



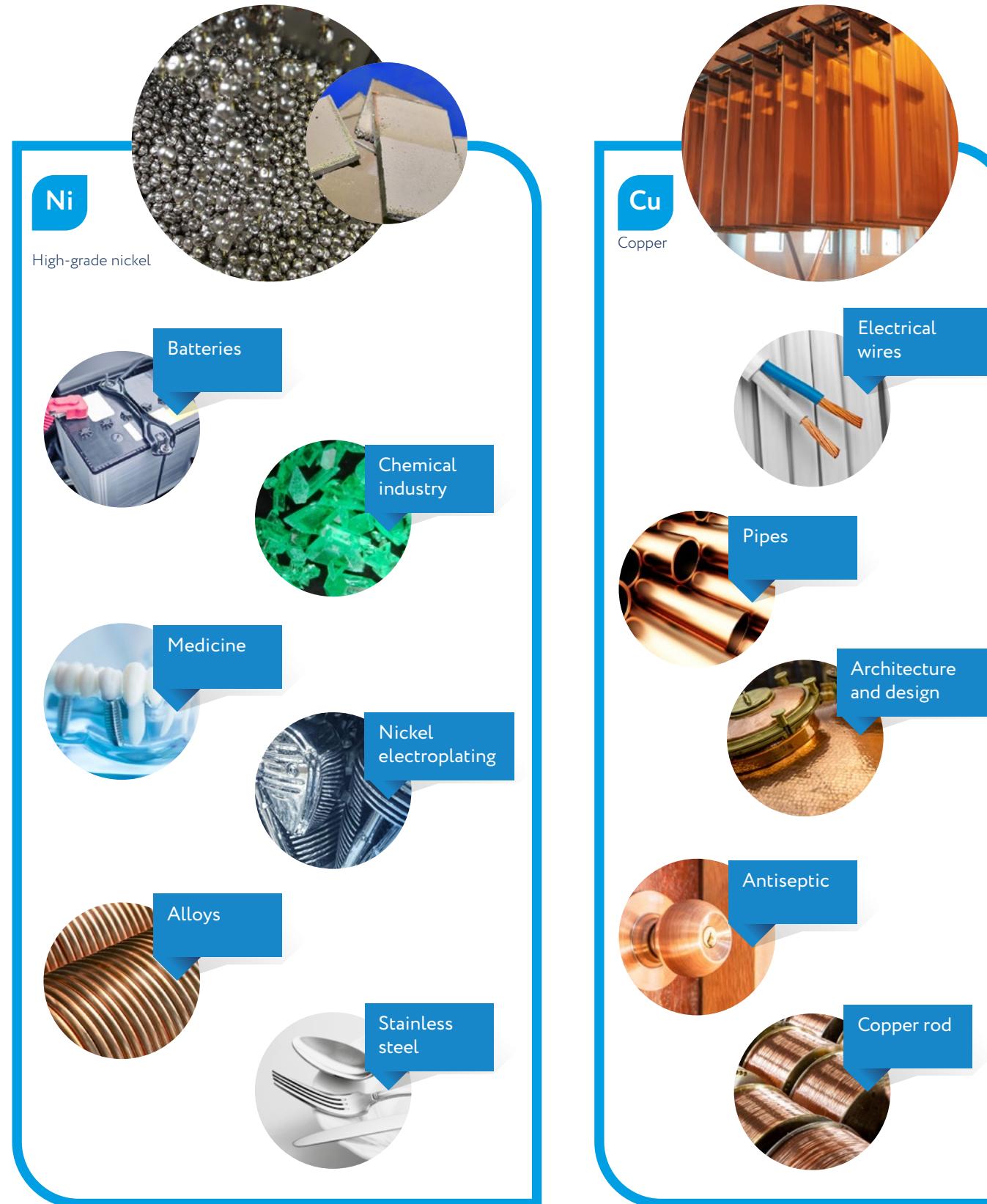
EXPANDING THE HORIZONS OF SUSTAINABLE GROWTH

OUR COMPANY IN 2019

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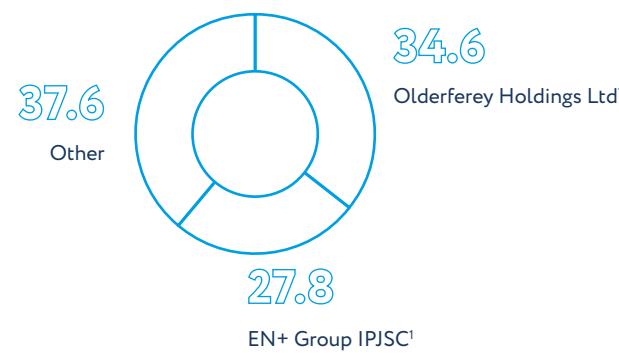
METAL PRODUCTS AND USES



OVERVIEW

Norilsk Nickel Group (hereinafter “the Company” or “Nornickel”) is Russia’s largest metals and mining company and the world’s largest producer of palladium and high-grade nickel and a major producer of platinum and copper. The Group also produces cobalt, rhodium, silver, gold, iridium, ruthenium, selenium, tellurium, and sulphur.

Ownership structure as of 31 December 2019,
% of shares held



^{1/} Indirect ownership via controlled entities.

0.28%

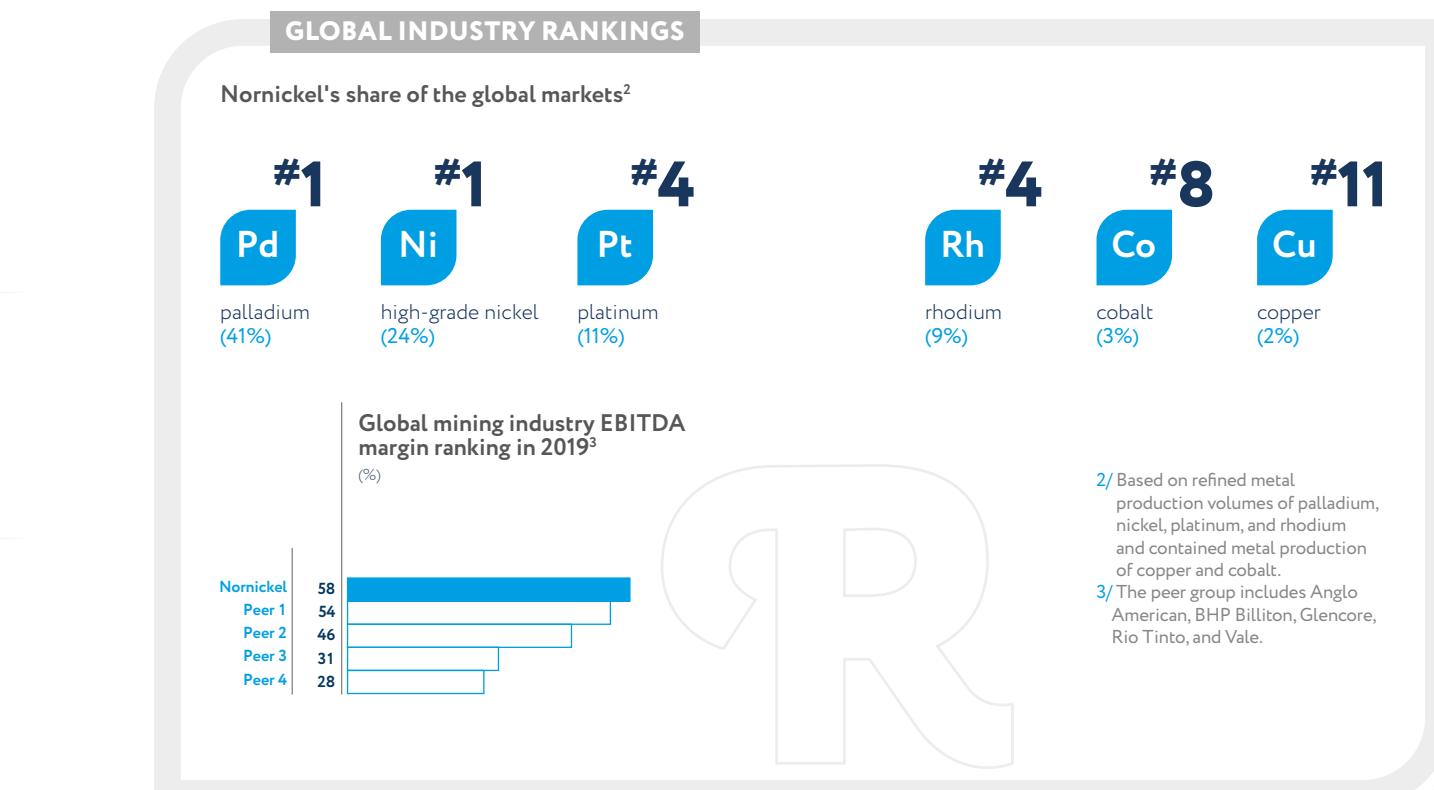
7.2%

Nornickel's weight in
MSCI Emerging Markets
index as of the end of 2019

Nornickel's weight in
MSCI Russia index
as of the end of 2019

The Company's shares are listed on the Moscow Exchange and included into its Blue Chip Index.

Nornickel American Depository Receipts (ADRs) trade on the OTC market in the USA, as well as on the OTC markets of the London, Berlin, and Frankfurt stock exchanges.



^{2/} Based on refined metal production volumes of palladium, nickel, platinum, and rhodium and contained metal production of copper and cobalt.
^{3/} The peer group includes Anglo American, BHP Billiton, Glencore, Rio Tinto, and Vale.



COMPETITIVE ADVANTAGES

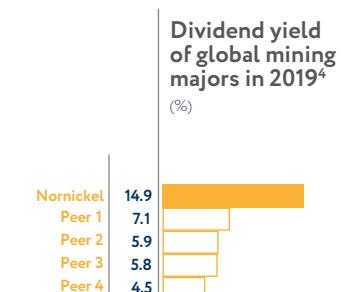
Mineral resources⁵

Nornickel operates the unique Talnakh ore deposit on the Taimyr Peninsula ranking the world's best polymetallic deposit in terms of the size of its minerals resources and contained metal grades. Successful development of the Talnakh deposit is the key driver of the Company's long-term sustainable growth.

10 mines

>80 years

of resources at the current production rate



PROVEN AND PROBABLE RESERVES

757 mln t

Ni 6.7 mln t

Cu 11.9 mln t

PGMs 120 moz

MEASURED AND INDICATED RESOURCES

2,193 mln t

Ni 15.2 mln t

Cu 23.2 mln t

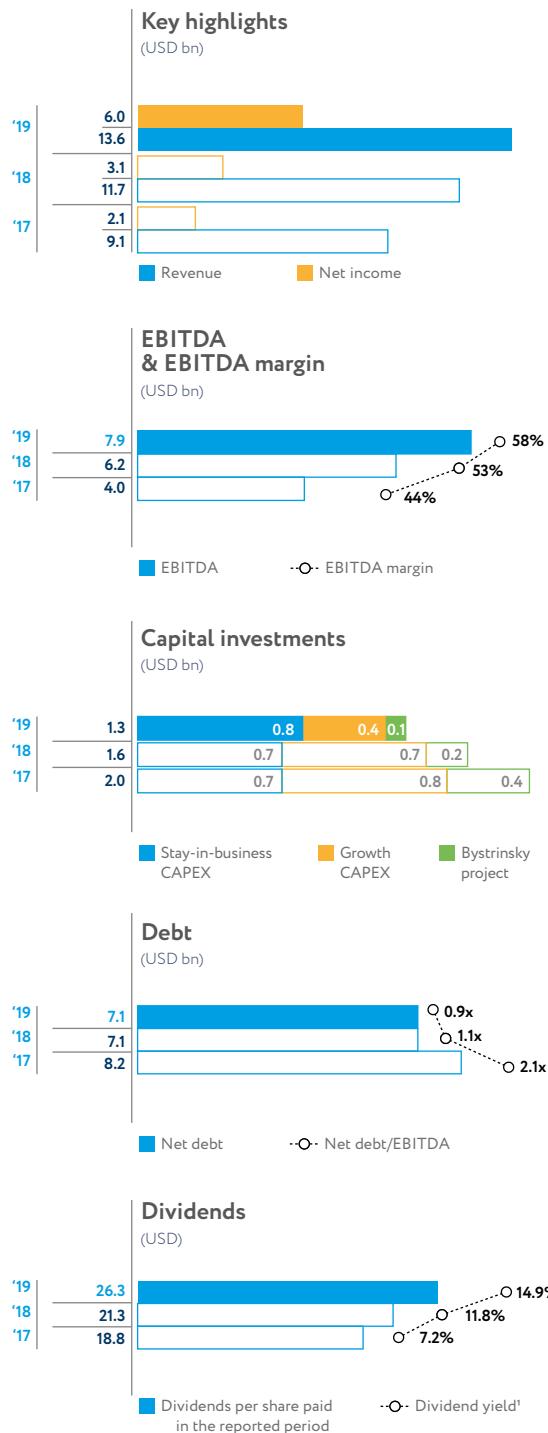
PGMs 260 moz

^{1/} The Company's reserves and resources are reported according to JORC standards as of 31 December 2019 and include wholly-owned international assets and exclude ore deposits in the Zabaykalsky Region. PGMs include six platinum group metals: platinum, palladium, rhodium, ruthenium, osmium, and iridium.

