**1,022**	**279**	**280**	**213**	**142**	**46**	**62**
	5,617	**284**	**1,267**	**1,084**	**1,649**	**1,049**	**284**
FLOATING RATE BANK LOANS AND BORROWINGS							
Principal	**3,883**	210	957	1,202	1,302	202	10
Interest	**363**	**127**	**123**	**77**	**33**	**3**	**–**
	4,246	**337**	**1,080**	**1,279**	**1,335**	**205**	**10**
CROSS-CURRENCY INTEREST RATE SWAP							
Payable	**1,008**	41	41	926			
Receivable	**(1,067)**	(72)	(72)	(923)			
	(59)	**(31)**	**(31)**	**3**			
TOTAL	**9,804**	**590**	**2,316**	**2,366**	**2,984**	**1,254**	**294**

35. FAIR VALUE OF FINANCIAL INSTRUMENTS

Financial instruments that are measured at fair value subsequent to initial recognition, are grouped into Levels 1 to 3 of fair value hierarchy based on the degree to which their fair value is observable as follows:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the assets or liability, either directly or indirectly; and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data.

Management believes that the carrying value of financial instruments such as cash and cash equivalents (refer to note 20), other financial assets (refer to note 16), trade and other accounts receivable (refer to note 19) and current accounts payable (refer to note 27) and lease liabilities (refer to note 25) either approximates to their fair value or may not significantly differ from it.

At 31 December 2020 other current liabilities classified as measured at fair value through profit or loss include a liability on the execution of a put option related to transactions with owners of non-controlling interest, holding 13.3% of share capital in GRK Bystrinskoe in the amount of USD 428 million (non-current liability at 31 December 2019: USD 210 million and at 31 December 2018: USD 146 million). Reclassification to current liabilities was carried out due to the fact that the put option is exercisable on demand at the reporting date. The fair value of the liability is determined based on the discounted cash flow of the asset less net debt taking into account the amount of working capital at the reporting date and application of lack of control discount reflecting the ownership interest. The fair value estimate is within Level 3 of fair value hierarchy. The most significant estimates and assumptions used in determination of the fair value at 31 December 2020, 2019 and 2018 are as follows:

- Future cash flows are forecast up to 2044 based on budgeted amounts, taking into account actual results for the previous years as well as capital expenditure budgets;
- Prices for metal concentrates (gold, copper) and iron ore are estimated using consensus forecasts for commodity prices;
- Metals concentrate (copper, gold and iron ore concentrates) production and sales forecast is based on production reports available at the reporting date and the life of mine plan taking into account the current production capacity and current estimates of metal content in ore reserves;
- The inflation and exchange rate forecasts are based on Oxford Economics data, consistent with a consensus forecast of investment banks. Forecast for exchange rate is made based on expected RUB and USD inflation indices.
- An after-tax nominal RUB discount rate of 13.8% (31 December 2019: 14.3%, 31 December 2018: 16.34%) was estimated by reference to the weighted average cost of capital and management's estimates of the risks specific to the asset.

Change in the fair value of the liability on the execution of the put option for 2020 amounted up to USD 262 million and was presented in the financial costs of the consolidated income statement (31 December 2019: USD 64 million and 31 December 2018: USD 46 million). The estimation of fair value of the liability on the execution of the put option is sensitive to changes in the number of key assumptions The sensitivity analysis at the reporting date is disclosed in the table below:

				Change of parameters
Increase in fair value of the liability on the execution of the put option	**Decrease in discount rate by 1 p.p.**	**Weakening of RUB/USD exchange rate by 10%**	**Increase of copper price by 10%**	**Increase of gold price by 10%**
At 31 December 2020	25	70	37	36
At 31 December 2019	15	68	33	30
At 31 December 2018	6	44	22	18

The information below presents financial instruments not measured at fair value, including loans and borrowings (refer to note 24), trade and other long-term payables (refer to note 27).

	At 31 December 2020		At 31 December 2019		At 31 December 2018	
	Carrying value	Fair value Level 1	Carrying value	Fair value Level 1	Carrying value	Fair value Level 1
Fixed rate bonds	4,277	4,512	4,865	5,100	3,688	3,705
TOTAL	**4,277**	**4,512**	**4,865**	**5,100**	**3,688**	**3,705**
Loans, including:	**Carrying value**	**Fair value Level 2**	**Carrying value**	**Fair value Level 2**	**Carrying value**	**Fair value Level 2**
Floating rate loans	5,349	5,309	3,776	3,814	3,856	3,654
Fixed rate loans	8	8	979	1,007	873	861
TOTAL	**5,357**	**5,317**	**4,755**	**4,821**	**4,729**	**4,515**
	Carrying value	**Fair value Level 2**	**Carrying value**	**Fair value Level 2**	**Carrying value**	**Fair value Level 2**
Trade and other long-term payables	32	32	37	37	200	210
TOTAL	**32**	**32**	**37**	**37**	**200**	**210**

The fair value of financial liabilities presented in table above is determined as follows:

- the fair value of corporate bonds was determined as their market price at the reporting dates;
- the fair value of floating rate and fixed rate loans and borrowings at 31 December 2020, 2019 and 2018 was determined as the present value of future cash flows (principal and interest), discounted at the market interest rates, which are determined as of the reporting date based on the currency of a loan, its expected maturity and credit risks attributable to the Group;
- the fair value of trade and other long-term payables at 31 December 2020, 2019 and 2018 was determined as the present value of future cash flows, discounted at the best management estimation of market interest rates.

36. INVESTMENTS IN SIGNIFICANT SUBSIDIARIES

Subsidiaries by operating segments	Country	Nature of business	Effective % held		
			31 December 2020	31 December 2019	31 December 2018
GMK GROUP					
JSC “Norilsky Kombinat”	Russian Federation	Rental of property	100	100	100
JSC “Taimyrgaz”	Russian Federation	Gas extraction	-	-	100
JSC “Norilskgazprom”	Russian Federation	Gas extraction	100	100	100
JSC “Norilsktransgaz”	Russian Federation	Gas transportation	100	100	100
JSC “Taimyrenergo”	Russian Federation	Rental of equipment	-	-	100
JSC “NTEK”	Russian Federation	Electricity production and distribution	100	100	100
LLC “ZSC”	Russian Federation	Construction	100	100	100
LLC “Norilsknickelremont”	Russian Federation	Repairs	100	100	100
LLC “Norilskyi obespechivaushyi complex”	Russian Federation	Production of spare parts	100	100	100

Subsidiaries by operating segments	Country	Nature of business	Effective % held		
			31 December 2020	31 December 2019	31 December 2018
SOUTH CLUSTER					
LLC "Medvezhyi ruchey"	Russian Federation	Ore mining and processing	100	100	100
KGMK GROUP					
JSC "Kolskaya GMK"	Russian Federation	Mining and metallurgy	100	100	100
LLC "Pechengastroy"	Russian Federation	Repairs	100	100	100
NORILSK NICKEL HARJAVALTA					
Norilsk Nickel Harjavalta OY	Finland	Metallurgy	100	100	100
GRK BYSTRINSKOYE					
LLC "GRK "Bystrinskoye"	Russian Federation	Ore mining and processing	50.01	50.01	50.01
LLC "Vostokgeologiya"	Russian Federation	Geological works and construction	100	100	100
OTHER NON-METALLURGICAL					
Metal Trade Overseas A.G.	Switzerland	Distribution	100	100	100
Norilsk Nickel (Asia) Limited	Hong Kong	Distribution	100	100	100
Norilsk Nickel USA, Inc.	USA	Distribution	100	100	100
LLC "Institut Gypronickel"	Russian Federation	Research	100	100	100
JSC "TTK"	Russian Federation	Supplier of fuel	100	100	100
JSC "ERP"	Russian Federation	River shipping operations	100	100	100
LLC "Aeroport Norilsk"	Russian Federation	Airport	100	100	100
JSC "AK "NordStar"	Russian Federation	Aircompany	100	100	100

Joint operations by operating segments	Country	Nature of business	Effective % held		
			31 December 2020	31 December 2019	31 December 2018
OTHER MINING					
Nkomati Nickel Mine	Republic of South Africa	Ore mining and processing	50	50	50

37. EVENTS SUBSEQUENT TO THE REPORTING DATE

On 12 February 2021 the Company made an early repayment of exchange-traded bonds in the amount of RUB 15 billion (USD 203 million at RUB/USD rate at 31 December 2020).

