



NORNICKEL



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Overview	Performance highlights	Business model	Mineral base	Operating performance	Norilsk Division	Kola Division	Trans-Baikal Division	Products



Overview

Nornickel is the leader in Russia’s metals and mining industry and the largest palladium and Class I nickel producer globally as well as a leading producer of platinum and copper, which are essential for the development of a low-carbon economy and green transport. The Company also produces cobalt, rhodium, silver, gold, iridium, ruthenium, selenium and other products.



Assets

The Group has 105 companies located in Russia and other countries.

The Group’s major production assets are located in Russia: on the Taimyr Peninsula (Norilsk Division), on the Kola Peninsula (Kola Division), and in the Zabaykalsky Territory (Trans-Baikal Division).

184 THOUSAND

average monthly salary at the Company

USD **3.0** BN

the Company’s CAPEX was in 2023

>80 THOUSAND

employees, of which about 60 thousand live and work permanently in the Arctic Circle

The Group also has an R&D facility based in Saint Petersburg, with branches in Norilsk and Monchegorsk. Other Group entities include geological and energy enterprises (Energy Division), transport logistics entities with port terminals and a unique Arctic sea fleet, as well as a number of other auxiliary units. The Group operates a global captive sales network (Sales Division) to distribute its products across the world.

28 COUNTRIES

consume the Company’s products

10.3%

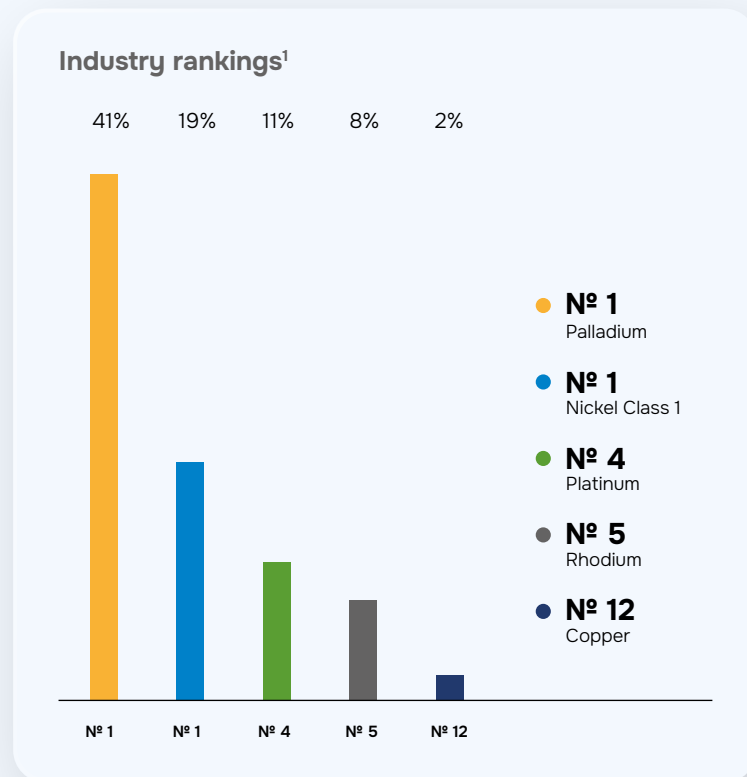
the Company’s share in Russia’s metals production



Performance highlights

Indispensable metals for green energy

Nornickel is the world's largest producer of green metals which underpin the global economy's decarbonization process and the transition to renewable energy and electrified transport.



Ni

- Batteries
- Chemical industries
- Construction
- Nickel-plating
- Alloys
- Stainless steel
- Renewable energy
- Special steels and alloys

Pd

- Catalysts
- Chemical industries
- Investments
- Electronics
- Dentistry
- Jewellery
- Hydrogen technologies

Pt

- Catalysts
- Jewellery
- Electronics
- Chemical and petrochemical industries
- Healthcare
- Hydrogen technologies
- Glass fibre and optical glass

Cu

- Automotive industry
- Pipes
- Architecture and design
- Antiseptics
- Copper rod
- Electronics and home appliances
- Renewable energy

High degree of vertical integration

From ore to finished products

100% SELF-SUFFICIENCY

The Company's reliance on own logistics, energy, fuel, and water supply translates to a significantly smaller share of these expenditures in cash costs vs peers.