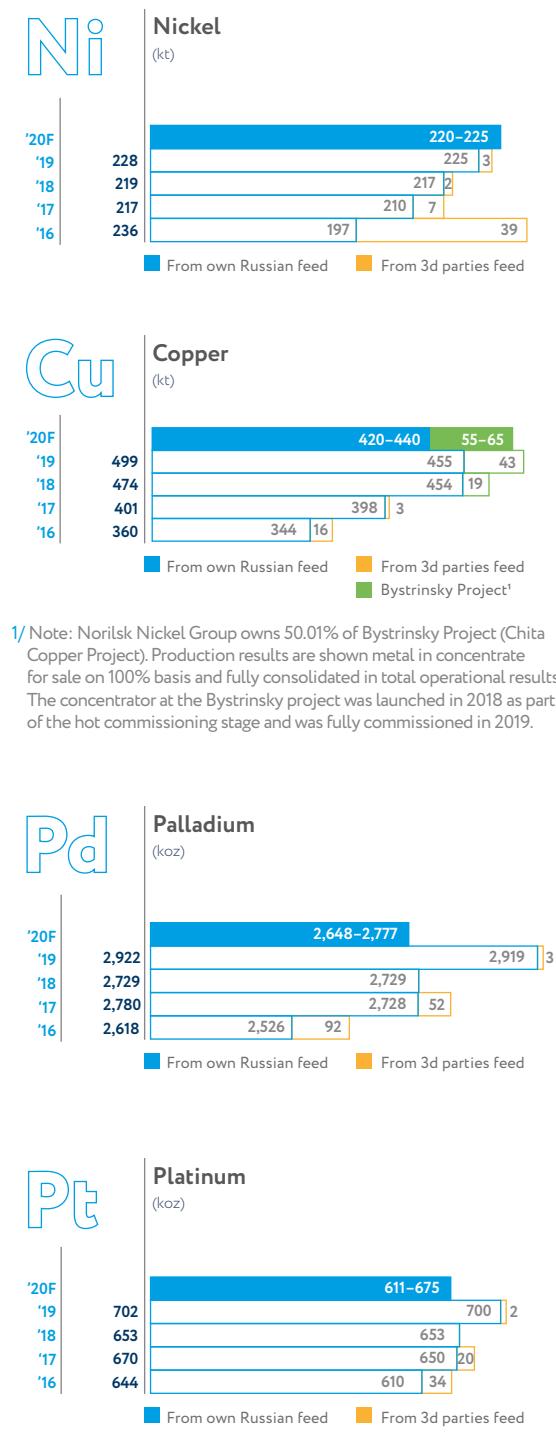
^{1/} In 2H 2017, Nornickel established Medvezhy Ruchey, a 100% subsidiary that operates part of the assets of Polar Division. Medvezhy Ruchey open pit and underground mines comprised investment project South Cluster.

PERFORMANCE HIGHLIGHTS

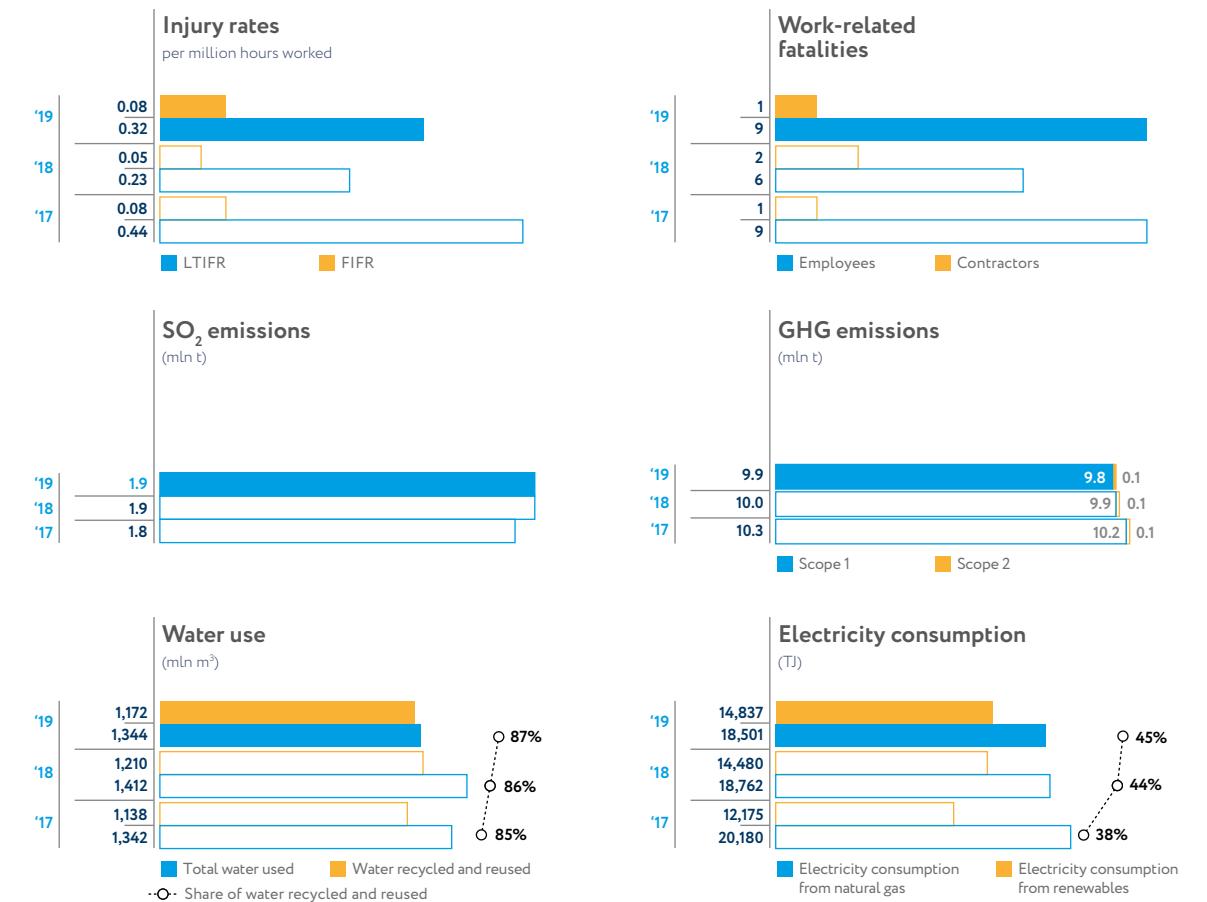
FINANCIAL HIGHLIGHTS



OPERATING HIGHLIGHTS



SUSTAINABILITY HIGHLIGHTS



ESG PERFORMANCE



MSCI «B» RATING REITERATED IN DECEMBER 2019

ROBECOSAM SCORE OF 37 ASSIGNED IN 2019 (RAISED FROM - 27 IN 2018)
37 ↑27

ISS GOVERNANCE SCORE 4
ENVIRONMENTAL SCORE 2
SOCIAL SCORE 2
ASSIGNED IN OCTOBER 2019
(1 is low risk, and 10 is high risk)

^{1/} Dividend yield was calculated on the basis of dividends in USD terms as of the date of the Board recommendation for AGM approval and average annual price of Nornickel ADRs (as reported by Bloomberg).

BUSINESS MODEL



GLOBAL ASSET
MAP

NORILSK NICKEL HARJAVALTA

Finland

KOLA MMC

Kola Peninsula

POLAR DIVISION AND
MEDVEZHY RUCHEY
(SOUTH CLUSTER)

Taimyr Peninsula

GRK BYSTRINSKOYE

Zabaykalsky Region

Greenfield project

Nornickel's new copper,
gold and iron concentrate
project launched in 2019

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
during 2020. As part of this process,
the partners will elaborate in due
course a plan contemplating the
cessation of the mining operations
and the placing of the mine in care
and maintenance.

NKOMATI

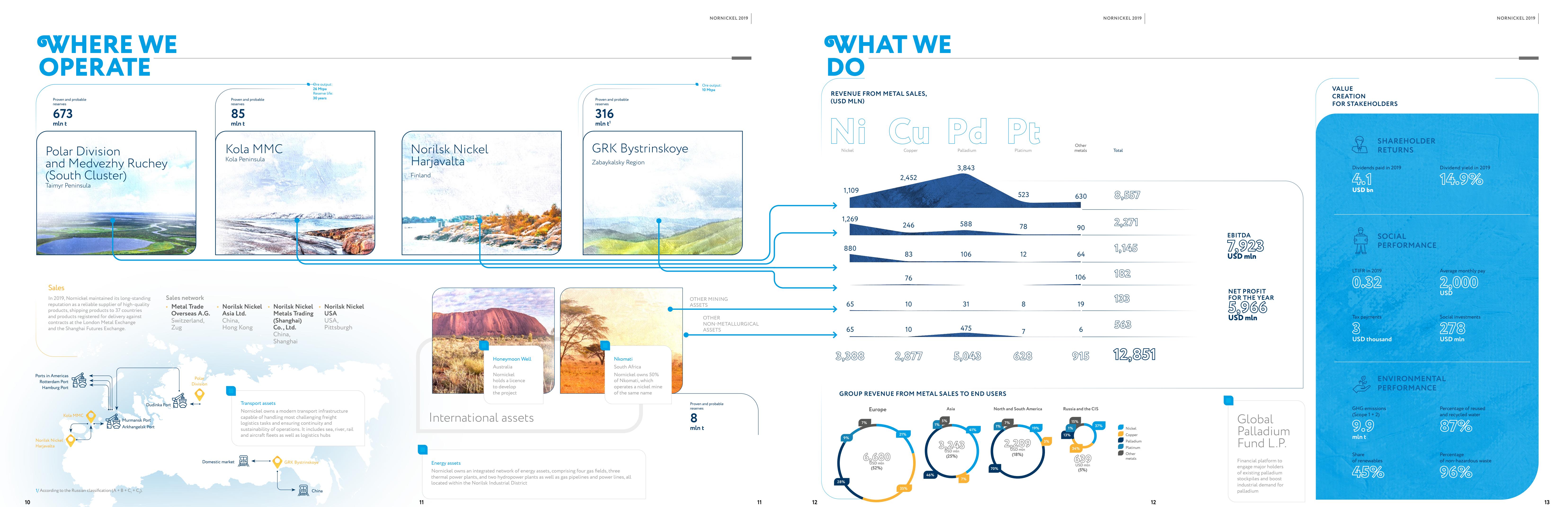
South Africa

HONEYMOON WELL

Australia

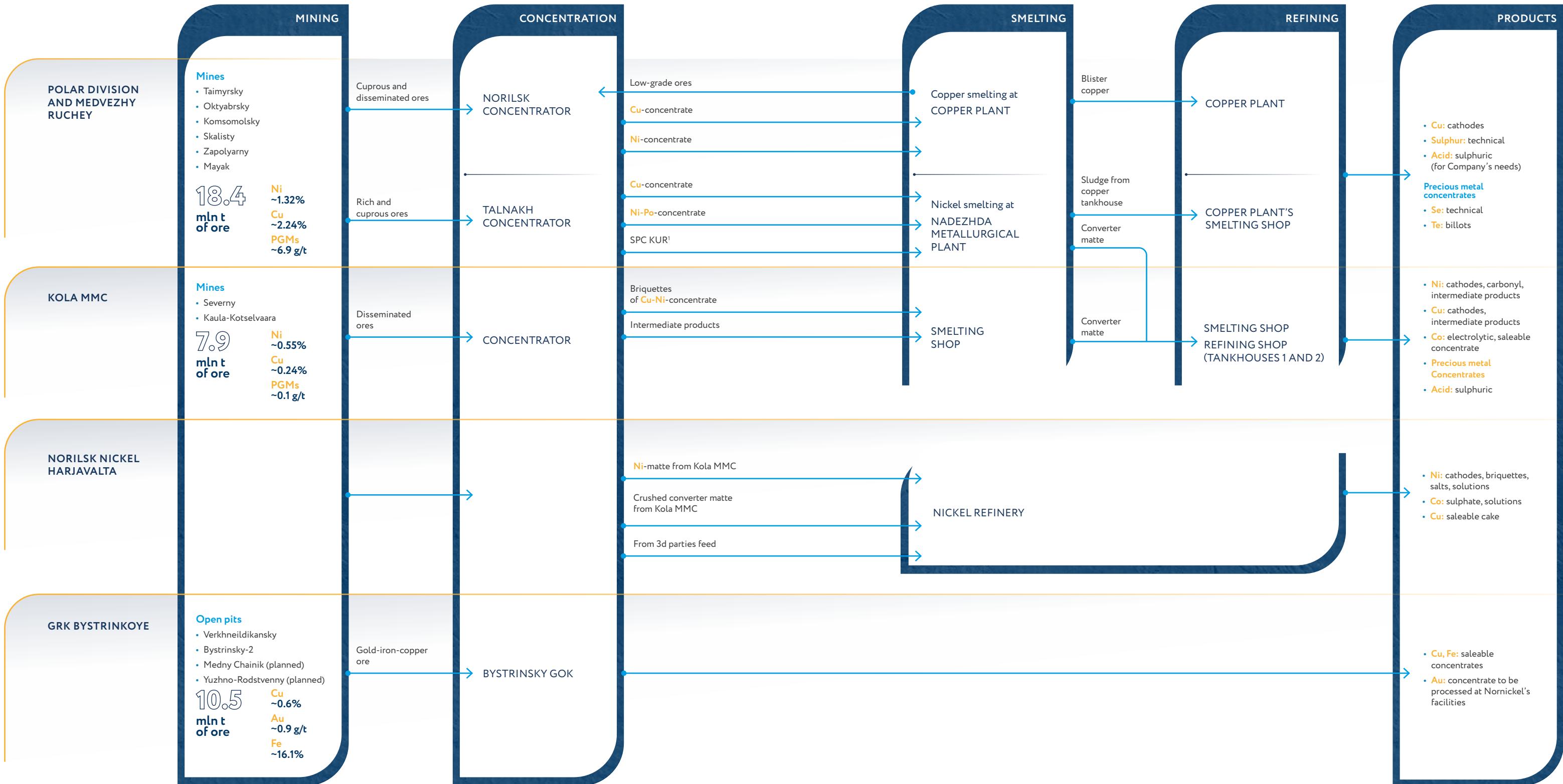
Nornickel holds a licence to develop
the Honeymoon Well project, which
includes deposits of disseminated
nickel sulphide ores.