MEASUREMENT UNITS AND CURRENCY EXCHANGE RATES

MEASUREMENT UNITS

LENGTH	
1 km	0.6214 mi
1 m	3.2808 ft
1 cm	0.3937 in
1 mi	1.609344 km
1 foot	0.3048 m
1 in	2.54 cm
AREA	
1 sq m	10.7639 sq ft
1 sq km	0.3861 sq mi
1 ha	2.4710 acres
1 sq ft	0.09290304 sq m
1 sq m	2.589988 sq km
1 acre	0.4046873 ha
WEIGHT	
1 kg	2.2046 lb
1 metric tonne	1,000 kg
1 short tonne	907.18 kg
1 troy ounce	31.1035 g
1 lb	0.4535924 kg
1 g	0.03215075 oz t

CURRENCY EXCHANGE RATES IN 2016–2020

Index	2016	2017	2018	2019	2020
Average rate Russian Rouble / US Dollar	67.03	58.35	62.71	64.74	72.15
Average effective rate Russian Rouble / US Dollar (for CAPEX)	66.25	58.32	63.88	64.40	73.15

GLOSSARY

Anode. Crude metal (nickel or copper) obtained from anode smelting and fed for electrolytic refining (electrolysis) whereby it is dissolved.

Refinement. The process of extracting high purity precious metals through their separation and removal of impurities.

Rich ores. Ores with high sulphide content (over 70%) and the following metal grades: 2–5% for nickel, 2–25% for copper, and 5–100 g/t for platinum group metals.

Probable ore reserves. Estimated based on the economically mineable part of indicated and, in some circumstances, measured mineral resources, including possible dilution and losses during mining operations.

Disseminated ores. Ores containing 5% to 30% sulphides, with the following metal grades: 0.2–1.5% for nickel, 0.3–2% for copper, and 2–10 g/t for platinum group metals.

Leaching. Selective dissolution of one or several components of the processed solid material in organic solvents or water solutions of inorganic substances. Kinds of leaching: acid leaching (leaching with acids as reagents), chlorine leaching.

Proven ore reserves. Estimated based on the economically mineable part of measured mineral resources, including possible dilution and losses during mining operations.

Metal extraction. The ratio between the quantity of a component extracted from the source material and its quantity in the source material (as a percentage or a fraction).

Cathode. Pure metal (nickel or copper) obtained as a result of electrolytic refining of anodes.

Cake. Solid residue from filtering pulp during leaching of ores, concentrates or metallurgical intermediates, and purification of processing solutions.

Conversion. Oxidation process to turn matte into converter matte (in smelting copper-nickel concentrates) or blister copper (in smelting copper concentrates) and remove slag (carbon, sulphur, iron and other impurities).

Concentrate. A product of ore concentration with a high grade of the extracted mineral, which gives its name to the concentrate (copper, nickel, etc.).

Cuprous ores. Ores containing 20% to 70% sulphides, with the following metal grades: 0.2–2.5% for nickel, 1.0–15.0% for copper, 5–50 g/t for platinum group metals.

Roasting. Heating ore to high temperatures to trigger chemical changes that enable subsequent metal recovery processes.

Concentration. Artificial improvement of metallurgical feedstock mineral grades by removal of a major portion of waste rock not containing any valuable minerals.

Oxide. A compound of a chemical element with oxygen.

Tailings pit. A complex of hydraulic structures used to receive and store mineral waste / tailings.

Vanyukov furnace. An autogenous smelter for processing concentrates, where smelting is performed in a bath of slag and matte, with intensive injection of air-oxygen mixture. The heat from oxidation reactions is actively used in the process.

Flash smelter. An autogenous smelter for processing dry concentrates, where the smelted substance is finely ground feedstock mixed with a gaseous oxidiser (air, oxygen), which holds melted metal particles suspended. The heat from oxidation reactions is actively used in the process.

Fluidised bed furnace. A furnace where solid particles are intensively mixed under a fluidising impact of heated gas (air, oxygen or flue gases) flowing through the bed of grainy material (powder, granules).

Pyrrhotite concentrate. By-product of copper-nickel ore concentration.

Smelting. Pyrometallurgical process carried out at temperatures that ensure complete melting of the processed material.

Sublevel caving. An underground mining method in which ore blocks are developed from top to bottom via sublevels, and ore is extracted by blasting or causing sublevels to cave in. The voids formed after extraction get filled with fractured rock.

Pulp. A mixture of finely ground rock with water or a water solution.

Ore. Natural minerals containing metals or their compounds in economically valuable amounts and forms.

Mine. A mining location for extraction of ores.

Thickening. Separation of liquid (water) and solid particles in dispersion systems (pulp, suspension, colloid) based on natural gravity settling of solid particles in settlers and thickeners, or centrifugal settling of solid particles in hydrocyclones.

Metal grade. The ratio between the weight of metal in the dry material and the total dry weight of the material expressed as a percentage or grammes per tonne (g/t).

Sulphides. Compounds of metals and sulphur.

Drying. Removal of moisture from concentrates performed in designated drying furnaces (to a moisture level below 9%).

Tolling agreement. An agreement to process foreign feedstock with subsequent shipping of finished product. The feedstock and end product are exempt from customs duties.

Converter matte. A metallurgical intermediate produced as a result of matte conversion. Depending on the chemical composition, the following types of converter matte are distinguished: copper, nickel and copper-nickel.

Filtration. The process of reducing the moisture level of the pulp by forcing it through a porous medium.

Flotation. A concentration process where specific mineral particles suspended within the pulp attach to air bubbles. Poorly wettable mineral particles attach to the air bubbles and rise through the suspension to the top of the pulp, producing foam, while well wettable mineral particles do not attach to the bubbles and remain in the pulp. This is how the minerals are separated.

Tailings. Waste materials left over after concentration processes and containing mostly waste rock with a minor amount of valuable minerals.

Ore mixture. A mixture of materials in certain proportions needed to achieve the required chemical composition of the end product.

Slag. Melted or solid substance with a varying composition that covers the surface of a liquid product during metallurgical processes (resulting from ore mixture melting, melted intermediate processing and metal refining) and includes waste rock, fluxes, fuel ash, metal sulphides and oxides, and products of interaction between the processed materials and lining of melting units.

Sludge. Powder product containing precious metals settling during electrolysis of copper and other metals.

Matte. Intermediate product in the form of an alloy of sulphides of iron and non-ferrous metals with a varying chemical composition. Matte is the main product accumulating precious metals and metal impurities the feedstock contains.

Electrolysis. A series of electrochemical reduction-oxidation reactions at electrodes immersed in an electrolyte as a result of passing of an electric current from an external source.

Electrowinning. Electrodeposition of metal from ores that have been put in solution. Ore or concentrate is leached with agents that dissolve metal-containing minerals or the entire material, so that the metal is deposited on the cathode. The electrolyte is typically reused in the process. The end product is high-purity metal cathode.

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NO. 10 APPENDIX

CORPORATE GOVERNANCE CODE COMPLIANCE REPORT

This Corporate Governance Code Compliance Report was discussed by the Board of Directors of PJSC MMC NORILSK NICKEL (the Company) at its meeting held on “9”April 2021 (Minutes No. GMK/9-pr-sd).

The Corporate Governance Code Compliance Report was prepared in accordance with the Recommendations on Preparation of the Report on Compliance with the Principles and Recommendations of the Corporate Governance Code (Letter of the Bank of Russia No. IN-06-52/8 dated 17 February 2016).

The Board of Directors certifies that all data in this Report contain full and reliable information on compliance by the Company with the principles and recommendations of the Corporate Governance Code for 2020[1].