Low carbon footprints

Low carbon footprints of nickel production the carbon footprint of nickel metal production according to international standards totalled

8.5 KG of CO₂ equivalent per kg of metal.

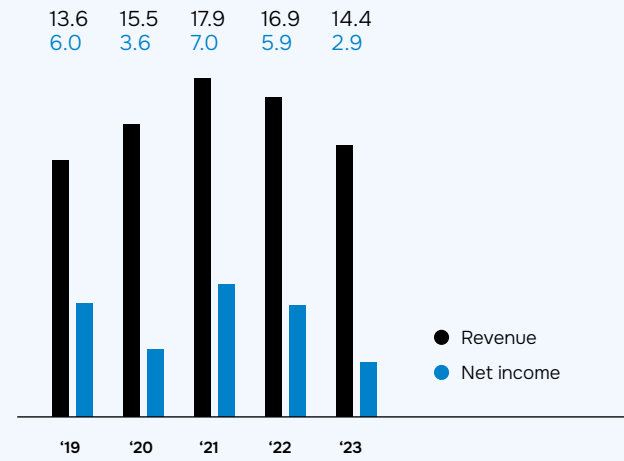
Best-in-class feedstock mix

Natural diversification and solid long-term fundamentals.

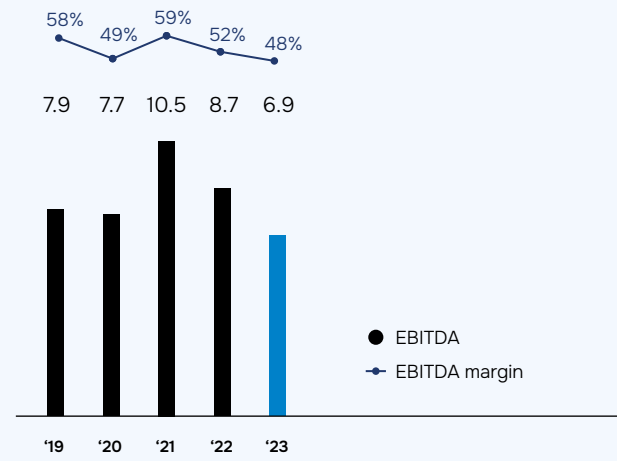
¹ Data as of early March 2024. Based on refined metal (including tolling) output for palladium, nickel, platinum, and rhodium; based on contained metal production for copper.