The asset is slated for sale.



PRODUCTION FLOW

FOR THE REPORTING
2019 YEAR



¹SPC KUR – Stored pyrrhotite concentrate from Kayerkansky Open Pit Coal Mine.

KEY INVESTMENT PROJECTS

Environmental projects

DESULFURIZATION PROGRAMME AT POLAR DIVISION

Location

Norilsk Industrial District,
Krasnoyarsk Region

Project overview

The project will be rolled out in two phases at Nornickel's two core downstream facilities in the Norilsk Industrial District as follows:

Nadezhda Metallurgical Plant:

- phase 1:** The construction of gases' capture and the acid neutralisation facilities (including gypsum storage and related infrastructure) – to be completed by 2023
- phase 2:** The expansion of neutralisation infrastructure (for treatment of the sulphuric acid produced from copper stream) – to be completed by 2025

Copper Plant:

- phase 1:** Preparatory work and retrofitting of the gas cleaning unit – to be completed by 2023
- phase 2:** Recovery of sulphur dioxide from rich off-gases at Desulfurization facilities, reduction of the plant's emissions to the maximum level possible, and the discontinuation of converters with sulphur-poor gases – to be completed by 2025



This is a large-scale environmental project launched in 2019 designed to capture sulphur dioxide emissions at Nadezhda Metallurgical Plant and Copper Plant (both of Nornickel's Polar Division), aiming to dramatically reduce these air emissions.

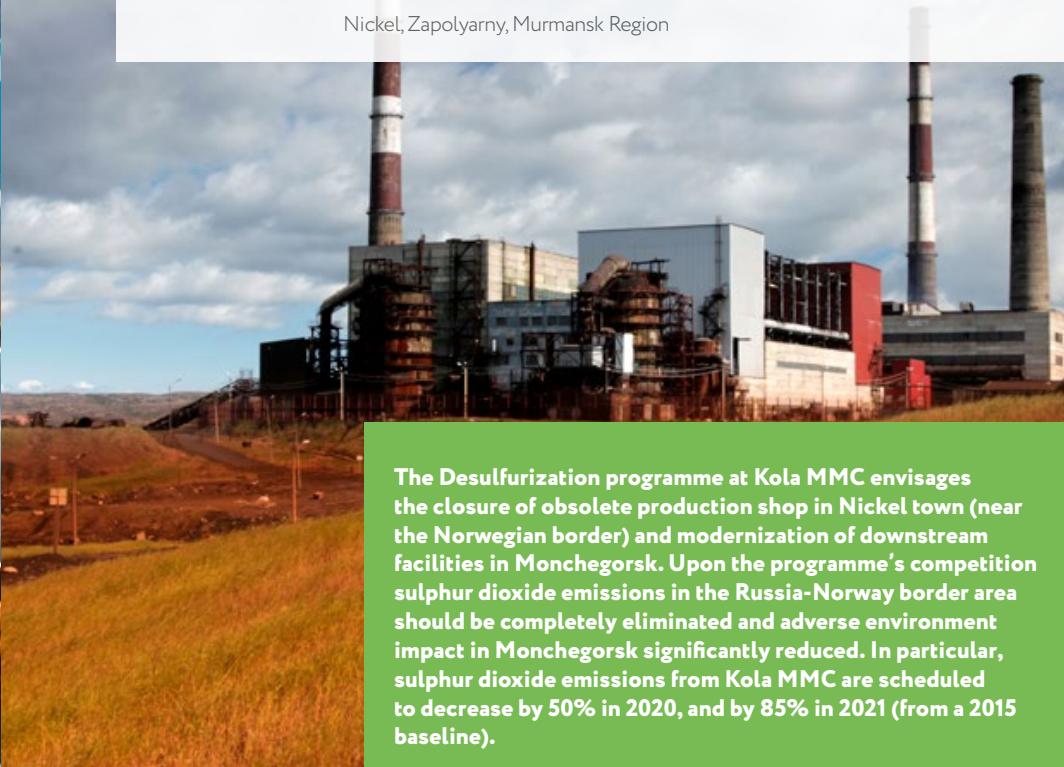
Desulfurization programme at the Polar Division is a staged project, with the following milestones set for sulphur dioxide reduction in the Norilsk Industrial District: 45% by 2023 and 90% by 2025 (from a 2015 baseline). In 2019–2025, the project's CAPEX has been budgeted for a total of USD 3.5 bn.



CLOSURE OF THE SMELTING SHOP IN NICKEL SETTLEMENT

This is a comprehensive environmental project at Kola MMC that aims to completely eliminate emissions in Nickel settlement, while reducing emissions from Kola MMC by 50% by the end of 2020 (from a 2015 baseline).

Nickel, Zapolaryny, Murmansk Region



The Desulfurization programme at Kola MMC envisages the closure of obsolete production shop in Nickel town (near the Norwegian border) and modernization of downstream facilities in Monchegorsk. Upon the programme's completion sulphur dioxide emissions in the Russia-Norway border area should be completely eliminated and adverse environment impact in Monchegorsk significantly reduced. In particular, sulphur dioxide emissions from Kola MMC are scheduled to decrease by 50% in 2020, and by 85% in 2021 (from a 2015 baseline).

Location

Nickel settlement,
Murmansk Region

Project overview

The project envisages the construction of a 200 kt dry concentrate loading point, the upgrade of the flotation circuit at Zapolaryny Concentrator to enable production of two types of copper-nickel concentrates, and the complete shutdown of smelting operations in Nickel settlement. The new facility at the concentrator will separate high-grade concentrate and low-grade concentrate, ready to be shipped to third-party consumers. In 2019, the concentrator processed 7.9 mln t of ore.

After all smelting operations will be shut down, the employees will be offered job opportunities at other Nornickel operating sites.

In 2017–2020, the project's CAPEX estimated at RUB 5.8 bn (USD 90.9 mln).

Project timeline

19

- CAPEX – **of RUB 1.5 bn (USD 24 mln)**
- Completion of the bulk of on-site preparatory work
- Development of design documentation for **Phase 1** at Nadezhda Metallurgical Plant, and successful state environmental review
- Some equipment supply contracts signed
- Development of design documentation for **Phase 1** at Copper Plant

20

- Detailed design documentation for the project at Nadezhda Metallurgical Plant will be prepared, application for the approval from the government's technical regulator (Glavgosexpertiza) to be made, and construction and installation works to commence
- Construction and installation works for **Phase 1** at Copper Plant will be carried out and documentation for **Phase 2** to be prepared

Project timeline

19

- CAPEX – **of RUB 2.3 bn (USD 35.6 mln)**
- Approval from the government's technical regulator (Glavgosexpertiza) received
- Construction and installation works completed
- Finished concentrate production launched and pre-commissioning of the plant started

20

- CAPEX – **of RUB 1.6 bn (USD 24.9 mln)**
- Partial closure of electric furnaces at the smelting shop in Nickel settlement
- Pre-commissioning at the loading point, and shipping of low-grade concentrate

21

- Complete shutdown of smelting operations in Nickel settlement
- Launch construction of a loading point for high-grade concentrate

Mining projects

SKALISTY MINE

Location

Norilsk Industrial District, Krasnoyarsk Region

Project overview

The Skalisty mine development project aims to ramp up ore production to 2.5 Mtpa by 2020 and maintain this level until 2025 through mining the rich and cuprous ore reserves of the Talmakhskoye and Oktyabrskoye deposits. In 2020–2025, the project's CAPEX has been budgeted for a total of RUB 58.3 bn (USD 0.85 bn).

Ore reserves¹

53 mln t

Average metal content

NI – 3.2 %
Cu – 3.7 %
PGMs – 10.0 g/t



TAIMYRSKY MINE

Location

Norilsk Industrial District, Krasnoyarsk Region

Project overview

The Taimyrsky mine development project aims to sustain ore production at 4.3 Mtpa until 2025 by tapping into the rich copper-nickel ore reserves of the Oktyabrskoye deposit. In 2020–2024, the project's CAPEX has been budgeted for a total of RUB 32.8 bn (USD 491.6 mln).

Ore reserves¹

139 mln t

Average metal content

NI – 1.2 %
Cu – 1.9 %
PGMs – 4.5 g/t

Project timeline

19

- CAPEX – of RUB 3.7 bn (USD 58 mln)
- Refurbishment of ventilation shaft No. 10 completed, and the main ventilation unit launched
- Pre-commissioning at the gas-fired boiler house launched

20

- Commissioning of the ventilation shaft No. 10
- Commissioning 400 ktpa of saleable ore capacity

Project timeline

19

- CAPEX – of RUB 4.3 bn (USD 67 mln)
- 5.6 km of underground workings completed

20–24

- Commissioning of 1.15 Mtpa mining capacity to maintain ore production at 4.3 Mtpa

¹ According to JORC standards.

Mining projects

OKTYABRSKY MINE

Location

Norilsk Industrial District, Krasnoyarsk Region

Project overview

The Oktyabrsky mine development project aims to maintain and gradually ramp up production to 6 Mtpa by 2025, through mining 38.5 mln t of the rich, disseminated and cuprous ore reserves of the Oktyabrskoye deposit. In 2020–2025, the project's CAPEX has been budgeted for a total of RUB 3.8 bn (USD 56.1 mln).

Ore reserves¹

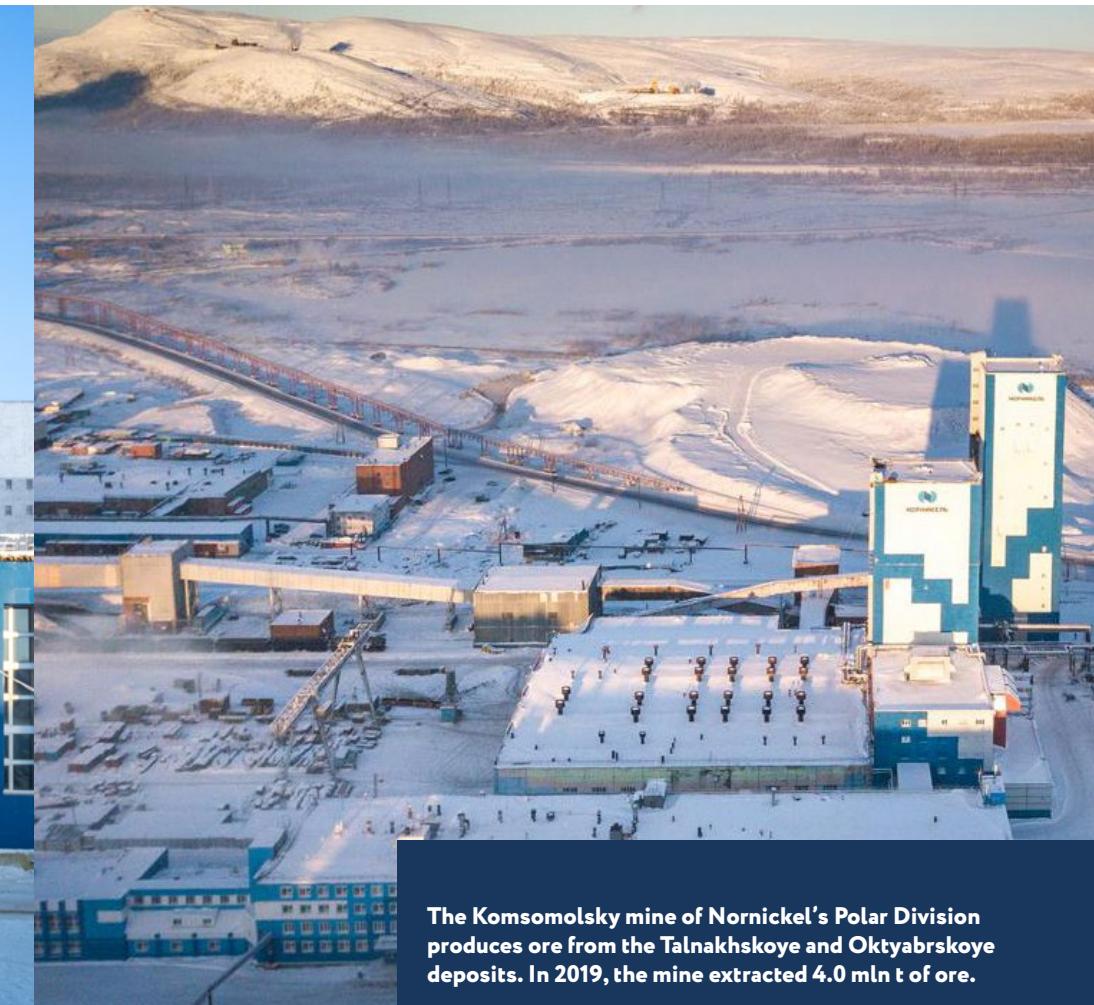
215 mln t

Average metal content

NI – 0.6 %

Cu – 2.1 %

PGMs – 5.8 g/t



KOMSOMOLSKY MINE

Location

Norilsk Industrial District, Krasnoyarsk Territory (Polar Division)

Project overview

The Komsomolsky mine development project aims to maintain ore production at 4 Mtpa until 2023, by mining the rich, cuprous, and disseminated ore reserves of the Talnakhskoye and Oktyabrskoye deposits. In 2020–2023, the project's CAPEX has been budgeted for a total of RUB 13.7 bn (USD 204.5 mln).