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
1.1	**The company shall ensure fair and equitable treatment of all shareholders in exercising their rights to participate in the governance of the company.**			
1.1.1	The company ensures the most favourable conditions for its shareholders to participate in the general meeting, develop an informed position on agenda items of the general meeting, coordinate their actions, and voice their opinions on items considered.	1. The company’s internal document approved by the general meeting of shareholders governing the procedures to hold general meetings of shareholders is publicly available. 2. The company provides accessible means of communication with the company, such as a hotline, email or online forum, to enable shareholders to express their opinions and send questions on the agenda in preparation for the general meeting. The company performed the above actions in advance of each general meeting held in the reporting period.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
1.1.2	The procedure for giving notice of, and providing relevant materials for, the general meeting enables shareholders to properly prepare for attending the general meeting.	1. The notice of an upcoming general meeting of shareholders is posted (published) online at least 30 days prior to the date of the general meeting. 2. The notice of an upcoming meeting indicates the location of the meeting and the documents required for admission. 3. Shareholders were given access to the information on who proposed the agenda items and nominees to the company's board of directors and the audit commission.	☑ Full compliance	
1.1.3	In preparation for the general meeting and during the general meeting, shareholders were enabled to receive information about, and all materials related to, the meeting, put questions to executive bodies and members of the board of directors, as well as communicate with each other, in an unobstructed and timely manner.	1. In the reporting period, shareholders were given an opportunity to put questions to members of executive bodies and members of the board of directors in advance of, and during, the annual general meeting. 2. The position of the board of directors (including dissenting opinions entered in the minutes) on each item on the agenda of general meetings held in the reporting period was included in the materials for the general meeting of shareholders. 3. The company gave duly authorized shareholders access to the list of persons entitled to participate in the general meeting, as from the date when such list was received by the company, in all instances of general meetings held in the reporting period.	☑ Full compliance	
1.1.4	Shareholders did not encounter unjustified difficulties in exercising their right to request that a general meeting be convened, to nominate candidates to governance bodies, and to make proposals for the agenda of the general meeting.	1. In the reporting period, shareholders had an opportunity to make proposals for the agenda of the annual general meeting for at least 60 days after the end of the respective calendar year. 2. In the reporting period, the company did not reject proposals for the agenda or candidates to governance bodies due to misprints or other insignificant flaws in the shareholder's proposal.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
1.1.5	Each shareholder was enabled to freely exercise his/her voting right in the simplest and most convenient way.	1. An internal document (internal policy) of the company contains provisions stipulating that every participant in the general meeting may, before the end of the respective meeting, request a copy of the ballot filled in by them and certified by the counting commission.	☑ Full compliance	
1.1.6	The procedure for holding a general meeting set by the company provides equal opportunities for all persons attending the meeting to voice their opinions and ask questions.	1. During general meetings of shareholders held in the reporting period in the form of a meeting (joint presence of shareholders), sufficient time was allocated for reports on, and discussion of, the agenda items. 2. Nominees to the company's governance and control bodies were available to answer shareholders' questions at the meeting at which their nominations were put to vote. 3. When passing resolutions on preparing and holding general meetings of shareholders, the board of directors considered using telecommunication means for remote access of shareholders to general meetings in the reporting period.	☑ Partial compliance	Criterion 2 is partially complied with. In accordance with the Regulations on the General Meeting of Shareholders of OJSC MMC Norilsk Nickel approved by the Company's General Meeting of Shareholders (Minutes No. 1 dated 6 June 2014), when the General Meeting of Shareholders considers the election of the Board of Directors and the Audit Commission, candidates to the Company's bodies must be invited. Amid the COVID-19 pandemic, in 2020, the Annual General Meeting of Shareholders was held in absentia, which made it impossible to invite candidates to governance and control bodies to the General Meeting of Shareholders.
1.2	**Shareholders have equal and fair rights to share profits of the company by receiving dividends.**			
1.2.1	The company has developed and put in place a transparent and clear mechanism for determining the dividend amount and paying dividends.	1. The company's dividend policy is developed, approved by the board of directors and disclosed. 2. If the company's dividend policy uses the company's reporting figures to determine the dividend amount, then relevant provisions of the dividend policy take into account the consolidated financial statements.	☑ Full compliance	
1.2.2	The company does not resolve to pay out dividends if such payout, while formally compliant with law, is economically unjustified and may lead to a false representation of the company's performance.	1. The company's dividend policy clearly identifies financial/ economic circumstances under which the company shall not pay out dividends.	☑ Full compliance	
1.2.3	The company does not allow for dividend rights of its existing shareholders to be impaired.	1. In the reporting period, the company did not take any actions that would lead to the impairment of the dividend rights of its existing shareholders.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
1.2.4	The company makes every effort to prevent its shareholders profiting from the company through any means other than dividends and liquidation value.	1. To prevent its shareholders profiting from the company through any means other than dividends and liquidation value, the company's internal documents provide for controls to timely identify and approve deals with affiliates (associates) of the company's significant shareholders (persons entitled to use votes attached to voting shares) where the law does not formally recognize such deals as interested party transactions.	☑ Full compliance	
1.3	**The corporate governance system and practices ensure equal conditions for all shareholders owning the same type (class) of shares, including minority and non-resident shareholders, and their equal treatment by the company.**			
1.3.1	The company has created conditions for fair treatment of each shareholder by the company's governance and control bodies, including conditions that rule out abuse by major shareholders against minority shareholders.	1. In the reporting period, procedures for managing potential conflicts of interest among significant shareholders were efficient, and the board of directors paid due attention to conflicts, if any, between shareholders.	☑ Full compliance	
1.3.2	The company does not take any actions that lead or may lead to artificial redistribution of corporate control.	1. No quasi-treasury shares were issued or used to vote in the reporting period.	☑ Full compliance	
1.4	**Shareholders are provided with reliable and efficient means of recording their rights to shares and are able to freely dispose of their shares without any hindrance.**			
1.4.1	Shareholders are provided with reliable and efficient means of recording their rights to shares and are able to freely dispose of their shares without any hindrance.	1. The company's registrar maintains the securities register in an efficient and reliable way that meets the needs of the company and its shareholders.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.1	**The board of directors carries out the strategic management of the company, determines key principles of, and approaches to, setting up a corporate risk management and internal control system, oversees the activities of the company's executive bodies, and performs other key functions.**			
2.1.1	The board of directors is responsible for appointing and dismissing executive bodies, including due to improper performance of their duties. The board of directors also ensures that the company's executive bodies act in accordance with the company's approved development strategy and core lines of business. The board of directors sets key long-term targets for the company, assesses and approves its key performance indicators and key business goals, as well as the strategy and business plans for the company's core lines of business. The board of directors determines the principles of, and approaches to, setting up a risk management and internal control system in the company.	1. The board of directors has the authority stipulated in the articles of association to appoint and dismiss members of executive bodies and to set out the terms and conditions of their contracts. 2. The board of directors reviewed the report(s) by the sole executive body and members of the collective executive body on the implementation of the company's strategy.	☑ Partial compliance	Criterion 1 is partially complied with. In accordance with the Company's Articles of Association, election and dismissal of the President is reserved to the General Meeting of Shareholders. Criterion 2 is partially complied with. In the reporting period, the Strategy Committee reviewed the materials relating to the implementation of the Company's functional strategies, submitted by executive bodies: • Implementation status of the development concept for the Company's design, repair, and construction services • Consolidated report on the implementation of the 2019 investment programme and the 2020 investment plan • Progress report on the Company's major projects • Implementation status of the IT programme, fuel and energy complex development strategy, exploration strategy, and sales strategy • Updated long-term production programme (including the progress report on Bystrinsky GOK reaching the design capacity) In addition, in the lead-up to the Annual General Meeting of Shareholders, the Company's Board of Directors previewed the report of the President (Chairman of the Management Board) on the Company's performance, included in the Annual Report.
2.1.2	The board of directors sets key long-term targets for the company, assesses and approves its key performance indicators and key business goals, as well as the strategy and business plans for the company's core lines of business.	1. In the reporting period, the board of directors reviewed at its meetings matters related to the progress in the implementation of the strategy and its updates, approval of the company's financial and business plan (budget), and consideration of the implementation criteria and performance (including interim criteria and performance) of the company's strategy and business plans.	☑ Full compliance	
2.1.3	The board of directors determines the principles of, and approaches to, setting up a risk management and internal control system in the company.	1. The board of directors determined the principles of, and approaches to, setting up a risk management and internal control system in the company. 2. The board of directors assessed the company's risk management and internal control system in the reporting period.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.1.4	The board of directors determines the company's policy on remuneration payable to, and/or reimbursement (compensation) of expenses incurred by, directors, executive bodies and other key executives of the company.	1. The company has developed and put in place a policy (policies) on remuneration and reimbursement (compensation) of expenses incurred by directors, executive bodies and other key executives of the company, approved by the board of directors. 2. At its meetings in the reporting period, the board of directors discussed matters related to such policy (policies).	☑ Partial compliance	Criterion 1 is partially complied with. The Company has developed and put in place the Remuneration Policy for Members of the Board of Directors that determines the structure of remuneration of non-executive directors and the Chairman of the Board of Directors, as well as rules for reimbursing expenses incurred by members of the Board of Directors. The Policy was approved by the Board of Directors, recommended for approval by the General Meeting of Shareholders (Minutes No. GMK/10-pr-sd dated 7 April 2020) and approved by the General Meeting of Shareholders (Minutes No. 1 dated 14 May 2020). The principles and basic mechanisms of the remuneration (expense reimbursement) system for members of executive bodies and other key executives of the Company are set forth in the Articles of Association, the Regulations on the Management Board, and internal documents approved by the President of the Company. The Company's current remuneration policy (system) operates under the continuous and direct control of the Board of Directors. The Corporate Governance, Nomination and Remuneration Committee is responsible for developing and regularly reviewing the remuneration policy (system) for members of the Board of Directors, members of the Management Board, and the President of the Company, as well as for overseeing its implementation and execution. Criterion 2 is partially complied with. In the reporting period, the Board of Directors recommended that the General Meeting of Shareholders approve a new version of the Remuneration Policy for Members of the Board of Directors and set remuneration and reimbursement of expenses related to the performance of their duties for members of the Board of Directors in the amount proposed by the Board of Directors. Corresponding resolutions were passed at the Annual General Meeting of Shareholders held on 13 May 2020.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
				Matters related to the Remuneration Policy for the Company's Top Management were reviewed by the Corporate Governance, Nomination and Remuneration Committee during the reporting period. Following the review of remuneration of the Company's key executives by the said committee, it is planned to include environmental and resource conservation indicators in the Company's KPI system.
2.1.5	The board of directors plays a key role in preventing, identifying and resolving internal conflicts between the company's bodies, shareholders and employees.	1. The board of directors plays a key role in preventing, identifying and resolving internal conflicts. 2. The company has set up mechanisms to identify transactions implying a conflict of interest and to resolve such conflicts.	☑ Full compliance	
2.1.6	The board of directors plays a key role in ensuring that the company is transparent, timely and fully discloses its information, and provides its shareholders with unhindered access to the company's documents.	1. The board of directors approved the company's regulations on the information policy. 2. The company designated persons responsible for implementing the information policy.	☑ Full compliance	