Financial highlights

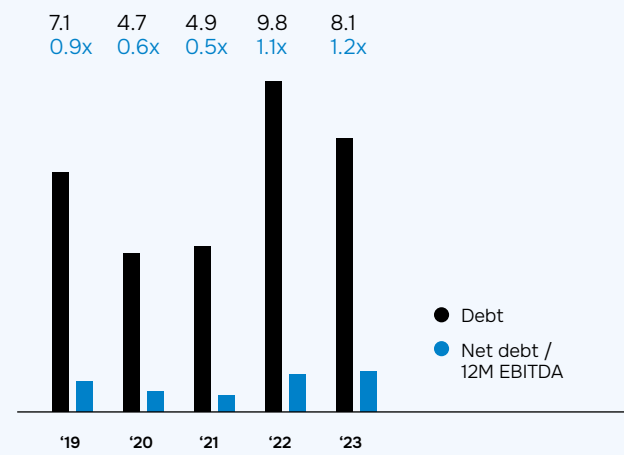
Key financial highlights, USD BN



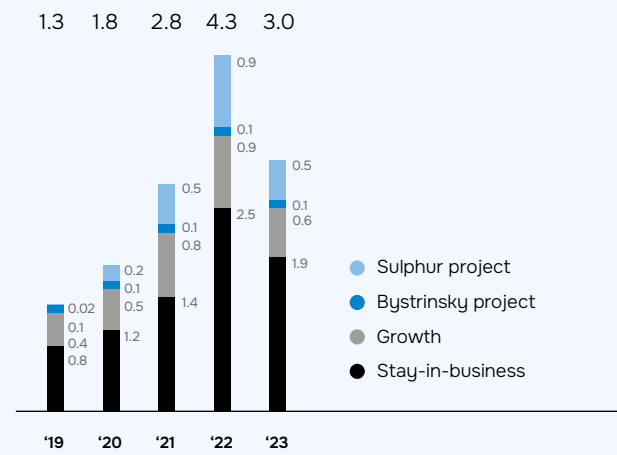
EBITDA & EBITDA margin, USD BN



Debt, USD BN

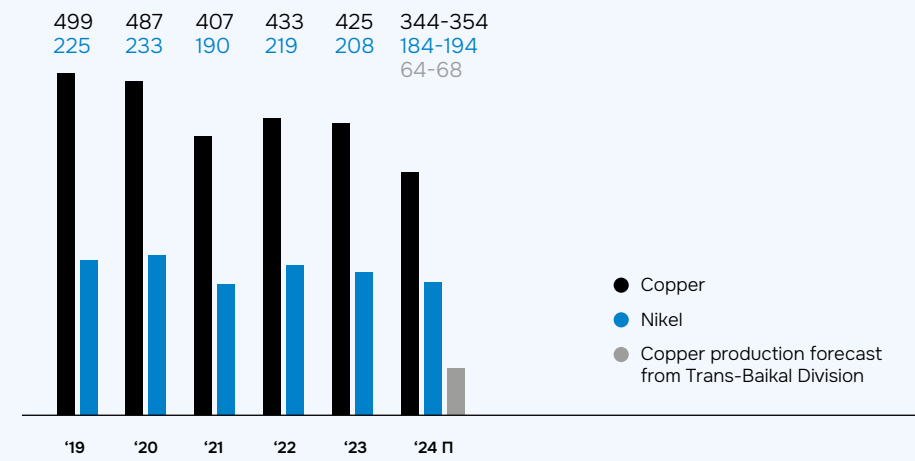


Capital investments, USD BN

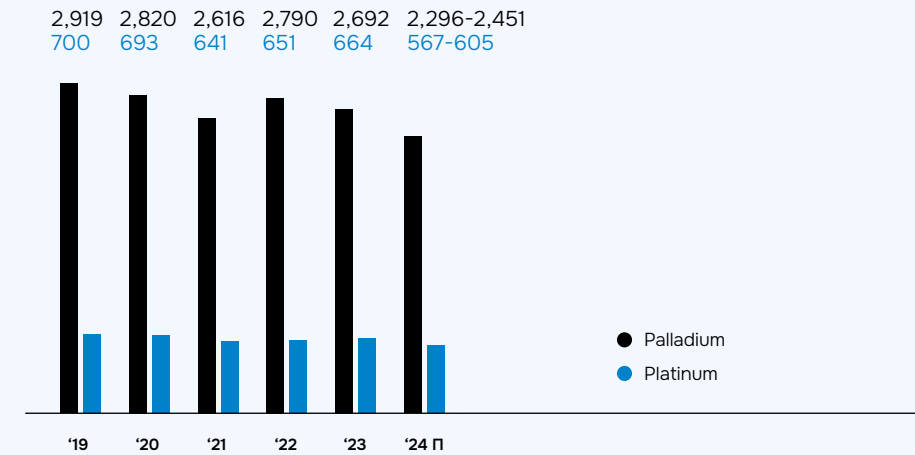


Operational highlights