Ore reserves¹

182 mln t

Average metal content

NI – 0.6 %

Cu – 1.1 %

PGMs – 4.8 g/t

Project timeline

'19

- CAPEX – of RUB 1.7 bn (USD 27 mln)
- 2.6 km of underground workings completed

'20-'25

- Commissioning 300 Ktpa cuprous ore and 1.15 Mtpa ore capacity to maintain production volumes

Project timeline

'19

- CAPEX – of RUB 3.5 bn (USD 54 mln)
- 4.5 km of underground workings completed

'20-'23

Commissioning 1.5 Mtpa of saleable ore capacity

¹/ According to JORC standards.

Mining projects

Energy projects

MEDVEZHY RUCHEY (SOUTH CLUSTER)

Location

Norilsk Industrial District, Krasnoyarsk Region

Project overview

The project aims to ramp up ore production to 9 Mtpa by 2027, first by expanding the open pit (open-pit operations) and then through underground mining. In 2020–2027, the project's CAPEX has been budgeted for a total of RUB 63.1 bn (USD 0.9 bn).

Ore reserves¹

42 mln t

Average metal content

NI – 0.3 %

Cu – 0.4 %

PGMs – 6.0 g/t



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 (with a processing capacity of 9.3 Mtpa), the northern part of the Norilsk-1 deposit, developed by the Zapolyarny open-pit mine and the Zapolyarnaya underground mine, as well as the tailing dump No. 1 and Lebyazhye tailing dump. Currently, the Norilsk Concentrator processes all disseminated ores from the Zapolyarny mine and cuprous and disseminated ores from the Oktyabrskoye and Talnakhskoye deposits. In 2019, the plant processed 7.5 mln t of ore, with nickel recovery in bulk concentrate reaching 71.3%. In 2019, the Zapolyarny mine produced 1.6 mln t of disseminated ore. In 2019, the South Cluster project's CAPEX was RUB 5.0 bn (USD 76 mln).



ENERGY INFRASTRUCTURE UPGRADES

Location

Norilsk Industrial District, Krasnoyarsk Region

Project overview

Energy infrastructure upgrade projects aim to replace outdated and obsolete HPP turbines and CHPP units, and retrofit key elements of the gas transmission system. These initiatives should markedly extend the service life of key energy infrastructure facilities, enhance the reliability of energy and gas supply, increase the amount of renewable energy generated, and enable the creation of an energy saving ecosystem. In 2020–2025, energy infrastructure CAPEX has been budgeted for a total of RUB 135 bn (USD 2 bn).

Project timeline

'19

- CAPEX of RUB 1.6 bn (USD 24 mln)
- Stripping completed
- Exploration conducted
- Preparation of the project design documentation started

'20

- Completion of feasibility study and detailed engineering
- Completion of design documentation
- Application for the approval from the government's technical regulator (Glavgosexpertiza)
- Launch of construction and installation works
- Construction and installation works, equipment delivery
- Launch of ore production

'21–'22

Project timeline

'19

- CAPEX of RUB 15.9 bn (USD 246 mln)
- Hydropower units at Ust-Khantayskaya HPP (turbine and electrical shops) replaced
- Power unit equipment at CHPP-2 replaced

'20–'25

- Replacement of two power units at CHPP-2 and CHPP-3
- Modernisation of power grid facilities and gas transmission equipment upgrades
- Turbine replacement and the introduction of an automated dispatch system at HPPs

¹ According to JORC standards.

Processing projects

BYSTRINSKY GOK (CHITA PROJECT)

Location

16 km east of Gazimursky Zavod, Gazimuro-Zavodsky District, Zabaykalsky Region

Project overview

The Bystrinsky GOK construction project has been made up of an open-pit mine at the Bystrinskoye deposit; a concentrator with all associated infrastructure, including a power line and the 227 km Borzya–Gazimursky Zavod railway line; as well as a rotation camp.

Construction of the open-pit mine and the concentrator started in 2013. In 2017, a 220 kV power line was commissioned and a camp for 1,047 people was built. Hot commissioning of the concentrator started in October 2017. The concentrator came online in December 2019. The project is expected to ramp up to its design capacity by 2021.

Ore reserves¹

316 mln t

Average metal content

Cu – 0.7 %

Fe₃O₄ – 23 %

Au – 0.9 g/t

In 2020–2022, the project's CAPEX has been budgeted for a total of

RUB **16.7** bln
(USD 252 mln).

The project's design capacity

10 Mtpa

Approximately new jobs

~2,000 positions



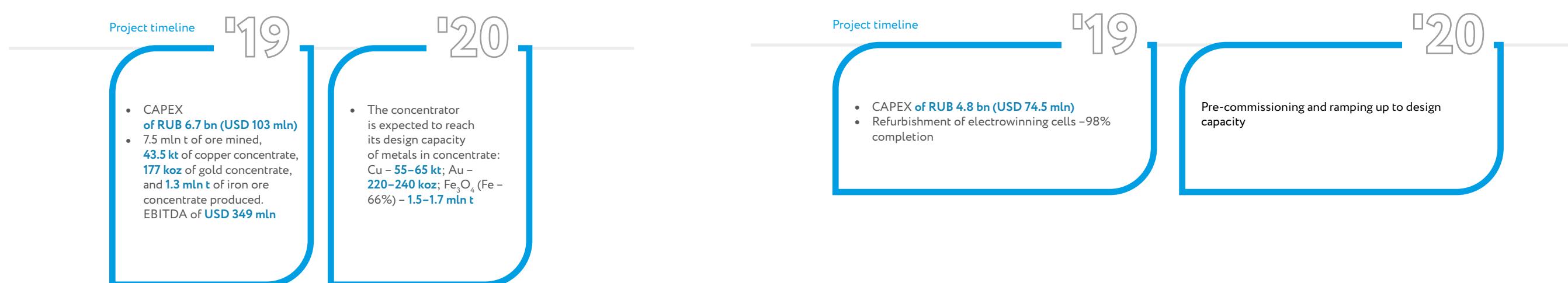
NICKEL TANKHOUSE UPGRADE

Location

Monchegorsk, Murmansk Region

Project overview

The tankhouse #2 upgrade project aims to increase efficiency of nickel cathode production, by utilizing the technology of nickel electrowinning from chlorine dissolved tube furnace nickel powder, and also increase nickel cathodes' capacity from 120 kt pa to 145 kt pa. The new technology will help to improve metal's purity and reduce air emissions. In 2020–2021, the project's CAPEX will total RUB 2.9 bn (USD 43.4 mln).



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

Processing projects

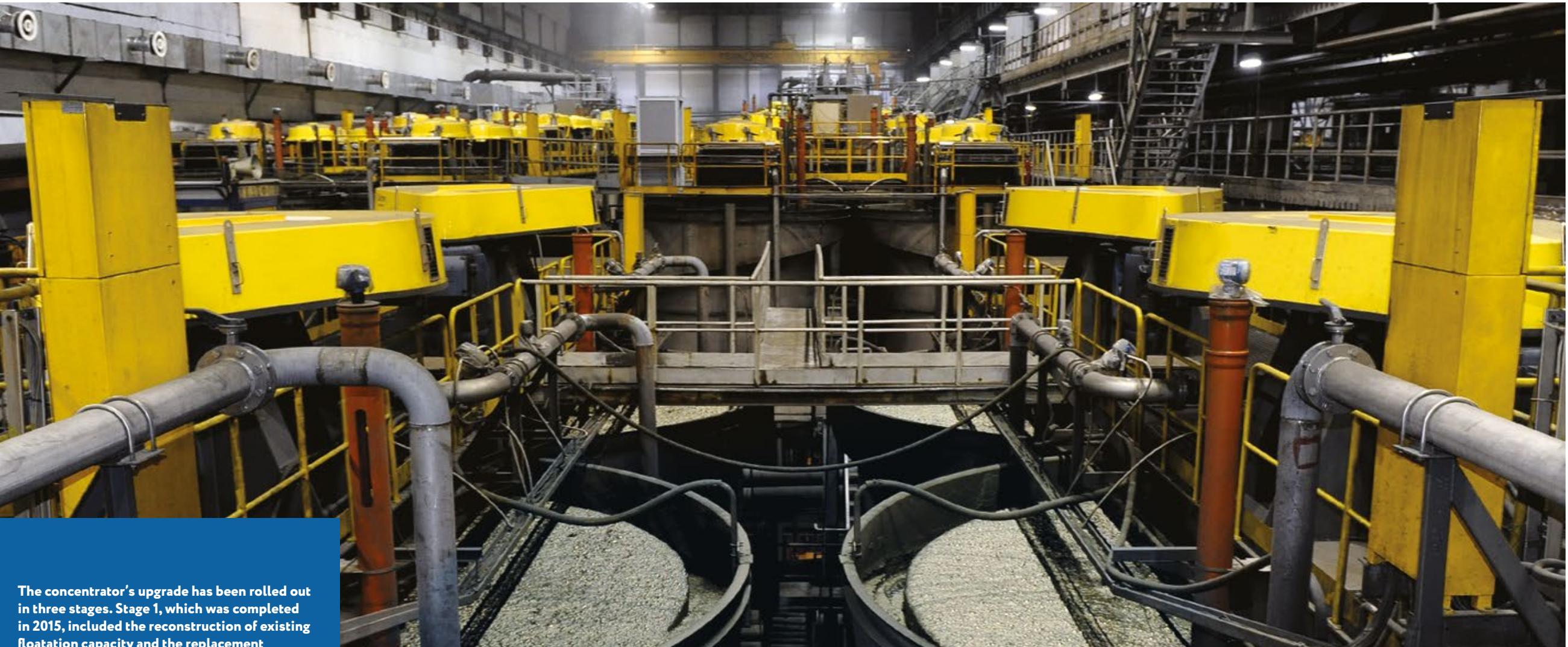
TALNAKH CONCENTRATOR

Location

Norilsk Industrial District, Krasnoyarsk Region

Project overview

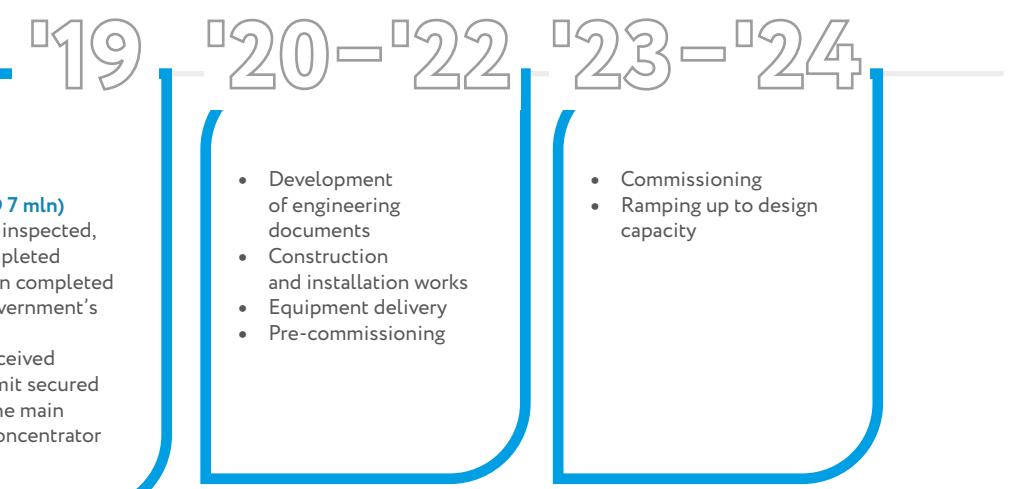
The Taldakh Concentrator (Polar Division) processes rich, cuprous, and disseminated ores from the Oktyabrskoye and Taldakhskoye deposits and produces nickel-pyrrhotite and copper concentrates. In 2019, the plant processed 10.7 mln t of ore, with nickel recovery in bulk concentrate reaching 85.9% (+2.7% y-o-y).