2.1.7	The board of directors controls the company's corporate governance practices and plays a key role in its significant corporate events.	1. In the reporting period, the board of directors reviewed the company's corporate governance practices.	☑ Partial compliance	The Board of Directors reviews the Company's corporate governance practices as part of its own performance evaluation as a key element of the Company's corporate governance framework, during the annual assessment of internal controls, as well as during the preparation and preliminary approval of the Company's Annual Report and approval of the Sustainability Report of the Norilsk Nickel Group. In 2020, The Board of Directors reviewed the Report on the Internal Performance Evaluation of the Board of Directors for 2020 and the recommendations of the Corporate Governance, Nomination and Remuneration Committee, and found the performance of the Board of Directors, Board Chairman, Corporate Secretary and the Board committees to be good.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
				The Company's Board of Directors reviewed the Internal Audit Department's 2020 performance assessment report for internal controls, which covers most aspects of corporate governance: • Division of roles between governance bodies • Organisation of the Board of Directors' activities, including engagement with executive management • Business development strategy • Coordination of risk management • Preventing conflicts of interest among shareholders, members of the Board of Directors, executive bodies and employees of the Company • Defining rules and procedures to ensure compliance with business ethics • Coordinating corporate disclosures • Monitoring internal controls The Norilsk Nickel Group's Annual Reports and Sustainability Reports include large sections on corporate governance with detailed information on the roles and performance of each governance body and changes in corporate governance practices at the Company. These reports must be reviewed by the Corporate Governance, Nomination and Remuneration Committee and then by the Board of Directors.
2.2	**The board of directors is accountable to the company's shareholders.**			
2.2.1	Information about the performance of the board of directors is disclosed and made available to the shareholders.	1. The company's annual report for the reporting period includes the information on individual attendance at board of directors and committee meetings. 2. The annual report contains key results of the board of directors' performance assessment in the reporting period.	☑ Full compliance	
2.2.2	The chairman of the board of directors is available to communicate with the company's shareholders.	1. The company has in place a transparent procedure enabling its shareholders to forward questions and express their positions on such questions to the chairman of the board of directors.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.3	**The board of directors manages the company in an efficient and professional manner and is capable of making fair and independent judgements and adopting resolutions in the best interests of the company and its shareholders.**			
2.3.1	Only persons of impeccable business and personal reputation who have the knowledge, expertise and experience required to make decisions within the remit of the board of directors and essential to performing its functions in an efficient way are elected to the board of directors.	1. The procedure for assessing the board of directors' performance established in the company includes, inter alia, assessment of directors' professional qualifications. 2. In the reporting period, the board of directors (or its nomination committee) assessed nominees to the board of directors for required experience, expertise, business reputation, absence of conflicts of interest, etc.	☑ Full compliance	
2.3.2	The company's directors are elected via a transparent procedure that enables shareholders to obtain information on nominees sufficient to judge on their personal and professional qualities.	1. Whenever throughout the reporting period the agenda of the general meeting of shareholders included election of the board of directors, the company provided to shareholders the biographical details of all nominees to the board of directors, the results of their assessment carried out by the board of directors (or its nomination committee), and the information on whether the nominee meets the independence criteria set forth in Recommendations 102–107 of the Code, as well as the nominees' written consent to be elected to the board of directors.	☑ Full compliance	
2.3.3	The board of directors has a balanced membership, including in terms of directors' qualifications, experience, expertise and business skills, and has the trust of shareholders.	1. As part of the board of directors' performance assessment run in the reporting period, the board of directors reviewed its requirements to professional qualifications, experience and business skills.	☑ Full compliance	
2.3.4	The company has a sufficient number of directors to organise the board of directors' activities in the most efficient way, including the ability to set up committees of the board of directors and enable the company's significant minority shareholders to elect a nominee to the board of directors for whom they vote.	1. As part of the board of directors' performance assessment run in the reporting period, the board of directors considered whether the number of directors met the company's needs and shareholders' interests.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.4	**The board of directors includes a sufficient number of independent directors.**			
2.4.1	An independent director is a person who is sufficiently professional, experienced and independent to develop his/her own position, and capable of making unbiased judgements in good faith, free of influence by the company's executive bodies, individual groups of shareholders, or other stakeholders. It should be noted that a nominee (elected director) who is related to the company, its significant shareholder, significant counterparty or competitor, or is related to the government, may not be considered as independent under normal circumstances.	1. In the reporting period, all independent directors met all independence criteria set out in Recommendations 102–107 of the Code, or were deemed independent by resolution of the board of directors.	☑ Full compliance	
2.4.2	The company assesses compliance of nominees to the board of directors and reviews compliance of independent directors with independence criteria on a regular basis. In such assessment, substance should prevail over form.	1. In the reporting period, the board of directors (or its nomination committee) made a judgement on the independence of each nominee to the board of directors and provided its opinion to shareholders. 2. In the reporting period, the board of directors (or its nomination committee) reviewed, at least once, the independence of incumbent directors listed by the company as independent directors in its annual report. 3. The company has developed procedures defining the actions to be taken by directors if they cease to be independent, including the obligation to timely notify the board of directors thereof.	☑ Full compliance	
2.4.3	Independent directors make up at least one third of elected directors.	1. Independent directors make up at least one third of directors.	☑ Full compliance	
2.4.4	Independent directors play a key role in preventing internal conflicts in the company and in ensuring that the company performs material corporate actions.	1. Independent directors (who do not have a conflict of interest) run a preliminary assessment of material corporate actions implying a potential conflict of interest and submit the results to the board of directors.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.5	**The chairman of the board of directors ensures that the board of directors discharges its duties in the most efficient way.**			
2.5.1	The board of directors is chaired by an independent director, or a senior independent director is chosen from among the elected independent directors to coordinate the activities of independent directors and enable the interaction with the chairman of the board of directors.	1. The board of directors is chaired by an independent director, or a senior independent director is chosen from among the independent directors[4]. 2. The role, rights and duties of the chairman of the board of directors (and, if applicable, of the senior independent director) are duly set out in the company's internal documents.	☑ Full compliance	The Board of Directors is chaired by an independent director. The Company believes that this situation is the most closely aligned with global best practices. An independent Chairman of the Company's Board of Directors ensures interaction between the Board of Directors, shareholders and other stakeholders in the most efficient way.
2.5.2	The chairman of the board of directors maintains a constructive environment at meetings, enables free discussion of agenda items, and supervises the execution of resolutions passed by the board of directors.	1. Performance of the chairman of the board of directors was assessed as part of the board of directors' performance assessment in the reporting period.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.5.3	The chairman of the board of directors takes all steps necessary for the timely provision to directors of information required to pass resolutions on agenda items.	1. The company's internal documents set out the duty of the chairman of the board of directors to take all steps necessary for the timely provision to directors of materials regarding items on the agenda of a board meeting.	☑ Full compliance	
2.6	**Directors act reasonably and in good faith in the best interests of the company and its shareholders, on a fully informed basis and with due care and diligence.**			
2.6.1	Directors pass resolutions on a fully informed basis, with no conflict of interest, subject to equal treatment of the company's shareholders, and assuming normal business risks.	1. The company's internal documents stipulate that a director should notify the board of directors of any existing conflict of interest as to any agenda item of a meeting of the board of directors or its committee, prior to discussing the relevant agenda item. 2. The company's internal documents stipulate that a director should abstain from voting on any item in connection with which he/she has a conflict of interest. 3. The company has in place a procedure enabling the board of directors to get professional advice on matters within its remit at the expense of the company.	☑ Full compliance	
2.6.2	The rights and duties of directors are clearly stated and formalised in the company's internal documents.	1. The company has adopted and published an internal document that clearly defines the rights and duties of directors.	☑ Full compliance	
2.6.3	Directors have sufficient time to perform their duties.	1. Individual attendance at board and committee meetings, as well as time devoted to preparation for attending meetings, was recorded as part of the procedure for assessing the board of directors in the reporting period. 2. In accordance with the company's internal documents, directors should notify the board of directors of their intentions to be elected to governance bodies of other entities (apart from the entities controlled by, or affiliated to, the company), and of their election to such bodies.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.6.4	All directors have equal access to the company's documents and information. Newly elected members of the board of directors are furnished with sufficient information about the company and the performance of the board of directors as soon as possible.	1. In accordance with the company's internal documents, directors are entitled to access documents and make queries regarding the company and its controlled entities, while executive bodies of the company should furnish all relevant information and documents. 2. The company has in place a formalised induction programme for newly elected members of the board of directors.	☑ Partial compliance	Under the Regulations on the Board of Directors of the Company, members of the Board of Directors may request information (materials) and clarifications from the executive bodies and officers of the Company on the Company's activities where such information is required to make an informed decision within the remit of the Board of Directors. The remit of the Company's Board of Directors includes both the matters that directly affect the Company's operations and the key matters related to activities of the Company controlled entities. In this regard, the disclosure rules outlined in the Regulations on the Board of Directors apply, inter alia, to documents and information of entities controlled by the Company.
2.7	**Meetings of the board of directors, preparation for such meetings, and participation of directors ensure efficient performance by the board of directors.**			
2.7.1	Meetings of the board of directors are held as needed, taking into account the scale of business and goals of the company at a particular time.	1. The board of directors held at least six meetings in the reporting year.	☑ Full compliance	
2.7.2	The company's internal documents set out a procedure for arranging and holding meetings of the board of directors, enabling members of the board of directors to properly prepare for such meetings.	1. The company has an approved internal document that describes a procedure for arranging and holding meetings of the board of directors and stipulates, in particular, that the notice of the meeting is to be given, as a rule, at least five days prior to such meeting.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.7.3	The format of the meeting of the board of directors is determined taking into account the importance of its agenda items. The most important matters are dealt with at meetings of the board of directors held in person.	1. The company's articles of association or internal document provide(s) for the most important matters (as per the list set out in Recommendation 168 of the Code) to be discussed at meetings of the board of directors held in person.	☑ Partial compliance	Criterion 1 is partially complied with. The Regulations on the Board of Directors of PJSC MMC NORILSK NICKEL list matters to be discussed only at in-person meetings of the Board of Directors. This list largely matches the list set out in Recommendation 168 of the Code; however, it reflects the features of the Company's corporate governance and the distribution of roles among its governance bodies. Formally, the following matters are not included in the list of matters to be reviewed at in-person meetings of the Board of Directors: • Approval of material transactions • Approval of the Company's registrar, as well as the terms of the contract with the registrar and its termination • Review of material aspects of operations of legal entities controlled by the Company • Matters relating to the Company's receipt of a mandatory or voluntary offer • Review of the Company's financial activities in the reporting period (quarter, year) • Matters related to the listing and delisting of Company shares • Review of the results of the performance assessment of the Board of Directors, executive bodies of the Company and key executives • Review of the Risk Management Policy • Approval of the Company's Dividend Policy