Production of nickel and copper, FROM OWN FEED, KT

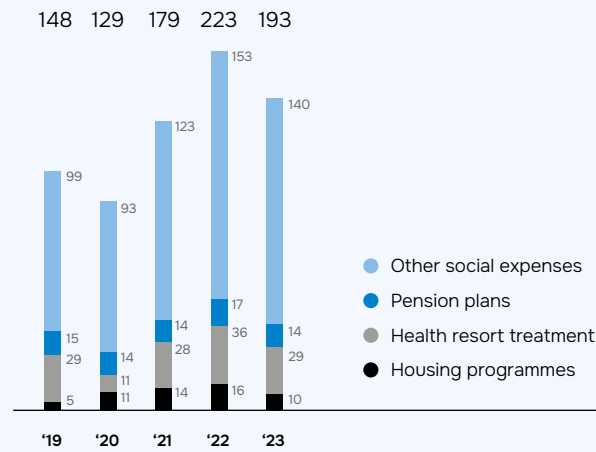


Production of palladium and platinum, FROM OWN FEED, KOZ

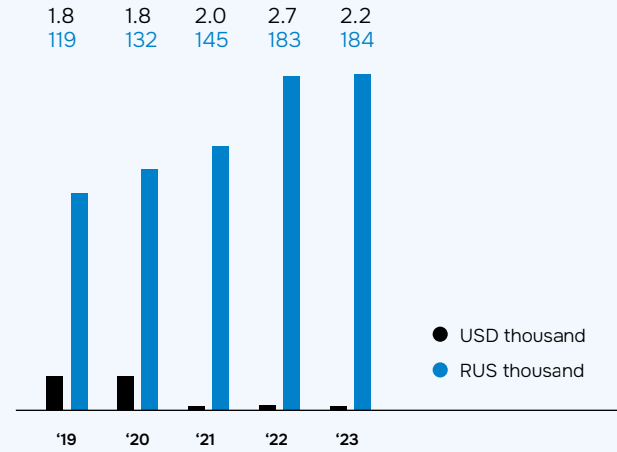


Sustainability highlights

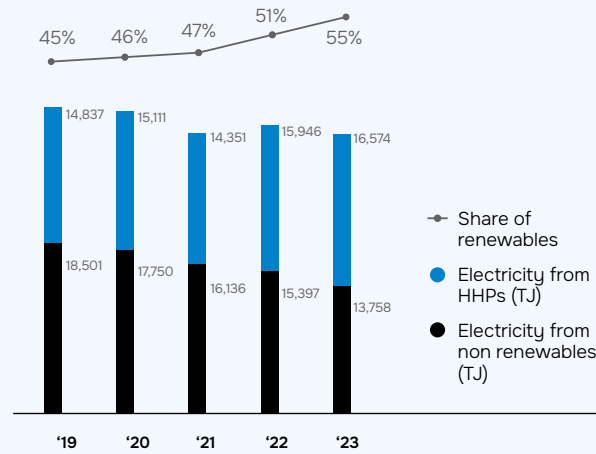
Social expenses for employees, USD MLN