The new concentration technology should increase recovery by 4%-7% for all key metals.

The concentrator's upgrade has been rolled out in three stages. Stage 1, which was completed in 2015, included the reconstruction of existing floatation capacity and the replacement of outdated flotation cells in order to maintain the concentration capacity at 7.5 Mtpa. Stage 2 involved the expansion of the main building, the reconstruction of the reagent preparation shop, and the construction of additional ball and vertical mills, as well as the 1st Stage of the tailing dump, all of which helped to increase capacity to 10 Mtpa. This stage was completed in 2018. The 3rd Stage of the Taldakh Concentrator upgrade includes a capacity ramp-up to 18 Mtpa and construction of the tailing dump's 2nd Stage. The project's completion is slated for 2023, reaching design capacity by 2024. The new concentration technology should increase recovery by 4%-7% for all key metals. CAPEX for the 3rd Stage of Taldakh Concentrator upgrade in 2020–2024 is estimated at RUB 40 bn (about USD 0.6 bn).

3rd Stage project timeline



POLAR DIVISION AND MEDVEZHY RUCHHEY (SOUTH CLUSTER)

Polar Division overview

Polar Division is the Group's flagship wholly-owned subsidiary operating a full upstream-integrated metals production cycle starting from ore mining and finishing with the metals refining and shipment of end products to customers. Polar Division operates the Company's largest ore field, Talnakh deposit, with a total mined volume of 17 mtpa.

Mining: The Talnakh and Oktyabrskoye deposits (copper-nickel sulphide ores)

Concentration: Talnakh Concentrator

Smelting: Nadezhda Metallurgical Plant, Copper Plant, PGM Concentrate Shop (part of Copper Plant)

Refining: Copper Plant

Location

Polar Division and Medvezhy Ruchey are located above the Arctic Circle on the Taimyr Peninsula in the north of the Krasnoyarsk region in Russia. They are linked to «mainland» Russia only by river transportation via the Yenisey River, sea transportation via the Northern Sea Route and by air, with no ground transportation connection with other parts of Russia available.



Medvezhy Ruchey (South Cluster) overview

Medvezhy Ruchey (100%-owned) operates Norilsk-1 deposit with mined ore volume of 1.6 mt in 2019.

Mining: The Norilsk-1 deposit (copper-nickel sulphide ores)

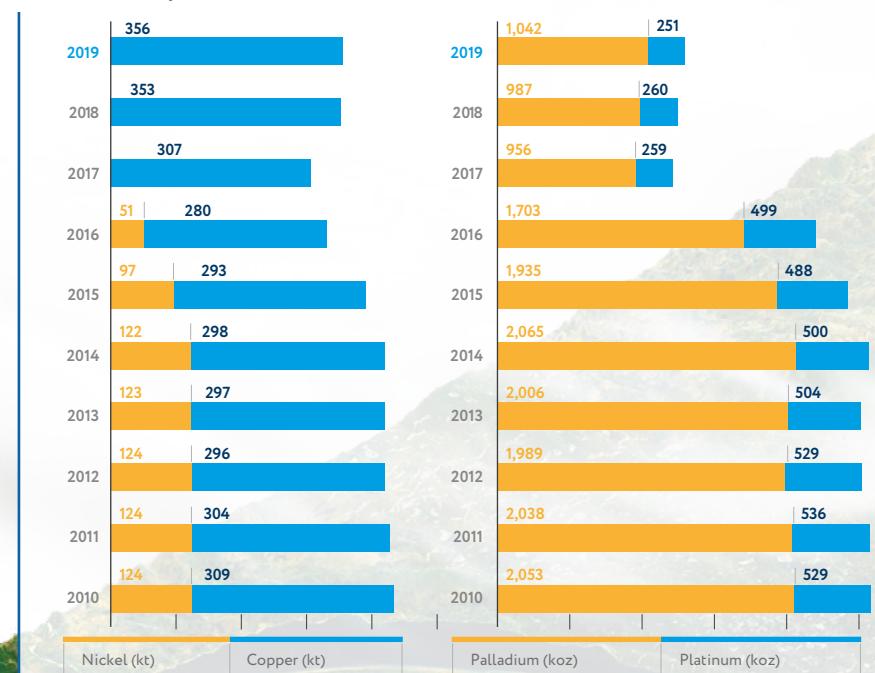
Concentration: Norilsk Concentrator

In 2019, Polar Division and Medvezhy Ruchey combined accounted for 71% and 36% of the Group's total copper and PGMs end products, respectively.

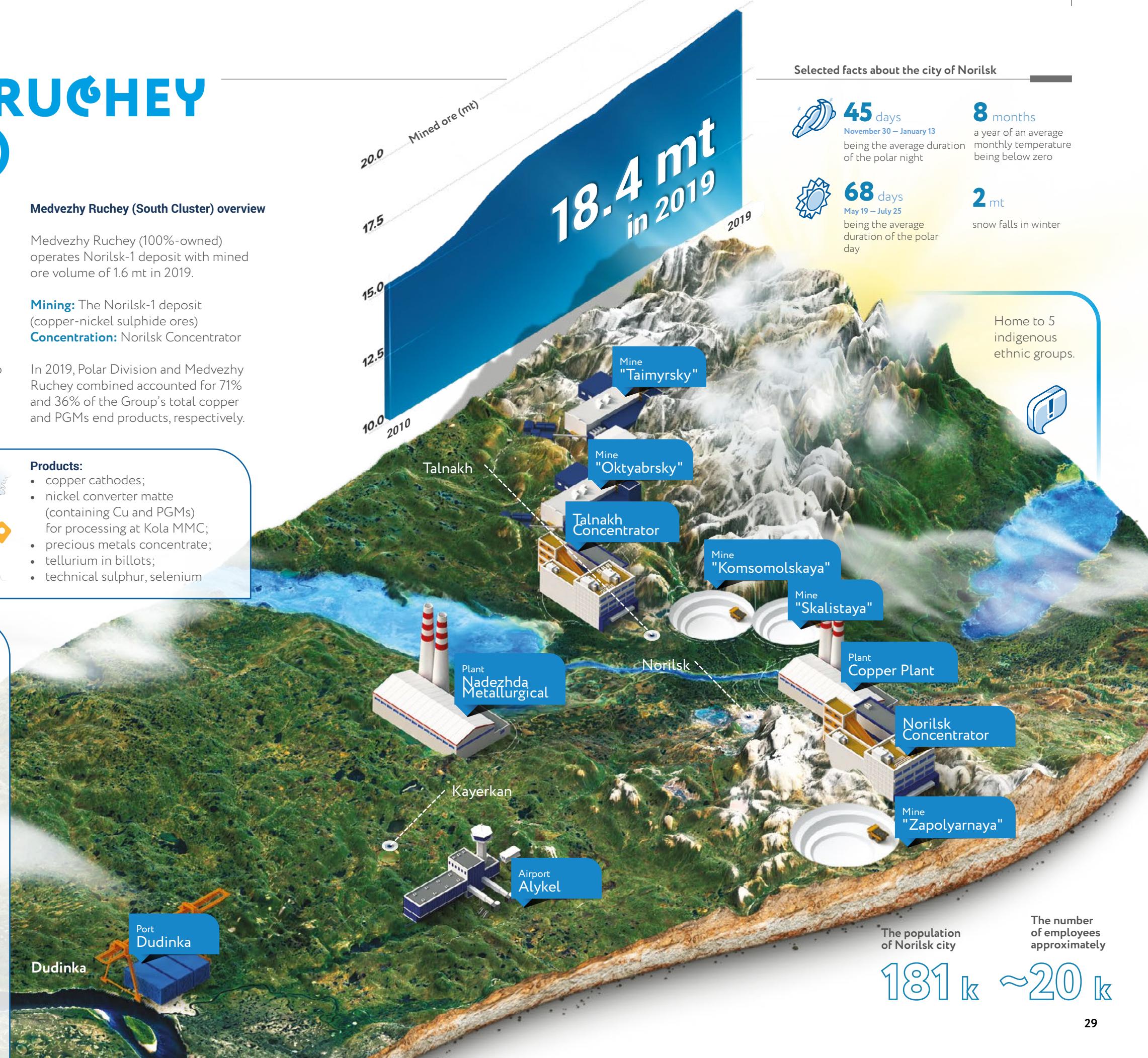
Products:

- copper cathodes;
- nickel converter matte (containing Cu and PGMs) for processing at Kola MMC;
- precious metals concentrate;
- tellurium in billots;
- technical sulphur, selenium

Saleable metal production¹



¹/ Due to reconfiguration of downstream facilities, Nickel Plant (of Polar Division) located in the city of Norilsk was shutdown in 2016, so that production of refined nickel at Polar Division was fully ceased and production of PGMs reduced. Since then all nickel refining was moved to Kola MMC and Norilsk Nickel Harjavalta.



Selected facts about the city of Norilsk

45 days
November 30 – January 13 being the average duration of the polar night

8 months
a year of an average monthly temperature being below zero

68 days
May 19 – July 25 being the average duration of the polar day

2 mt
snow falls in winter

Home to 5 indigenous ethnic groups.



The population of Norilsk city

181 k ~20 k

KOLA MMC

Overview

Kola MMC is Nornickel's wholly-owned subsidiary that is fully integrated upstream into Polar Division operations. In 2019, Kola MMC accounted for 73%, 17% and 62% of the Group's total nickel, copper and PGMs end products, respectively.

Mining: Zhdanovskoye, Zapolyarnoye, Kotselvaara and Semiletka deposits

Concentration: Zapolyarny Concentrator

Smelting: Smelting Shop (located in Nickel settlement), Briquetting Shop (located in Zapolyarny town), Metallurgical Shop (located in Monchegorsk town)

Refining: Nickel refining Tank-houses №1 and №2 (located in Monchegorsk town)

Location

Kola MMC is located on the Kola Peninsula in Russia's Murmansk Region.

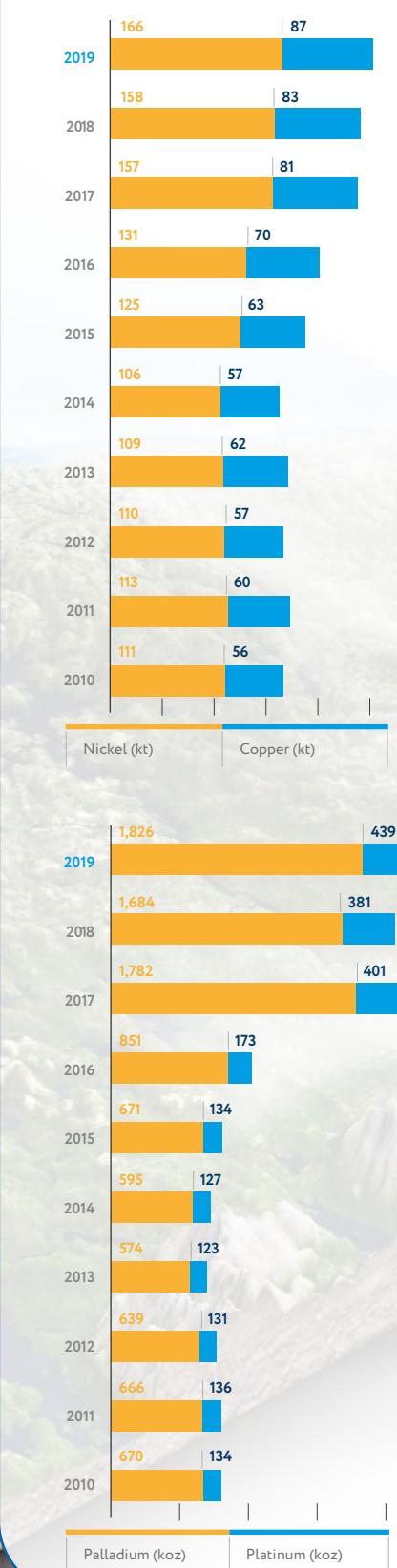


Products:

- nickel cathodes and carbonyl;
- saleable nickel concentrate;
- copper cathodes;
- saleable copper and nickel saleable intermediate products;
- electrolytic cobalt;
- cobalt concentrate;
- precious metal concentrates;
- sulphur acid;
- crushed converter matte for processing at Norilsk Nickel Harjavalta.



Saleable metal production



The number of employees **8.2 k**

GRK BYSTRINSKOYE

Overview

GRK Bystrinskoye (50.01%-owned) is Nornickel's new mining and processing project, which produces copper and gold (as well as iron) concentrates. In 2019, Bystrinsky GOK accounted for 9% of the Group's total copper end products.