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
				In the reporting period, in-person meetings of the Board of Directors approved the Company's budget and pre-approved the Annual Report, discussed the election of the Chairman of the Board of Directors and the formation of the Company's executive bodies, reviewed the implementation of the investor relations strategy, reports on production, occupational health and safety, progress in responding to the incident at CHPP-3 in Norilsk, Norilsk Nickel Group's 2019 Sustainability Report, and matters related to preparing and holding General Meetings of Shareholders. Taking into account the requirements of the Federal Law On Joint Stock Companies, the level of decision-making on applying for delisting has been raised higher than required by the Code – the Articles of Association of PJSC MMC

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
				NORILSK NICKEL refer this matter to the General Meeting of Shareholders. Approval of the Annual Report and annual accounting (financial) statements is also referred to the General Meeting of Shareholders. The matter of convening the General Meeting of Shareholders, including the preparation of a report by the Board of Directors setting forth its substantiated position on the agenda items of the General Meeting of Shareholders, is reviewed at the meeting of the Board of Directors held in person. Thus, the list of matters to be reviewed only at in-person meetings of the Board of Directors, stipulated by the Regulations on the Board of Directors of PJSC MMC NORILSK NICKEL, does not fully comply with the list of matters stipulated by Recommendation 168 of the Code. Nevertheless, virtually all of the matters specified in Recommendation 168 of the Code are reviewed in person by members of the Board of Directors. Discussion of items on the agendas of committee meetings requires sufficient time, since recommendations expressing the opinions of committee members on agenda items are the basis for an informed decision at a Board meeting. Excessive workload of independent directors contradicts the principle laid down in the Corporate Governance Code about “board members should be able to spend sufficient time working on the board of directors, including on its committees”. All elected members of the Audit and Sustainable Development Committee have the knowledge, skills and experience required to serve on the Committee. The Committee is chaired by an independent director. The risks associated with partial compliance with this criterion are minimal.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.7.4	Resolutions on the most important matters relating to the company's operations are passed at a meeting of the board of directors by a qualified majority or by a majority of all elected directors.	1. The company's articles of association provide for resolutions on the most important matters set out in Recommendation 170 of the Code to be passed at a meeting of the board of directors by a qualified majority of at least three quarters or by a majority of all elected directors.	☑ Partial compliance	Criterion 1 is partially complied with. The Company's Articles of Association provide for resolutions on increasing the Company's authorised capital by placing additional shares to be passed by the Board of Directors unanimously. Resolutions on certain material matters (some of which are listed in Recommendation 170 of the Code) are passed by at least ten votes of members of the Board of Directors (which is at least three quarters of all directors). These matters include: • Submission for review by the General Meeting of Shareholders of matters concerning amendments and addenda to the Articles of Association and the reduction of authorised capital • Approval and amendment of the Dividend Policy • Approval of material transactions • Review of material matters relating to the operations of controlled entities Internal documents, the Company's sales strategy and other matters are also approved by at least ten votes of members of the Board of Directors.
				In addition, a special quorum is stipulated by the Company's Articles of Association whenever the agenda of a meeting includes the determination of the Company's business priorities, development concept and strategy, approval of the Company's plans and budgets, as well as submission for review by the General Meeting of Shareholders of matters concerning reorganisation and liquidation of the Company and increase of its authorised capital: at least two thirds of the elected directors, including at least one independent director, must participate in the meeting. The risks associated with partial compliance with Recommendation 170 of the Code are offset by the traditionally active participation of Board members in meetings (generally, 100%) and consensus-based decision-making by the Board of Directors (in most cases unanimously). Matters of particular importance are subject to preliminary discussion by committees of the Board of Directors.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.8	**The board of directors sets up committees to preview the most important matters related to the company's operations.**			
2.8.1	An audit committee comprised of independent directors was set up to preview matters related to controlling the company's financial and business activities.	1. The board of directors set up an audit committee comprised solely of independent directors. 2. The company's internal documents set out the tasks of the audit committee, including those listed in Recommendation 172 of the Code. 3. At least one member of the audit committee represented by an independent director has experience and knowledge of preparing, analyzing, assessing and auditing accounting (financial) statements. 4. In the reporting period, meetings of the audit committee were held at least once a quarter.	☑ Partial compliance	Criterion 1 is partially complied with. The Audit and Sustainable Development Committee is established at the Company, made up of three independent and two non-executive directors (who are not the issuer's sole executive body and/or members of its collegial executive body). According to the Company's internal documents, the Board of Directors has 13 members. The Board of Directors includes six independent directors. The Company has four Board committees, each comprised of five members. According to their terms of reference, each committee must include independent directors. All six independent members of the Board of Directors are involved in the activities of the committees, but it is not possible to establish committees entirely made up of independent directors due to the insufficient ratio of the number of independent directors (six people) to the total number of committee members (20 people). In 2020, the Audit Committee of the Board of Directors held eight meetings. In addition, an average of three Board meetings were held each month in 2020.
				Discussion of items on the agendas of committee meetings requires sufficient time, since recommendations expressing the opinions of committee members on agenda items are the basis for an informed decision at a Board meeting. Excessive workload of independent directors contradicts the principle laid down in the Corporate Governance Code about "board members should be able to spend sufficient time working on the board of directors, including on its committees". All elected members of the Audit and Sustainable Development Committee have the knowledge, skills and experience required to serve on the Committee. The Committee is chaired by an independent director. The risks associated with partial compliance with this criterion are minimal.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.8.2	To preview matters related to adopting an efficient and transparent remuneration scheme, a remuneration committee was set up, comprised of independent directors and headed by an independent director who is not the chairman of the board of directors.	1. The board of directors set up a remuneration committee comprised solely of independent directors. 2. The remuneration committee is chaired by an independent director who is not the chairman of the board of directors. 3. The company's internal documents set out the tasks of the remuneration committee, including those listed in Recommendation 180 of the Code.	☑ Partial compliance	Criterion 1 is partially complied with. The Company combines the functions of the Remuneration Committee and the Nomination Committee within the Corporate Governance, Nomination and Remuneration Committee of the Board of Directors. The Committee is made up of four independent directors and one non-executive director (who are not the issuer's sole executive body and/or members of its collegial executive body). According to the Company's internal documents, the Board of Directors has 13 members. The Board of Directors includes six independent directors. The Company has four Board committees, each comprised of five members. According to their terms of reference, each committee must include independent directors. All six independent members of the Board of Directors are involved in the activities of the committees, but it is not possible to establish committees entirely made up of independent directors due to the insufficient ratio of the number of independent directors (six people) to the total number of committee members (20 people). In 2020, the Corporate Governance, Nomination and Remuneration Committee of the Board of Directors held 11 meetings. In addition, an average of three Board meetings were held each month in 2020.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
				Discussion of items on the agendas of committee meetings requires sufficient time, since recommendations expressing the opinions of committee members on agenda items are the basis for an informed decision at a Board meeting. Excessive workload of independent directors contradicts the principle laid down in the Corporate Governance Code about “board members should be able to spend sufficient time working on the board of directors, including on its committees”. All elected members of the Corporate Governance, Nomination and Remuneration Committee have the knowledge, skills and experience required to serve on the Committee. In addition, the Committee is chaired by an independent director. The risks associated with partial compliance with this criterion are minimal. Criterion 3 is partially complied with. The Terms of Reference of the Corporate Governance, Nomination and Remuneration Committee of the Board of Directors of PJSC MMC NORILSK NICKEL set out the Committee’s tasks listed in Recommendation 180 of the Code, excluding Sub-paragraph 7 “Preparing a report on practical implementation of the policies on remuneration due to members of the company’s executive bodies; such report shall be included in the annual report and other documents of the company”.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.8.3	To preview matters related to talent management (succession planning), professional composition and efficiency of the board of directors, a nomination (appointments, HR) committee was set up, predominantly comprised of independent directors.	1. The board of directors set up a nomination committee (or its tasks listed in Recommendation 186 of the Code are fulfilled by another committee[5]) predominantly comprised of independent directors. 2. The company's internal documents set out the tasks of the nomination committee (or the tasks of the relevant committee with combined functions), including those listed in Recommendation 186 of the Code.	☑ Partial compliance	Criterion 1 is complied with. The Company integrates the functions of the Nomination Committee within the Corporate Governance, Nomination and Remuneration Committee of the Board of Directors. The Committee is made up of five members of the Board of Directors – four independent directors and one non-executive director (who are not the issuer's sole executive body and/or members of its collegial executive body). Criterion 2 is partially complied with. The Terms of Reference of the Corporate Governance, Nomination and Remuneration Committee of the Board of Directors of PJSC MMC NORILSK NICKEL set out all the tasks listed in Recommendation 186 of the Code, excluding Sub-paragraph 4 "Description of individual duties of directors and the chairman of the board of directors, including time they should spend on issues related to the company's activities, both at and outside the board meetings, in the course of planned and unplanned work. Such descriptions (which shall be prepared separately for the board members and the chairman of the board of directors) must be approved by the board of directors and provided to each new board member and the chairman for review after their election".
				The main duties of members of the Board of Directors (including the Chairman of the Board of Directors) are prescribed in the Regulations on the Board of Directors. The composition of the Company's Board of Directors is quite stable, and the individual duties of each director have already been established. An induction training programme has been developed for newly elected directors to familiarise them, among other things, with the procedures of the Board of Directors. An additional description of directors' duties by the relevant Committee will be purely formal. The risks associated with partial compliance with this criterion are minimal. The Company does not intend to include this task in the functions of the Committee.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.8.4	Taking into account the company's scale of business and level of risks, the company's board of directors made sure that the composition of its committees is fully in line with the company's business goals. Additional committees were either set up or not deemed necessary (strategy committee, corporate governance committee, ethics committee, risk management committee, budget committee, health, safety and environment committee, etc.).	1. In the reporting period, the company's board of directors considered whether the composition of its committees was in line with the board's tasks and the company's business goals. Additional committees were either set up or not deemed necessary.	☑ Full compliance	The Company has four Board committees[6]: • Audit and Sustainable Development Committee • Corporate Governance, Nomination and Remuneration Committee • Budget Committee • Strategy Committee