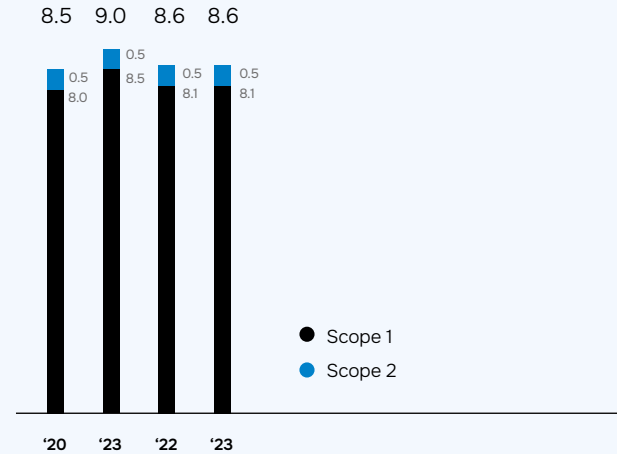
Average monthly salaries



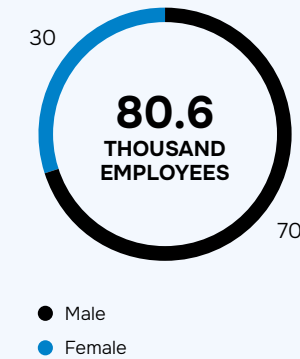
Electricity consumption



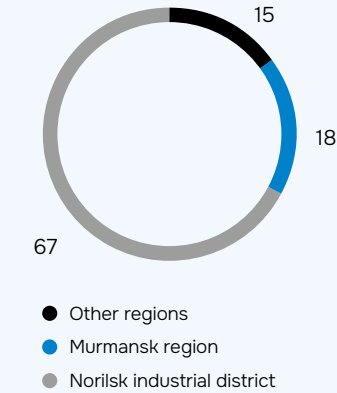
GHG emissions from production assets, MLN T



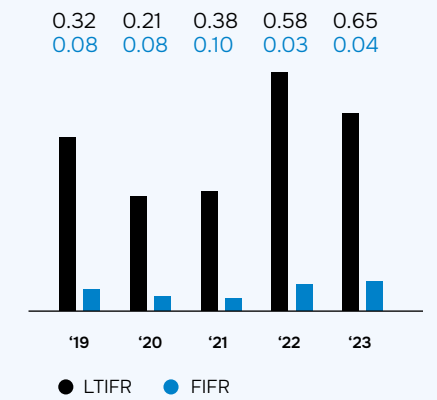
The average headcount of Nornickel employees in 2023, %