Mining: Open-pit mining at the Bystrinskoye deposit

Concentration: Concentrator with a capacity of 10.0 mtpa

Average metal grades

Cu	Fe in magnetite concentrate	Au ¹
0.7%	23%	0.9 g/t

Products:

- copper concentrate;
- gold concentrate;
- iron ore concentrate

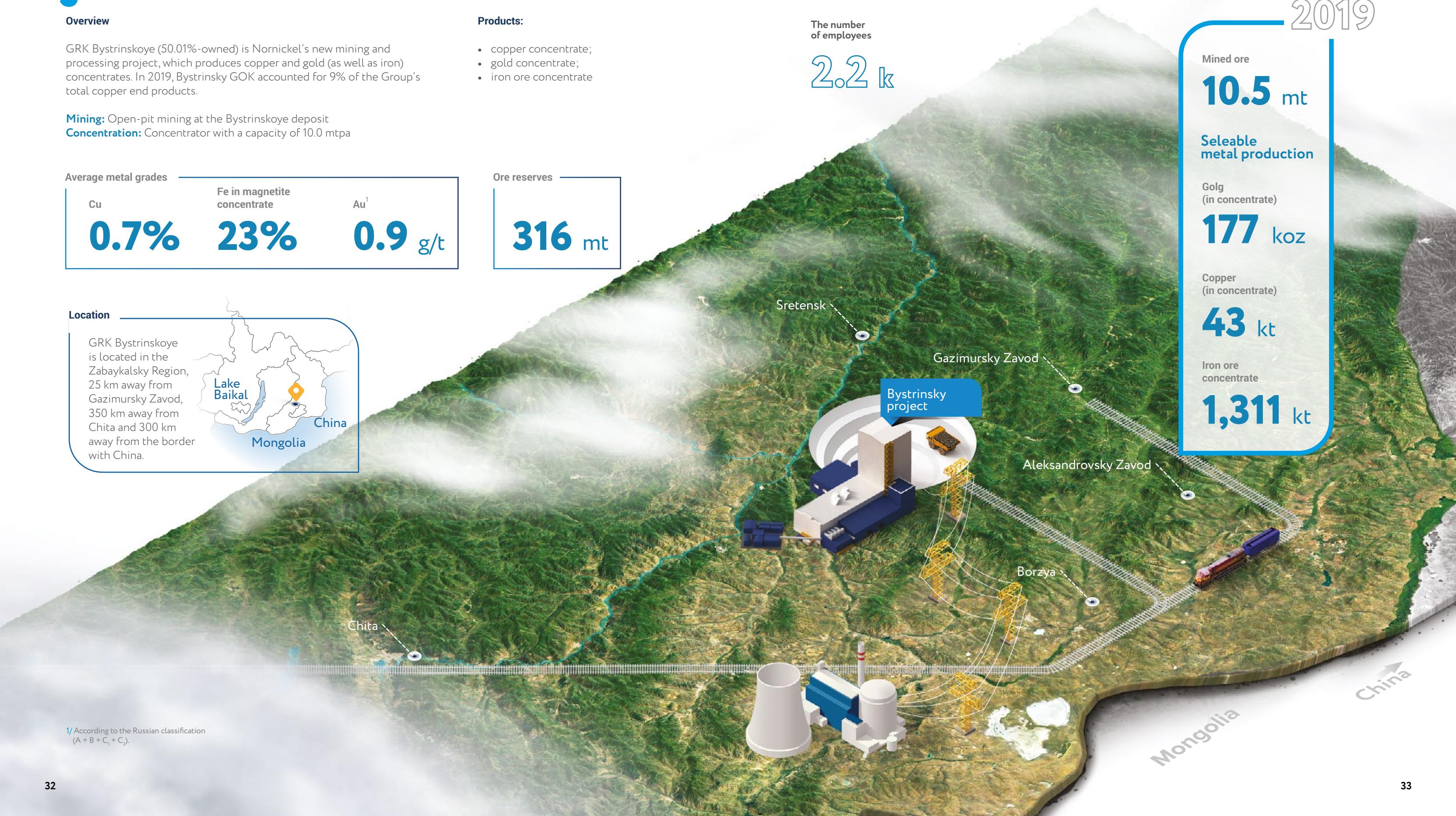
The number of employees

2.2 k

Ore reserves

316 mt

Location



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

NORILSK NICKEL HARJAVALTA

Overview

Harjavalta nickel refinery was acquired by the Group in 2007 (100%-owned). Harjavalta facility processes the Company's Russian feedstock and nickel-bearing raw materials sourced from third-party suppliers. Founded in 1959, Harjavalta is the only nickel refinery in Finland and one of the largest in Europe with a total capacity of 66 ktpa of nickel products.

The facility uses sulphur acid leaching, the best-in-class technology with the metal recovery rates of above 98%. In 2019, Norilsk Nickel Harjavalta accounted for 27%, 3 and 2% of the Group's total nickel, copper and PGMs end products, respectively.

Location

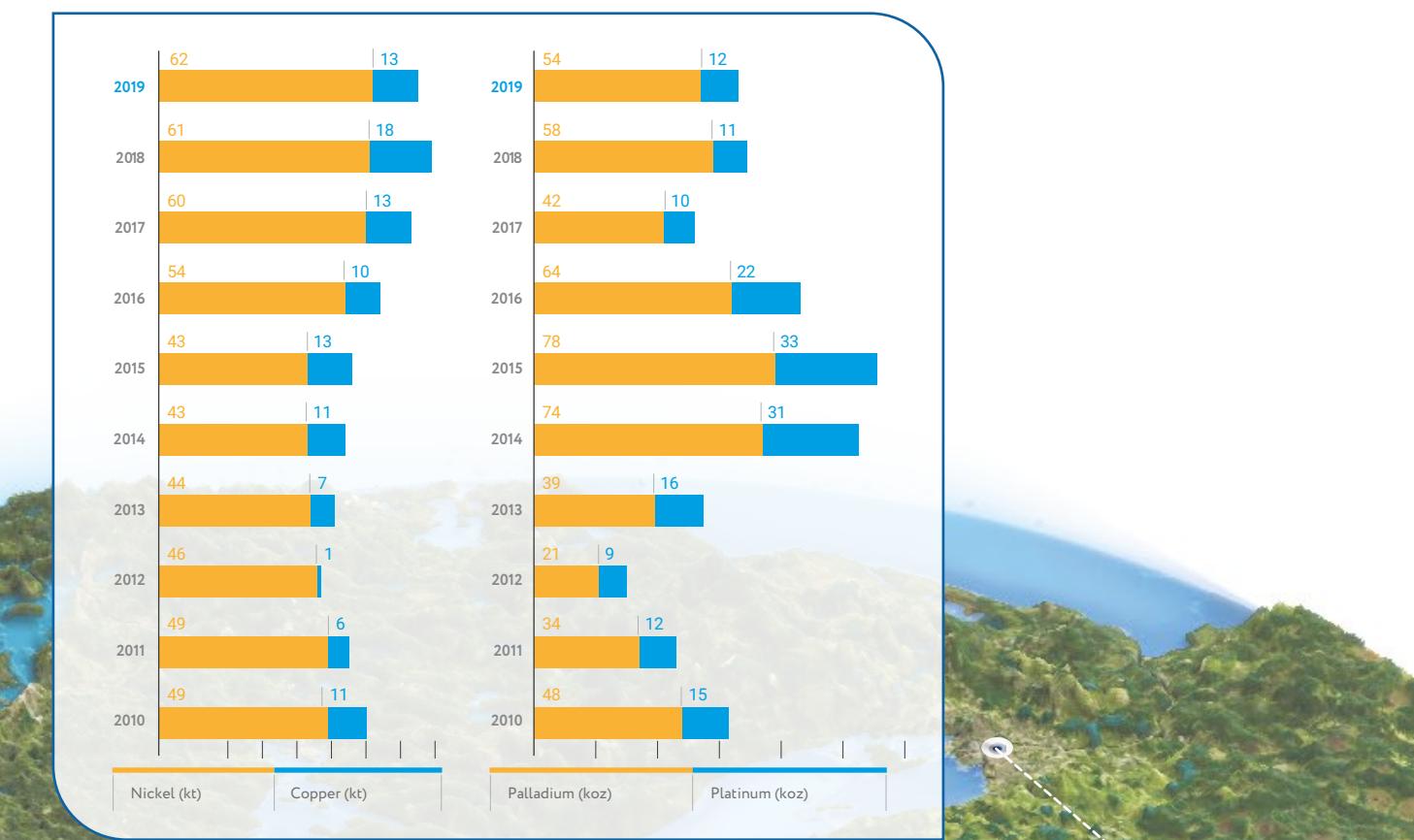
Norilsk Nickel Harjavalta is located 212 km north-west from Helsinki, Finland.



Products:

- nickel cathodes and briquettes;
- nickel salts, solutions, powders;
- cobalt sulphate and solutions;
- PGM-bearing copper cake.

Saleable metal production



CLIMATE CHANGE

Nornickel's Board of Directors considers climate change as an important matter, which is being reviewed as part of a broader environmental strategy. The climate change has been recently added to the Company's operating and strategic agendas agenda, which is being supervised by the First Vice President – Chief Operating Officer.

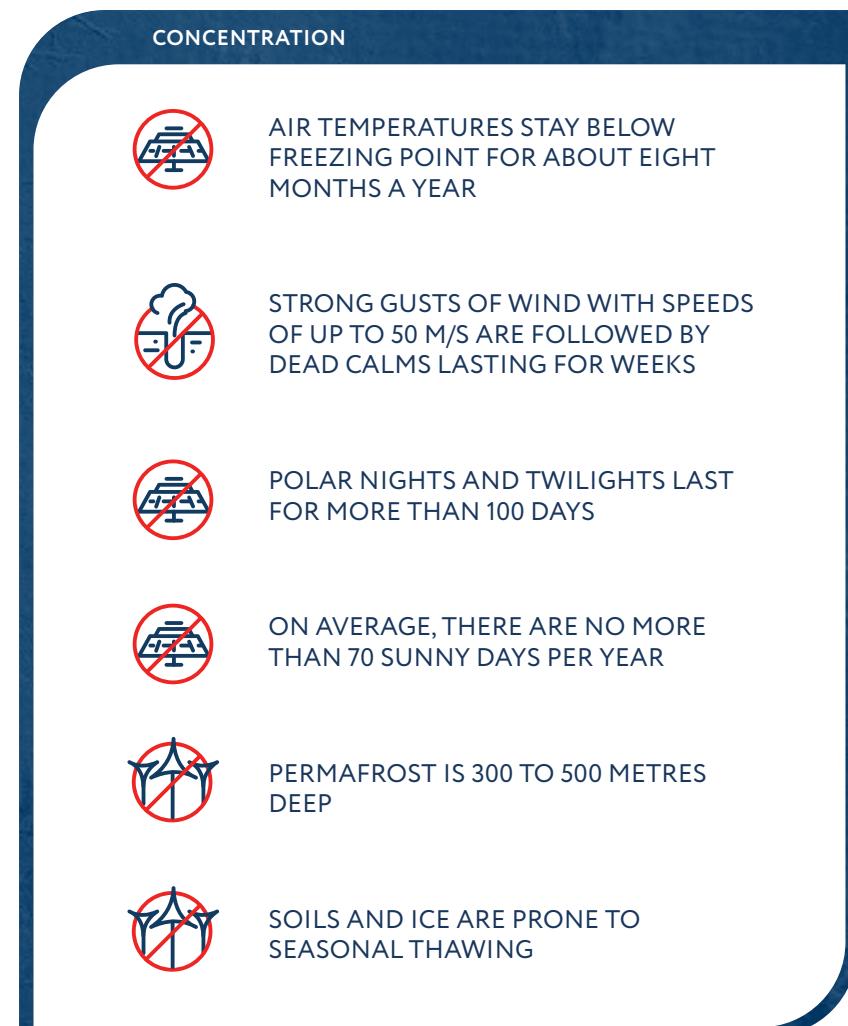
In 2019, an internal working group was set up comprised of several Vice Presidents to monitor the progress of the Company's environmental programmes and initiatives including ones related to climate change. The group is led by Gareth Penny, Chairman of the Board of Directors.

CLIMATE RISK MANAGEMENT

As part of its risk management strategy, Nornickel implements a range of measures to monitor and control climate-related risks. These activities enable Nornickel to keep climate risks at an acceptable level. Occurrence of climate risks may also unlock additional opportunities for Nornickel, driven by a strong demand for metals essential for the development of a low-carbon economy globally.

Pretty much all metals produced by the Company are widely used in transition to low-carbon economy: platinum group metals (PGMs) are used in auto catalytic converters, nickel is a key component in EV batteries, and copper is used in EV charging infrastructure.

Hydropower is the main source of renewable energy for the Company. The use of other renewables such as solar, geothermal, and wind energy is limited, as Nornickel's main production assets are located north of the Arctic Circle in harsh climatic conditions:



Since its establishment in 1935, the Company has successfully operated in these challenging climatic conditions and already incorporated them in the design of its infrastructure and energy mix, with having developed fully captive energy assets, relying on low-carbon fuels, i.e. natural gas (about 90% of the energy mix), and renewable hydropower (about 10%).

KEY CLIMATE CHANGE RISKS

- 1. 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	Impact on Nornickel's development goal and strategy	Risk assessment	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	Impact on goals: medium. Source of risk: external. Year-on-year change in risk: none	The Company manages the risk through: <ul style="list-style-type: none"> Closed water circuits to reduce water withdrawal from external sources Regular hydrological observations to forecast water levels in rivers and other water bodies Cooperation with the Federal Service for Hydrometeorology and Environmental Monitoring (Rosgidromet) in setting up permanent hydrological and meteorological monitoring stations to improve the accuracy of water level forecasts for major rivers across Nornickel's regions of operation Dredging the Norilskaya River and reducing energy consumption at production facilities in case of risk occurrence Replacing hydropower plant equipment to increase electricity output through improving the efficiency of hydropower units (implementation period: 2012–2021)

- 2. Permafrost thawing:** loss of bearing capacity of soil under pile foundations can lead to deformation and subsequent collapse of buildings and structures.