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.8.5	Committees are composed so as to enable comprehensive discussions of matters under preview, taking into account the diversity of opinions.	1. Committees of the board of directors are headed by independent directors. 2. The company's internal documents (policies) include provisions stipulating that persons who are not members of the audit committee, the nomination committee and the remuneration committee may attend committee meetings only by invitation of the chairman of the respective committee.	☑ Partial compliance	Criterion 1 is partially complied with. According to the Company's internal documents, the Board of Directors has 13 members, including six independent directors. The Company has four Board committees, each comprised of five members. According to their terms of reference, each committee must include independent directors. All six independent members of the Board of Directors are involved in the activities of the committees. If independent directors are elected chairmen of all committees, it will lead to excessive workload of independent directors, which contradicts the principle laid down in the Corporate Governance Code about "board members should be able to spend sufficient time working on the board of directors, including on its committees". Consequently, the Budget Committee and the Strategy Committee are headed by non-executive directors. The Budget Committee and the Strategy Committee each comprise two independent and three non-executive directors. All elected members of the Budget Committee and the Strategy Committee have the knowledge, skills and experience required to serve on the committees. Committee chairmen ensure their efficient performance. The risks associated with partial compliance with this criterion are minimal.
2.8.6	Committee chairmen inform the board of directors and its chairman on the performance of their committees on a regular basis.	1. In the reporting period, committee chairmen reported to the board of directors on the performance of committees on a regular basis.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
2.9	**The board of directors ensures performance assessment of the board of directors, its committees, and members of the board of directors.**			
2.9.1	The board of directors' performance assessment is aimed at determining the efficiency of the board of directors, its committees and members, consistency of their work with the company's growth requirements, as well as at bolstering the work of the board of directors and identifying areas for improvement.	1. Self-assessment or external assessment of the board of directors' performance carried out in the reporting period included performance assessment of committees, individual directors and the board of directors in general. 2. Results of self-assessment or external assessment of the board of directors' performance carried out in the reporting period were reviewed at the meeting of the board of directors held in person.	☑ Full compliance	
2.9.2	Performance of the board of directors, its committees and members is assessed regularly at least once a year. An external advisor is engaged at least once in three years to conduct an independent assessment of the board of directors' performance.	1. The company engaged an external advisor to conduct an independent assessment of the board of directors' performance at least once over the last three reporting periods.	☑ Full compliance	
3.1	**The company's corporate secretary ensures efficient ongoing interaction with shareholders, coordinates the company's efforts to protect shareholder rights and interests, and supports efficient performance of the board of directors.**			
3.1.1	The corporate secretary has the knowledge, experience and qualifications sufficient to perform his/her duties, as well as an impeccable reputation and the trust of shareholders.	1. The company has adopted and disclosed an internal document – regulations on the corporate secretary. 2. The biographical data of the corporate secretary are published on the corporate website and in the company's annual report with the same level of detail as for members of the board of directors and the company's executives.	☑ Full compliance	
3.1.2	The corporate secretary is sufficiently independent of the company's executive bodies and has the powers and resources required to perform his/her tasks.	1. The board of directors approves the appointment, dismissal and additional remuneration of the corporate secretary.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
4.1	**Remuneration payable by the company is sufficient to attract, motivate and retain people with competencies and qualifications required by the company. Remuneration payable to directors, executive bodies and other key executives of the company is in compliance with the approved remuneration policy of the company.**			
4.1.1	The amount of remuneration paid by the company to directors, executive bodies and other key executives creates sufficient incentives for them to work efficiently while enabling the company to engage and retain competent and qualified specialists. At the same time, the company avoids unnecessarily high remuneration, as well as unjustifiably large gaps between remunerations of the above persons and company employees.	1. The company has in place an internal document (internal documents) – the policy (policies) on remuneration of directors, executive bodies and other key executives, which clearly defines the approaches to remuneration of the above persons.	☑ Partial compliance	The new version of the Remuneration Policy for Members of the Board of Directors of PJSC MMC NORILSK NICKEL was approved at the Annual General Meeting of Shareholders reviewing the 2019 performance (Minutes No. 1 dated 14 May 2020). The Policy describes the key principles and parameters of the remuneration system for members of PJSC MMC NORILSK NICKEL's Board of Directors, the structure of remuneration for non-executive Board members (base remuneration, additional remuneration for serving on Board committees/chairing one of the Board committees) and the Chairman of the Board of Directors, procedures for reimbursing incurred expenses, as well as liability insurance and indemnification. The principles and basic mechanisms of the remuneration (expense reimbursement) system for members of executive bodies are set forth in the Articles of Association, the Regulations on the Management Board, and other internal documents of the Company. In particular, the Company has in place the following internal documents: • Regulations on Annual Performance Bonuses for Head Office Employees of PJSC MMC NORILSK NICKEL approved by Order of the CEO – Chairman of the Management Board of OJSC MMC Norilsk Nickel No. GMK/43-p dated 14 July 2014 • Regulations on Implementing the Long-Term Remuneration Programme for Key Employees of the Norilsk Nickel Group approved by Order of the President of PJSC MMC NORILSK NICKEL No. GMK/134-p dated 30 December 2015 • Regulations on Remuneration for Employees of Business Units of the Head Office of PJSC MMC NORILSK NICKEL approved by Order of the CEO of OJSC MMC Norilsk Nickel No. GMK/49-p dated 26 April 2002