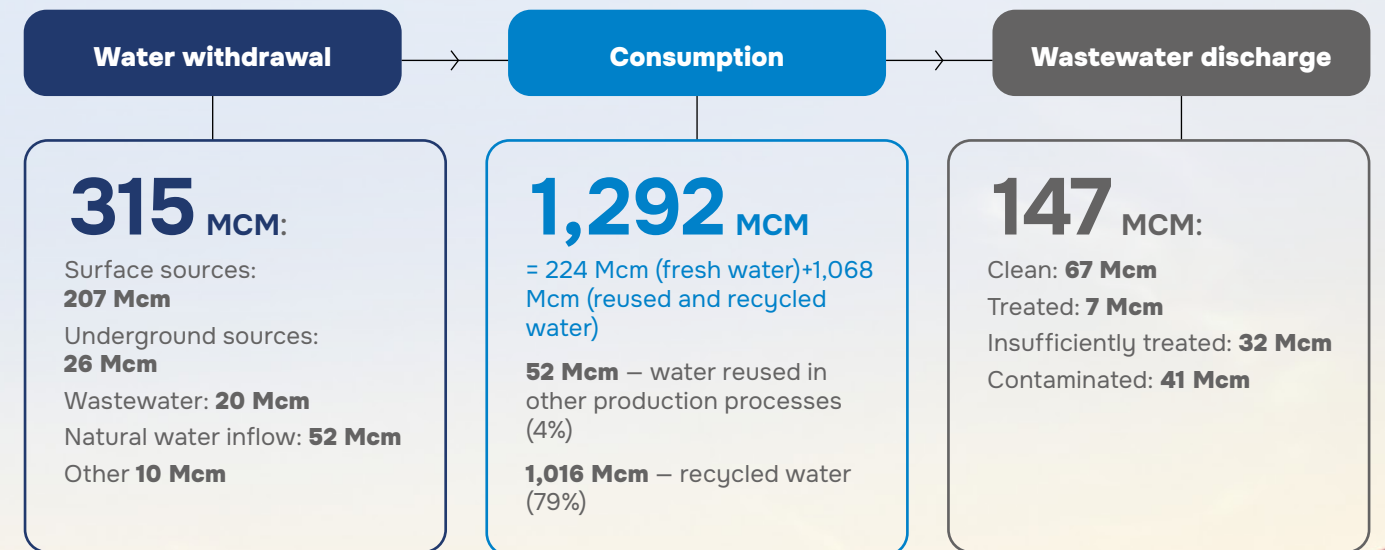
Headcount by region, %



Injury rates, PER MILLION HOURS WORKED



Use of water resources in 2023



Business model



A 20–25% growth in the output of the Company's core metals by 2030

Reduced environmental footprint across regions of operation

Deeper integration into emerging value chains and diversification of production capacities

Resources

Mineral resource base

1,267 MT
Proven and probable reserves copper-nickel sulphide ores

283 MT
Proven and probable (gold-iron-copper ores)

Workforce

>80 THOUSAND employees

Mining and metallurgical assets

- 9** mines
- 4** concentration facilities
- 4** metallurgical plants

Auxiliary assets

- Transport enterprises
- Energy enterprises
- Global sales network
- R&D: Gipro-nickel Institute

Performance highlights

Mining

Norilsk Division

19.2 MT of ore
Ni 1.14% Cu 1.98% PGMs 6.48 g/t

Kola Division

7.2 MT of ore
Ni 0.52% Cu 0.22% PGMs 0.08 g/t

Trans-Baikal Division

15.0 MT of ore
Cu 0.63%

Energy Division

2,720 MCM of natural gas

85 KT of gas condensate

Group's metals production

Ni 209 KT

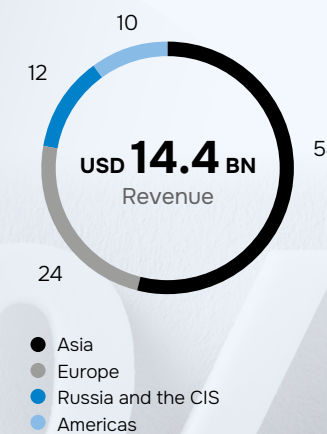
Cu 425 KT

Financial highlights

USD 6.9 BN EBITDA **USD 2.9 BN** Net income

48% EBITDA margin **1.2x** Net debt/EBITDA

Revenue by sales market, %



Environment and climate

8.6 MT GHG emissions from operations (Scope 1 + 2)

6.4 MT GHG emissions (Scope 3)

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

55% Share of renewables

83% Share of reused and recycled water

Value for stakeholders

Shareholders

USD 1,475 MLN Total dividends paid in 2023

Employees

USD 193 MLN Spending on social programmes for employees

>USD 2,000 Average monthly pay

USD 15 MLN Spending on pension plans

Suppliers

95% Share of Russian companies in supplies to Nornickel

Customers

The Company's products are supplied to

28 COUNTRIES WORLDWIDE

Government

RUB 281 BN /

USD 3.3 BN Tax and other payments to budgets

Pd 2,692 KOZ

Pt 664 KOZ

Mineral base

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

Mineral resources and ore reserves as at 1 January 2024

Copper-nickel sulphide ore (Norilsk and Kola Divisions)

7 mines

Proven and probable reserves

1,267 MLN T

Ni 9 mln t
Cu 16 mln t
6 PGMs 175 Moz

Measured and indicated resources

1,869 MLN T

Ni 14 mln t
Cu 23 mln t
6 PGMs 256 Moz

Reserves life (at the current production rate) over 70 years

Gold-iron-copper ore (Trans-Baikal Division)

2 open pits

Proven and probable reserves

283 MLN T

Cu 1.5 mln t
Au 6 Moz
Ag 25 Moz
Fe 53 mln t

Measured and indicated resources

303 MLN T

Cu 1.8 mln t
Au 6 Moz
Ag 30 Moz
Fe 65 mln t

Reserves life (at the current production rate) over 70 years



- 1** Ore Body
- 2** Inclined shaft
- 3** Ramp
- 4** Skip shaft
- 5** Cage shaft
- 6** Ventilation shaft