Key risk factors	Impact on Nornickel's development goal and strategy	Risk assessment	Mitigation
Climate change, increase in average annual temperature 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. Timely supply of products to consumers. Social responsibility: comfort and safety of people living in Nornickel's regions of operation	Impact on goals: medium. Source of risk: external. Year-on-year change in risk: none	The Company manages the risk through: <ul style="list-style-type: none"> Regular monitoring of soil condition under the foundations of buildings and structures built on permafrost Geodetic monitoring of buildings movement Measurements of soil temperatures under building foundations Monitoring the compliance of its facilities with operational requirements for crawl spaces Recommendations and corrective action plans to ensure safe operating conditions for buildings and structures

CLIMATE CHANGE

USE OF RENEWABLES AND ENERGY EFFICIENCY

The Company sources energy locally, primarily from low-carbon natural gas and renewable energy sources, namely two hydropower plants. Diesel fuel, fuel oil, petrol and jet fuel are used by its transportation assets. Use of high-carbon fuel by energy assets is minimal. Only small amounts of coal are used in certain production processes.

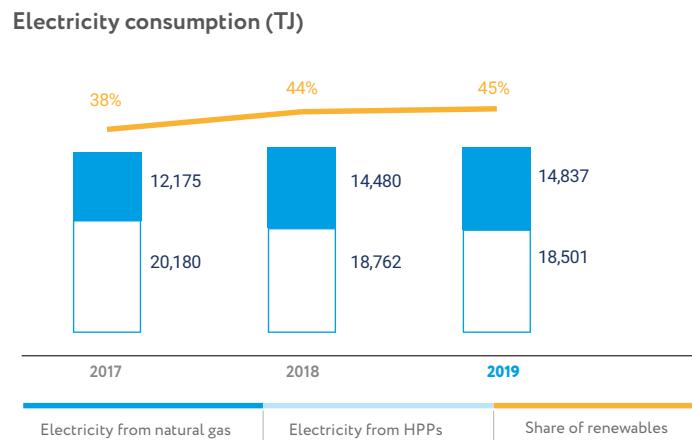
Group's electricity generation and electricity and fuel consumption (TJ)

No.	Indicator	2017	2018	2019
1	Fuel consumption by the Company ¹	156,569	148,910	144,772
1.1	• natural gas	134,709	129,335	125,329
1.2	• diesel fuel and fuel oil	15,221	13,788	13,535
1.3	• petrol and jet fuel	5,178	4,127	3,820
1.4	• coal ²	1,460	1,660	2,087
2	Electricity and heat from own renewable sources (HPPs)	12,414	14,877	15,058
3	Electricity and heat purchased from third parties	10,483	10,931	11,331
4	Sales of electricity and heat to third parties	19,503	18,926	18,766
5	Total consumption of electricity and fuel (1 + 2 + 3 - 4)	159,962	155,792	152,395

¹/ Including the fuel used to generate electricity for Norilsk.

²/ Coal is only used in production processes, with Kola MMC accounting for 45% of total consumption, GRK Bystrinskoye 27, the Polar Division 13, cement production 9, and other subsidiaries 6.

The Company's priority energy source is hydropower generated by Ust-Khantayskaya and Kureyskaya HPPs. In 2019, renewables accounted for 45% of total electricity consumed by the Group and 54% of power consumption in the Norilsk Industrial District.



Nornickel is committed to the responsible use of heat and electricity. 87.5% of electricity is generated by own energy companies supplying electricity to both the Company's facilities and third parties.

Nornickel's investment programme prioritises several major projects to fully unlock the potential of renewable power sources (hydropower) and drive energy savings.

GHG EMISSIONS

In 2019, GHG emissions (Scope1+2) amounted to approximately 9.9 Mtpa.

GHG emissions, mln t of CO₂ equivalent¹

Indicator	2017	2018	2019
Scope 1	10.2	9.9	9.8
Scope 2	0.1	0.1	0.1
Total emissions (scope 1 + 2)	10.3	10.0	9.9

¹/ The estimate was made in 2019 as per the GHG-Protocol Guidelines and includes carbon dioxide (CO₂) and methane (CH₄) emissions.

Nornickel's strategic ambition is to stabilise its annual greenhouse gas emissions at a level not exceeding 10 to 12 mln t of CO₂-equivalent, after factoring in its scheduled production growth and facilities' modernization projects, and completion of its major environmental programme.

GHG emission intensity index² (%)



²/ Carbon intensity index is calculated as carbon emissions per tonne of copper equivalent as a percentage relative to its level in 2013, assumed as 100%.

WATER

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 reduce fresh water withdrawal. Furthermore, the Company never withdraws water from protected natural areas. In 2019, 87% 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 2019. 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.

WATER WITHDRAWAL

319 Mcm

SURFACE SOURCES – 227 MCM
UNDERGROUND SOURCES – 26 MCM
WASTEWATER – 21 MCM
NATURAL WATER INFLOW – 37 MCM
OTHER – 9 MCM

WATER CONSUMPTION

1,344 Mcm = 272 Mcm

(NEW WATER)

+ 1,072 Mcm

(REUSED AND RECYCLED WATER)

WATER REUSED IN OTHER PRODUCTION PROCESSES – 31 MCM (2%)

RECYCLED WATER – 1,141 MCM (85%)

WASTEWATER DISCHARGE

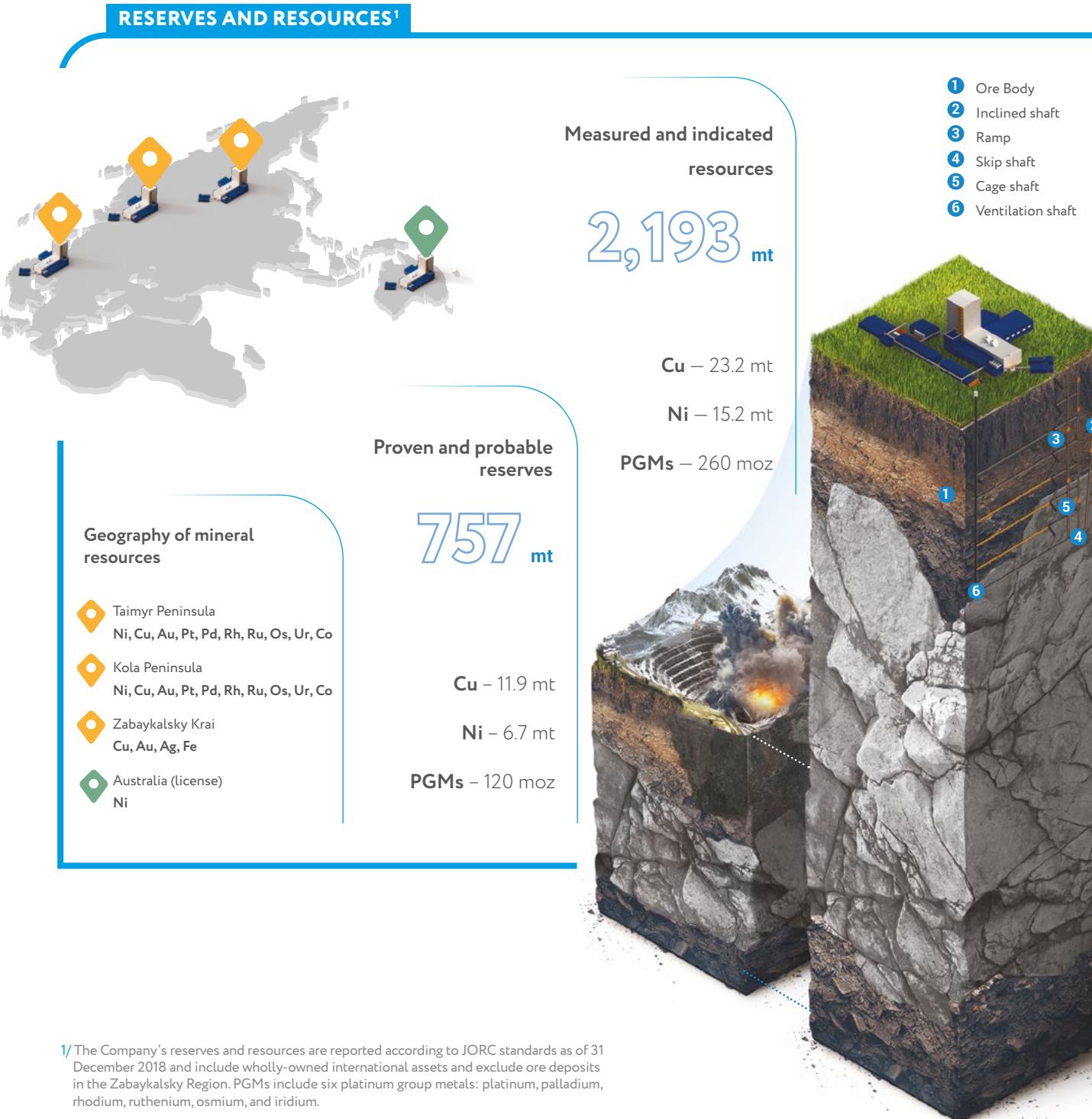
142 Mcm

CLEAN – 76 MCM
TREATED – 5 MCM
INSUFFICIENTLY TREATED – 26 MCM
CONTAMINATED – 36 MCM

MINERAL BASE

Nornickel operates the world's best polymetallic mineral resources comprised of Class-1 mining assets located in Russia's Taimyr Peninsula. Greenfield and brownfield mine development supports the Company's long-term sustainable growth strategy.

>80 years
of resources at the current production rate



¹/ The Company's reserves and resources are reported according to JORC standards as of 31 December 2018 and include wholly-owned international assets and exclude ore deposits in the Zabaykalsky Region. PGMs include six platinum group metals: platinum, palladium, rhodium, ruthenium, osmium, and iridium.

Minerals reserves and resources as at December 31, 2019²

Indicator	Ore (kt)	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)
TAIMYR PENINSULA													
Proven and probable reserves	672,815	0.92	1.72	4.19	1.11	0.24	5.55	6,176	11,598	90,585	23,967	5,200	119,987
Measured and indicated resources	1,698,853	0.69	1.30	3.53	1.00	0.21	4.74	11,778	22,167	193,056	54,456	11,428	259,157
Inferred resources	438,473	0.85	1.73	4.21	1.09	0.25	5.53	3,707	7,585	59,401	15,375	3,526	77,899
KOLA PENINSULA (disseminated ore)													
Proven and probable reserves	84,682	0.62	0.30	0.03	0.02	0.01	0.05	524	256	78	51	24	130
Measured and indicated resources	320,943	0.69	0.33	0.05	0.03	0.02	0.08	2,247	1,089	488	314	177	862
Inferred resources	143,625	0.63	0.31	0.04	0.03	0.01	0.07	909	448	184	121	60	320
AUSTRALIA (Honeymoon Well)													
Measured and indicated resources (nickel sulfide ores)	173,300	0.68	-	-	-	-	-	1,180	-	-	-	-	-
Inferred resources (nickel sulfide ores)	11,900	0.68	-	-	-	-	-	81	-	-	-	-	-
Inferred resources (nickel laterite ores)	339,000	0.81	-	-	-	-	-	2,746	-	-	-	-	-
TOTAL RUSSIAN ASSETS													
Proven and probable reserves	757,497	0.88	1.56	3.72	0.99	0.21	4.93	6,700	11,854	90,663	24,018	5,224	120,117
Measured and indicated resources	2,019,796	0.69	1.15	2.98	0.84	0.18	4.00	13,982	23,237	193,536	54,763	11,602	260,003
Inferred resources	582,098	0.79	1.38	3.18	0.83	0.19	4.18	4,612	8,031	59,585	15,496	3,586	78,219
TOTAL RUSSIAN AND INTERNATIONAL ASSETS													
Proven and probable reserves	784,543	0.88	1.56	3.72	0.99	0.21	4.93	6,867	12,129	92,957	24,660	5,360	123,137
Measured and indicated resources	2,209,142	0.69	1.06	2.74	0.78	0.16	3.69	15,319	23,526	195,929	55,436	11,742	263,158
Inferred resources	936,009	0.80	0.86	1.99	0.52	0.12	2.61	7,486	8,101	59,938	15,556	3,605	78,641

¹/ 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).

Proven and probable ore reserves are included in mineral resources.

Data regarding the reserves and resources is based on the balance-sheet reserves of A, B, C1 and C2, categories (according to the terminology of the State Committee for Mineral Reserves) as of the end of the given calendar year.

The six platinum group metals (PGMs) are platinum, palladium, rhodium, ruthenium, osmium, and iridium. The four elements are platinum, palladium, rhodium and gold.

Ore losses applied ranged from 1.6 % to 26% and dilution from 6% to 31.9%.

Excluding deposits in Zabaykalsky Region.

Figures given as Total may differ from the sum of individual numbers due to rounding. Certain values may in some instances vary slightly from previously published values.