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
4.1.2	The company's remuneration policy is devised by the remuneration committee and approved by the board of directors. The board of directors, assisted by the remuneration committee, ensures control over the introduction and implementation of the company's remuneration policy, revising and amending it as required.	1. In the reporting period, the remuneration committee considered the remuneration policy (policies) and its (their) introduction practices and presented relevant recommendations to the board of directors as required.	☑ Partial compliance	The Corporate Governance, Nomination and Remuneration Committee of the Board of Directors monitored the implementation of the remuneration policy (system) so as to develop proposals on its efficiency improvement. Recommendations of the Corporate Governance, Nomination and Remuneration Committee were communicated to, and considered by, the Board of Directors.
4.1.3	The company's remuneration policy includes transparent mechanisms for determining the amount of remuneration due to directors, executive bodies and other key executives of the company, and regulates all types of payments, benefits and privileges provided to such persons.	1. The company's remuneration policy (policies) includes (include) transparent mechanisms for determining the amount of remuneration due to directors, executive bodies and other key executives of the company, and regulates (regulate) all types of payments, benefits and privileges provided to such persons.	☑ Partial compliance	The Company's remuneration system includes the procedure for determining (setting) the amount of remuneration due to members of the Board of Directors and executive bodies. The remuneration policy (system) in place at the Company broadly complies with the transparency criterion. The procedure for determining the amount of remuneration due to members of the Board of Directors is set forth in the Remuneration Policy for Members of the Board of Directors of PJSC MMC NORILSK NICKEL, and is determined by resolution of the General Meeting of Shareholders. The aggregate remuneration payable to the President and members of the Management Board is comprised of basic salary and bonuses (variable part). The variable part of remuneration depends on the Company's performance and is determined by both financial and non-financial indicators. The mechanism for determining the amount of the variable part of the remuneration payable to members of the Management Board is based on key performance indicators. Key performance indicators are reviewed and updated by the Corporate Governance, Nomination and Remuneration Committee of the Board of Directors on an annual basis.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
4.1.4	The company determines a policy on reimbursement (compensation) of expenses detailing a list of reimbursable expenses and specifying service levels that directors, executive bodies and other key executives of the company may claim. Such policy can make part of the company's remuneration policy.	1. The remuneration policy (policies) or other internal documents of the company define the rules for reimbursement of expenses incurred by directors, executive bodies and other key executives of the company.	☑ Full compliance	
4.2	**The remuneration system for members of the board of directors ensures alignment of financial interests of directors with long-term financial interests of shareholders.**			
4.2.1	The company pays fixed annual remuneration to its directors.	1. Fixed annual remuneration was the only form of monetary remuneration payable to directors for their service on the board of directors during the reporting period.	☑ Full compliance	
4.2.2	The company does not pay remuneration for attending individual meetings of the board of directors or its committees.	1. If the company's internal document(s) – the remuneration policy (policies) stipulates (stipulate) provision of company shares to members of the board of directors, clear rules for share ownership by board members shall be defined and disclosed, aimed at stimulating long-term ownership of such shares.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
4.2.3	The company does not provide for any extra payments or compensations in the event of early termination of directors' tenure resulting from a change of control or any other reasons.	1. The company does not provide for any extra payments or compensations in the event of early termination of directors' tenure resulting from a change of control or any other reasons.	☑ Partial compliance	The Company's remuneration policy (system) does not provide for any extra payments or compensations in the event of early termination of directors' tenure resulting from a change of control or any other reasons. The only exception is made for the incumbent Chairman of the Board of Directors. The General Meeting of Shareholders resolved to make additional payments to the incumbent Chairman of the Board of Directors of the Company in the event of the above. This exception is due to the unique business skills and high demand for this specialist, who is one of the most experienced and professional managers at the international level, with significant experience in the metals and mining sector.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
4.3	**The company considers its performance and the personal contribution of each executive to the achievement of such performance when determining the amount of a fee payable to members of executive bodies and other key executives of the company.**			
4.3.1	Remuneration due to members of executive bodies and other key executives of the company is determined in a manner providing for reasonable and justified ratio of the fixed part of remuneration and the variable part which depends on the company's performance and the employee's personal (individual) contribution.	1. In the reporting period, annual performance targets approved by the board of directors were used to determine the amount of the variable part of remuneration due to members of executive bodies and other key executives of the company. 2. During the latest assessment of the remuneration system for members of executive bodies and other key executives of the company, the board of directors (remuneration committee) made sure that the company applies an efficient ratio of the fixed and variable parts of remuneration. 3. The company has in place a procedure that guarantees return to the company of bonus payments illegally received by members of executive bodies and other key executives of the company.	☑ Partial compliance	Criterion 1 is partially complied with. Annual KPIs were used to determine the amount of the variable part of remuneration due to members of executive bodies. These final (annual) KPIs were preliminarily analysed and assessed by the Corporate Governance, Nomination and Remuneration Committee of the Board of Directors. Criterion 2 is partially complied with. The Corporate Governance, Nomination and Remuneration Committee of the Board of Directors assesses the remuneration system for the Company's executive bodies on an annual basis. Based on the results of the most recent assessment, recommendations were made to change the variable part of remuneration. Criterion 3 is partially complied with. Applicable laws stipulate a legal mechanism for the Company to recover bonus payments illegally received by employees (including members of the Company's executive bodies). The mechanism is quite effective and can be used whether or not it (or a reference thereto) is included in the Company's internal documents.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
4.3.2	The company has in place a long-term incentive programme for members of executive bodies and other key executives of the company with the use of company shares (options and other derivative instruments where company shares are the underlying asset).	1. The company has in place a long-term incentive programme for members of executive bodies and other key executives of the company with the use of company shares (financial instruments based on company shares). 2. The long-term incentive programme for members of executive bodies and other key executives of the company implies that the right to dispose of shares and other financial instruments used in this programme takes effect at least three years after such shares or other financial instruments are granted. The right to dispose of such shares or other financial instruments is linked to the company's performance targets.	☑ No compliance	The Company considers introducing various motivation programmes for employees of the Norilsk Nickel Group including members of executive bodies, focusing in particular on promoting legislative initiatives aimed at improving the legal regulation of the acquisition by a joint stock company of its own shares.
4.3.3	The compensation (golden parachute) payable by the company in case of early termination of powers of members of executive bodies or key executives at the company's initiative, provided that there have been no actions in bad faith on their part, does not exceed the double amount of the fixed part of their annual remuneration.	1. In the reporting period, the compensation (golden parachute) payable by the company in case of early termination of powers of members of executive bodies or key executives at the company's initiative, provided that there have been no actions in bad faith on their part, did not exceed the double amount of the fixed part of their annual remuneration.	☑ Full compliance	
5.1	**The company has in place an effective risk management and internal control system providing reasonable assurance in the achievement of the company's goals.**			
5.1.1	The company's board of directors determined the principles of, and approaches to, setting up a risk management and internal control system at the company.	1. Functions of different governance bodies and business units of the company in the risk management and internal control system are clearly defined in the company's internal documents/relevant policy approved by the board of directors.	☑ Full compliance	
5.1.2	The company's executive bodies ensure establishment and continuous operation of an efficient risk management and internal control system at the company.	1. The company's executive bodies ensured the distribution of functions and powers related to risk management and internal control between the heads (managers) of business units and departments accountable to them.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
5.1.3	The company's risk management and internal control system ensures an objective, fair and clear view of the current state and future prospects of the company, the integrity and transparency of the company's reporting, as well as reasonable and acceptable risk exposure.	1. The company has approved an anti-corruption policy. 2. The company has established an accessible method of notifying the board of directors or the board's audit committee of breaches or any violations of the law, the company's internal procedures and code of ethics.	☑ Full compliance	
5.1.4	The company's board of directors takes necessary measures to make sure that the company's current risk management and internal control system is consistent with the principles of, and approaches to, its setup determined by the board of directors, and that it functions efficiently.	1. In the reporting period, the board of directors or the board's audit committee assessed the performance of the company's risk management and internal control system. Key results of this assessment are included in the company's annual report.	☑ Full compliance	
5.2	**The company performs internal audits for regular independent assessment of the reliability and efficiency of its risk management and internal control system, as well as corporate governance practices.**			
5.2.1	The company has set up a separate business unit or engaged an independent external organisation to carry out internal audits.	1. To perform internal audits, the company has set up a separate business unit – internal audit division functionally reporting to the board of directors or to the audit committee, or engaged an independent external organisation with the same line of reporting.	☑ Full compliance	
5.2.2	Functional and administrative reporting lines of the internal audit unit are delineated. The internal audit unit functionally reports to the board of directors.	1. In the reporting period, the performance of the internal control and risk management system was assessed as part of the internal audit procedure. 2. The company applies generally accepted approaches to internal control and risk management.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
6.1	**The internal audit division assesses the performance of the internal control, risk management, and corporate governance systems. The company applies generally accepted standards of internal audit.**			
6.1.1	The company has developed and implemented an information policy ensuring efficient exchange of information by the company, its shareholders, investors and other stakeholders.	1. The company's board of directors approved an information policy developed in accordance with the Code's recommendations. 2. The board of directors (or one of its committees) considered matters related to the company's compliance with its information policy at least once in the reporting period.	☑ Full compliance	
6.1.2	The company discloses information on its corporate governance system and practices, including detailed information on compliance with the principles and recommendations of the Code.	1. The company discloses information on its corporate governance system and general principles of corporate governance, including disclosure on its website. 2. The company discloses information on the composition of its executive bodies and board of directors, independence of directors and their membership in the board of directors' committees (as defined by the Code). 3. If the company has a controlling person, the company publishes a memorandum of the controlling person setting out this person's plans for the company's corporate governance.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
6.2	**The company makes timely disclosures of complete, up-to-date and reliable information about the company to allow shareholders and investors to make informed decisions.**			
6.2.1	The company discloses information based on the principles of regularity, consistency and promptness, as well as availability, reliability, completeness and comparability of disclosed data.	1. The company's information policy sets out the approaches to, and criteria for, identifying information that can have a material impact on the company's evaluation and the price of its securities, as well as procedures ensuring timely disclosure of such information. 2. If company securities are traded on foreign organized markets, the company ensured concerted and equivalent disclosure of material information in the Russian Federation and in the said markets in the reporting year. 3. If foreign shareholders hold a significant amount of the company shares, the relevant information was disclosed in the reporting period both in the Russian language and in one of the most widely used foreign languages.	☑ Full compliance	
6.2.2	The company avoids a formalistic approach to information disclosure and discloses material information about its operations, even if disclosure of such information is not required by law.	1. In the reporting period, the company disclosed annual and semi-annual financial statements prepared under the IFRS. The company's annual report for the reporting period included annual financial statements prepared under the IFRS, along with the auditor's report. 2. The company discloses complete information about its capital structure, as stated in Recommendation 290 of the Code, in its annual report and on the corporate website.	☑ Full compliance	
6.2.3	The company's annual report, as one of the most important tools of its information exchange with shareholders and other stakeholders, contains information enabling assessment of the company's annual performance results.	1. The company's annual report contains information about the key aspects of its operational and financial performance. 2. The company's annual report contains information about the environmental and social aspects of the company's operations.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
6.3	**The company provides information and documents requested by its shareholders in accordance with the principles of equal and unhindered access.**			
6.3.1	The company provides information and documents requested by its shareholders in accordance with the principles of equal and unhindered access.	1. The company's information policy establishes the procedure for providing shareholders with easy access to information, including information on legal entities controlled by the company, as requested by shareholders.	☑ Full compliance	Under the Company's Regulations on the Information Policy (the "Regulations"), the procedure and turnaround times for providing access to the Company's documents are to be set out in an internal document of the Company published on the Company's website. Pursuant to the above provision of the Regulations, information on the procedure for providing copies of the Company's documents upon request of security holders and other stakeholders is disclosed by the Company on its website at: https://www.nornickel.ru/upload/iblock/d5c/Poryadok_predostavleniya_dokumentov_PAO_GMK_NN.pdf. The procedure does not involve any complex steps preventing shareholders from obtaining documents of the Company or its controlled entities. Additionally, documents that are subject to disclosure by the Company under Russian laws and containing information on controlled persons are freely available on the Company's website under the Investors section. In particular, information on controlled entities is provided in Annual Reports, Sustainability Reports, Issuer's Quarterly Reports, IFRS Consolidated Financial Statements, Production Results updates and Capital Markets Day presentations.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
6.3.2	When providing information to shareholders, the company ensures reasonable balance between the interests of particular shareholders and its own interests consisting in preserving the confidentiality of important commercial information which may materially affect its competitive edge.	1. In the reporting period, the company did not refuse shareholders' requests for information, or such refusals were justified. 2. In cases defined by the information policy, shareholders are warned of the confidential nature of the information and undertake to maintain its confidentiality.	☑ Full compliance	
7.1	**Actions that materially affect or may affect the company's authorised capital structure and financial position and accordingly the position of its shareholders (material corporate actions) are taken on fair terms ensuring that the rights and interests of shareholders and other stakeholders are observed.**			
7.1.1	Material corporate actions include company reorganisation, acquisition of 30% or more of the company's voting shares (takeover), execution by the company of material transactions, increase or decrease of the company's authorised capital, listing or delisting of company shares, as well as other actions which may lead to material changes in the rights of shareholders or violation of their interests. The company's articles of association provide for a list (criteria) of transactions or other actions classified as material corporate actions, and these actions are referred to the remit of the company's board of directors.	1. The company's articles of association include a list of transactions or other actions classified as material corporate actions, and their identification criteria. Resolutions on material corporate actions are referred to the remit of the board of directors. When execution of such corporate actions is expressly referred by law to the remit of the general meeting of shareholders, the board of directors presents relevant recommendations to shareholders. 2. According to the company's articles of association, material corporate actions include at least: company reorganisation, acquisition of 30% or more of the company's voting shares (takeover), execution by the company of material transactions, increase or decrease of the company's authorised capital, listing or delisting of company shares.	☑ Partial compliance	Criteria 1 and 2 are partially complied with. The Company's Articles of Association do not formally stipulate a list of actions and transactions that are material corporate actions for the Company. At the same time, the Company's Articles of Association identify certain corporate actions and transactions, resolutions on which are referred to the remit of the Board of Directors due to their significance for the Company. Thus, the Company defines these actions and transactions as material and establishes the procedure for passing relevant resolutions recommended by the Code. The list of such actions and transactions largely follows Recommendations 303 and 307 of the Code, but also includes other events and transactions of particular importance to the Company.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
				When addressing the matter of arranging and holding the General Meeting of Shareholders, the Board of Directors makes recommendations to shareholders for voting on all agenda items, including those defined in Recommendation 303 of the Code as material corporate actions – reorganisation, delisting, and increase of the authorised capital. In accordance with the Company's Articles of Association, approval of a number of other transactions, in addition to major transactions and interested party transactions, is referred to the remit of the Board of Directors, including: • transactions with Company shareholders holding more than 5% of voting shares, and their affiliates • transactions worth over USD 200 mln • transactions worth over USD 20 mln excluding transactions entered into in the ordinary course of business • transactions associated with purchase, disposal or encumbrance of any securities and derivative financial instruments worth over USD 5 mln • transactions associated with purchase/sale of any business/ enterprise, exclusive rights, real estate, licences, concessions and other rights to develop and extract mineral resources, outside the Russian Federation, worth over USD 5 mln. The Company's voting procedure at general meetings of shareholders/participants of subsidiaries on the approval of the above transactions is also referred to the remit of the Board of Directors.