OPERATING PERFORMANCE

ORE OUTPUT (mln t)

Type of ore / Asset	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Copper-nickel sulphide ores	24.5	24.7	24.6	24.8	25.2	25.3	24.9	25.0	25.2	26.3
Polar Division	16.1	16.6	16.7	16.7	17.0	17.3	17.2	15.7	15.7	16.8
Medvezhy Ruchey (South Cluster)								1.6	1.7	1.6
Kola MMC	8.3	8.1	7.9	8.0	8.1	8.0	7.6	7.6	7.9	7.9
Gold-iron-copper ores	n. a.	7.9	10.5							
GRK Bystrinkoye ¹	n. a.	7.9	10.5							

¹/ Norilsk Nickel Group owns 50.01% of GRK Bystrinkoye (Chita Copper Project). Production results are shown metal in concentrate for sale on 100% basis and fully consolidated in total operational results. The concentrator at the Bystrinsky project was launched in 2018 as part of the hot commissioning stage and was fully commissioned in 2019.

Average mined grades

Asset	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nickel (%)										
Polar Division & Medvezhy Ruchey	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.3	1.3	1.3
Kola MMC	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.5	0.6	0.5
Copper (%)										
Polar Division & Medvezhy Ruchey	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2
Kola MMC	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
GRK Bystrinkoye	n. a.	0.4	0.6							
PGMs (g/t¹)										
Polar Division & Medvezhy Ruchey	7.5	7.1	7.4	7.1	6.8	6.9	6.8	6.8	6.8	6.9
Kola MMC	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

¹/ Including five platinum group metals: palladium, platinum, rhodium, ruthenium, and iridium.

Metals recovery in concentration (%)

Asset	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nickel										
Polar Division & Medvezhy Ruchey	82.4	82.1	82.5	82.0	82.0	81.3	77.1	79.9	81.5	83.1 ¹
Kola MMC	73.1	71.5	71.8	72.5	72.4	72.7	69.0	69.8	69.5	67.9
Copper										
Polar Division & Medvezhy Ruchey	95.8	95.7	96.2	96.0	95.8	95.5	94.2	94.7	94.6	95.2 ¹
Kola MMC	73.8	72.6	74.4	74.9	75.2	76.0	73.6	75.4	74.1	73.2
GRK Bystrinkoye	n. a.	82.9	87.7							
PGMs										
Polar Division & Medvezhy Ruchey	79.7	82.0	80.6	81.6	81.4	79.3	77.7	81.5	82.7	85.2 ¹

Metals recovery in smelting (%)

Asset	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nickel										
Polar Division & Medvezhy Ruchey ¹	93.2	92.9	91.8	91.5	92.4	93.1	93.4	93.9	94.6	94.6
Kola MMC ²	n. a.	96.5	96.8	96.5	96.7	96.7				
Kola MMC ³	97.7	97.7	97.8	97.7	97.8	97.8	98.0	98.2	98.0	97.0
Norilsk Nickel Harjavalta ³	96.0	96.4	98.3	96.4	97.1	97.8	98.3	98.5	97.9	97.9
Copper										
Polar Division & Medvezhy Ruchey ¹	94.5	94.7	94.2	94.1	94.7	94.2	94.1	94.0	94.4	94.1
Kola MMC ²	n. a.	96.2	96.6	96.2	96.1	96.2				
Kola MMC ³	97.2	97.4	97.3	97.3	97.2	97.3	97.1	97.4	97.6	96.5
Norilsk Nickel Harjavalta ³	91.0	91.3	94.8	96.4	97.1	99.6	99.7	99.7	99.7	99.8
PGMs										
Polar Division & Medvezhy Ruchey ¹	93.8	94.1	93.2	93.0	93.3	93.8	95.0	95.6	95.9	95.8
Kola MMC ³	96.9	96.3	96.8	95.8	95.1	96.3	93.4	96.7	94.0	91.6
Norilsk Nickel Harjavalta ³	85.6	93.6	96.9	97.0	97.0	99.6	99.4	99.3	99.8	99.8

¹/ Feedstock to finished products;

²/ Feedstock to converter matte;

³/ In refining, converter matte to finished products.

Saleable metal production

Commodity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nickel (kt)	296	295	300	285	274	266	236	217	219	229
Including from own Russian feed	236	235	223	219	223	221	197	210	217	225
Copper ¹ (kt)	388	378	364	371	368	369	360	401	474	499
Including from own Russian feed	366	363	344	346	346	353	344	399	474	499
Palladium (koz)	2,855	2,806	2,732	2,662	2,752	2,689	2,618	2,780	2,729	2,922
Including from own Russian feed	2,723	2,704	2,624	2,529	2,582	2,575	2,526	2,728	2,729	2,919
Platinum (koz)	692	696	683	650	662	656	644	670	653	702
Including from own Russian feed	663	672	658	604	595	610	610	650	653	700

¹/ From 2018 copper volumes includes 100% of GRK Bystrinkoye production.

SHAREHOLDER INFORMATION

SECURITIES

As of 31 December 2019, the authorised capital of MMC Norilsk Nickel was comprised of 158,245,476 ordinary shares with a par value of RUB 1 each. The Company had no preferred shares outstanding.

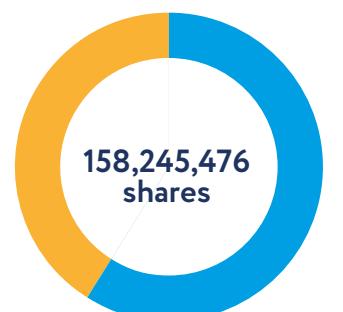
Shares

The Company's ordinary shares have been listed on Moscow Exchange (MOEX, ticker symbol: GMKN) since 2001 and are included in the MOEX Blue Chip Index.

ADRs

Nornickel has ADR program since 2001. Shares are convertible into ADRs at a ratio of 1:10. Depositary services for ADR transactions are provided by the Bank of New York Mellon, and custody services are provided by VTB Bank. ADRs are traded in the electronic trading system of OTC markets of the London Stock Exchange (LSE, ticker: MNOD), on the US OTC market (ticker: NILSY), and several other exchanges.

Breakdown of shares and ADRs as of 31 December 2019



Shares	74.3%
ADRs	25.7%

The Company's market capitalisation at the end of 2019 increased by 62.6% year-on-year to

USD 48.3 bn

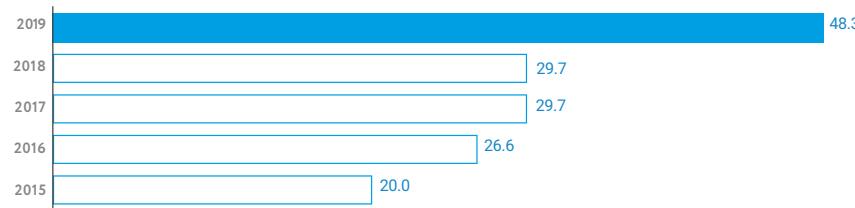
The Company has investment grade credit ratings from all the three major global rating agencies:

Fitch **BBB-**
Stable

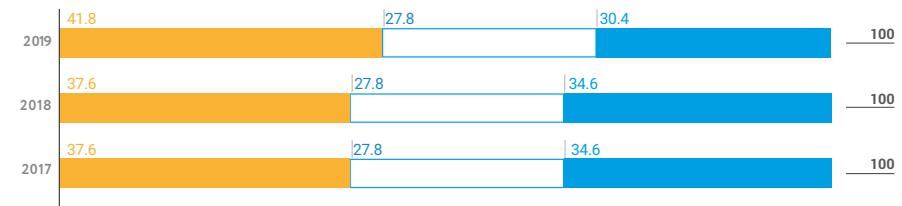
Standard & Poor's **BBB-**
Stable

Moody's **Baa2**
Stable

Market cap as at calendar year-end (USD bn)



Shareholders' structure as of year-end (mln t)



Olderfrey Holdings Ltd (indirect ownership via controlled entities)
EN+ Group PJSC (indirect ownership via controlled entities, including UC RUSAL Plc.)
In 2017–2018 shows the interest (directly and indirectly) UC RUSAL Plc.
Free float

Rouble bonds

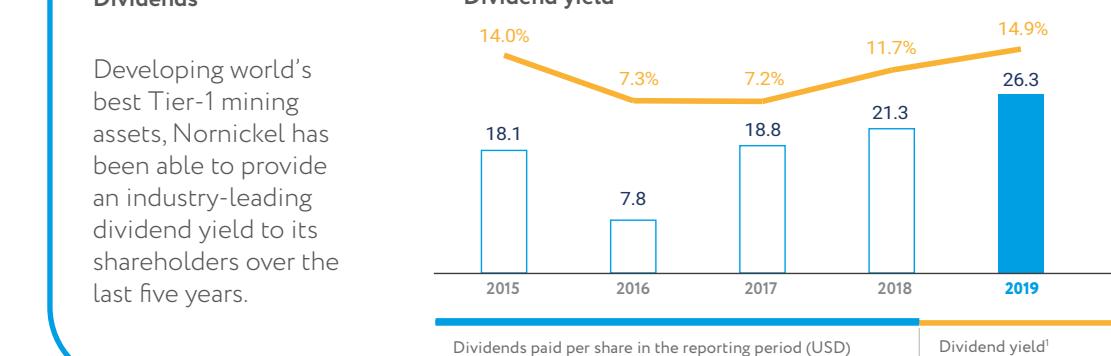
Instrument	Exchange-traded bonds, BO-05	Exchange-traded bonds, BO-001P-01
Issuer		
ISIN	RU000A0JW5C7	RU000A100VQ6
Offering date	19.02.2016	01.10.2019
Maturity date	06.02.2026	24.09.2024
Issue size (RUB bn)	15	25
Coupon rate (%)	11.60	7.20
Coupon dates	Every 182 days starting from the offering date	

Eurobonds

Instrument	2020 (LPN)	2022 (LPN)	2022 (LPN)	2023 (LPN)	2024 (LPN)
ISSUER					MMC FINANCE D.A.C.
Offering date	28.10.2013	08.06.2017	14.10.2015	11.04.2017	28.10.2019
Maturity date	28.10.2020	08.04.2022	14.10.2022	11.04.2023	28.10.2024
Issue size (USD mln)	1,000	500	1,000	1,000	750
Coupon rate (%)	5.550	3.849	6.625	4.100	3.375
Coupon dates	28 October/28 April	08 October/08 April	14 October/14 April	11 October/11 April	28 October/28 April
Issue rating (F/M/S)	BBB-/Baa2/BBB-	BBB-/-/BBB-	BBB-/Baa2/BBB-	BBB-/-/BBB-	BBB-/Baa2/BBB-

Dividends

Dividend yield



¹/ Note: Dividend yield was calculated on the basis of dividends in USD terms as of the date of the Board recommendation for AGM approval and average annual price of Nornickel ADRs (as reported by Bloomberg).

Tax treatment of income from securities (%)

Item	Income from securities transactions	Interest income on securities	Dividend income on securities
Individuals			
Residents	13 ¹	13	13
Non-residents	30 ²	30	15
Legal entities			
Russian entities	20 ¹	20	13 ³
Non-resident entities	20 ⁴	20	15

¹/ Or 0% if by the selling date the Company shares have been held for more than five years and the requirements for the share of real estate in the Company's assets as outlined in paragraph 2, Article 284₂ of the Russian Tax Code have been met.

²/ If the Company shares are sold in Russia. A 0% rate is applied if by the selling date the shares have been held for more than five years and the requirements for the share of real estate in the Company's assets as outlined in paragraph 2, Article 284₂ of the Russian Tax Code have been met.

³/ Or 0%, if as at the date of the dividend payout resolution a Russian entity has been owing an interest of 50% (and more) in the authorised capital of the entity paying dividends, for 365 days (and more).

⁴/ If the income is classified as income of a foreign entity from sources in the Russian Federation in accordance with Clause 1, Article 309 of the Russian Tax Code.

Dividend history¹

Period	Declared dividend		Dividend per share	
	RUB mln	USD mln ²	RUB	USD ²
Total for 2019	323,647	4,754	1,488	22.75
FY2019 ³	88,174	1,154	557	7.29
9M 2019	95,595	1,500	604	9.48
6M 2019	139,878	2,100	884	13.27
Total for 2018	248,214	3,739	1,569	23.63
FY2018	125,413	1,939	793	12.25
6M 2018	122,802	1,800	776	11.37
Total for 2017	131,689	2,162	832	13.66
FY2017	96,210	1,562	608	9.87
6M 2017	35,479	600	224	3.79
Total for 2016	140,894	2,339	890	14.78
FY2016	70,593	1,239	446	7.83
9M 2016	70,301	1,100	444	6.95
Total for 2015	135,642	2,148	857	13.57
FY2015	36,419	548	230	3.46
9M 2015	50,947	800	322	5.06
6M 2015	48,276	800	305	5.06

¹/ Earlier dividend history is available on the Company's website: <https://www.nornickel.com/investors/dividends/>

²/ Calculated using the Bank of Russia's exchange rate as of the date of the Board of Directors' dividend recommendation.

³/ On 7 April 2020, the Company's Board of Directors recommended that the Annual General Meeting of Shareholders approve a dividend for FY2019.