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
7.1.2	The board of directors plays a key role in passing resolutions or making recommendations on material corporate actions, relying on the opinions of the company's independent directors.	1. The company has in place a procedure enabling independent directors to express their opinions on material corporate actions prior to approval thereof.	☑ Full compliance	
7.1.3	When taking material corporate actions affecting the rights and legitimate interests of shareholders, equal terms and conditions are guaranteed for all shareholders; if the statutory procedure designed to protect shareholder rights proves insufficient, additional measures are taken to protect their rights and legitimate interests. In doing so, the company is guided by the corporate governance principles set forth in the Code, as well as by formal statutory requirements.	1. Due to the specifics of the company's operations, the company's articles of association contain less stringent minimum criteria for material corporate actions than required by law. 2. All material corporate actions in the reporting period were duly approved before they were taken.	☑ Full compliance	
7.2	**The company takes material corporate actions in such a way as to ensure that shareholders timely receive complete information about such actions, allowing them to influence such actions and guaranteeing adequate protection of their rights when taking such actions.**			
7.2.1	Information about material corporate actions is disclosed with explanations of the grounds, circumstances and consequences.	1. In the reporting period, the company disclosed information about its material corporate actions in due time and in detail, including the grounds for, and timelines of, such actions.	☑ Full compliance	

No.	Corporate governance principles	Compliance criteria	Compliance status[2]	Reasons[3] for non-compliance
7.2.2	Rules and procedures related to material corporate actions taken by the company are set out in the company's internal documents.	1. The company's internal documents set out a procedure for engaging an independent appraiser to estimate the value of assets either disposed of or acquired in a major transaction or an interested party transaction. 2. The company's internal documents set out a procedure for engaging an independent appraiser to estimate the value of shares acquired and bought back by the company. 3. The company's internal documents provide for an expanded list of grounds on which the company's directors and other persons as per the applicable law are deemed to be interested parties to the company's transactions.	☑ Partial compliance	Criteria 1 and 2 are partially complied with. The Company engages an independent appraiser in all cases stipulated by law. An independent appraiser can be engaged at the initiative of members of the Board of Directors.

Notes:
1. The reporting year is indicated, and if the Corporate Governance Code Compliance Report contains data for the period from the end of the reporting year to the date of this report, the date of this report is indicated.
2. Full compliance" means that the company meets all the compliance criteria. Otherwise, a "Partial compliance" or "No compliance" status is used.
3. Reasons for partial compliance or non-compliance are provided for each compliance criterion in case the company only complies with the criteria partially or does not comply with any of them. If the company's compliance status is indicated as "Full compliance", no explanation is required.
4. Specify which of the two alternative approaches permitted by the principle has been implemented in the company and explain why this approach was chosen.
5. If the tasks of the nomination committee are fulfilled by another committee, the name of the latter committee must be indicated.
6. A list of additional committees set up at the company must be provided.