	Ore (mln t)	Metal grade					
		Ni (%)	Cu (%)	Pd (g/t)	Pt (g/t)	Au (g/t)	6 PGM ² (g/t)
NORILSK AND KOLA DIVISIONS¹ (COPPER-NICKEL SULPHIDE ORES)							
TOTAL PROVEN AND PROBABLE RESERVES	1,267	0.70	1.26	3.26	0.88	0.18	4.30
TOTAL MEASURED AND INDICATED RESOURCES³	1,869	0.74	1.22	3.22	0.89	0.18	4.26
TOTAL INFERRED RESOURCES	888	0.68	1.14	2.87	0.76	0.17	3.76

Norilsk Division							
Proven and probable reserves	1,203	0.71	1.31	3.43	0.93	0.19	4.52
Proven reserves	709	0.65	1.28	3.25	0.87	0.19	4.26
Talnakh ore field	676	0.67	1.33	3.25	0.85	0.19	4.25
Norilsk-1 deposit (disseminated ore)	32	0.25	0.33	3.11	1.20	0.13	4.56
Probable reserves	494	0.79	1.35	3.69	1.01	0.19	4.90
Talnakh ore field	389	0.94	1.64	3.98	1.01	0.21	5.17
Norilsk-1 deposit (disseminated ore)	105	0.22	0.26	2.64	1.04	0.11	3.89
Measured and indicated resources	1,569	0.75	1.39	3.82	1.05	0.21	5.06
Talnakh ore field	1,429	0.80	1.50	3.87	1.02	0.22	5.07
Norilsk-1 deposit (disseminated ore)	140	0.28	0.34	3.39	1.33	0.14	5.00
Inferred resources	750	0.69	1.30	3.40	0.90	0.20	4.44
Talnakh ore field	741	0.69	1.31	3.39	0.89	0.20	4.43
Norilsk-1 deposit (disseminated ore)	9	0.25	0.34	3.62	1.50	0.148	5.41
Kola Division (Disseminated Ore)							
Proven and probable reserves	64	0.63	0.32	0.03	0.02	0.01	0.05
Proven ore reserves	33	0.59	0.25	0.03	0.02	0.01	0.05
Probable reserves	32	0.68	0.39	0.03	0.02	0.01	0.05
Measured and indicated resources	300	0.69	0.34	0.05	0.03	0.02	0.09
Inferred resources	138	0.63	0.31	0.04	0.02	0.01	0.06

	Ore (mln t)	Metal grade			
		Cu (%)	Au (g/t)	Ag (g/t)	Fe (%)
ZABAYKALSKY DIVISION⁴ (GOLD-IRON-COPPER ORES)					
Total proven and probable reserves	283	0.53	0.66	2.75	18.67
Total measured and indicated resources ³	303	0.59	0.65	3.08	21.54
Total inferred resources	44	0.6	0.4	3.34	4.29

¹ In line with the JORC Code. In 2021, SRK Consulting (Russia) completed an estimate of mineral resources and ore reserves using its own methodology.

² The six platinum group metals (PGMs) are platinum, palladium, rhodium, ruthenium, osmium, and iridium.

³ Proven and probable ore reserves are included in measured and indicated resources.

⁴ In 2021, CSA Global completed an estimate of mineral resources of the Bystrinskoye deposit in line with the JORC Code based on an updated resource model, which reflects both complexity and diversity of the deposit's ore types.

Production flow



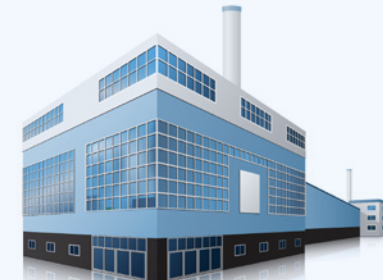
Mining



Concentration



Smelting



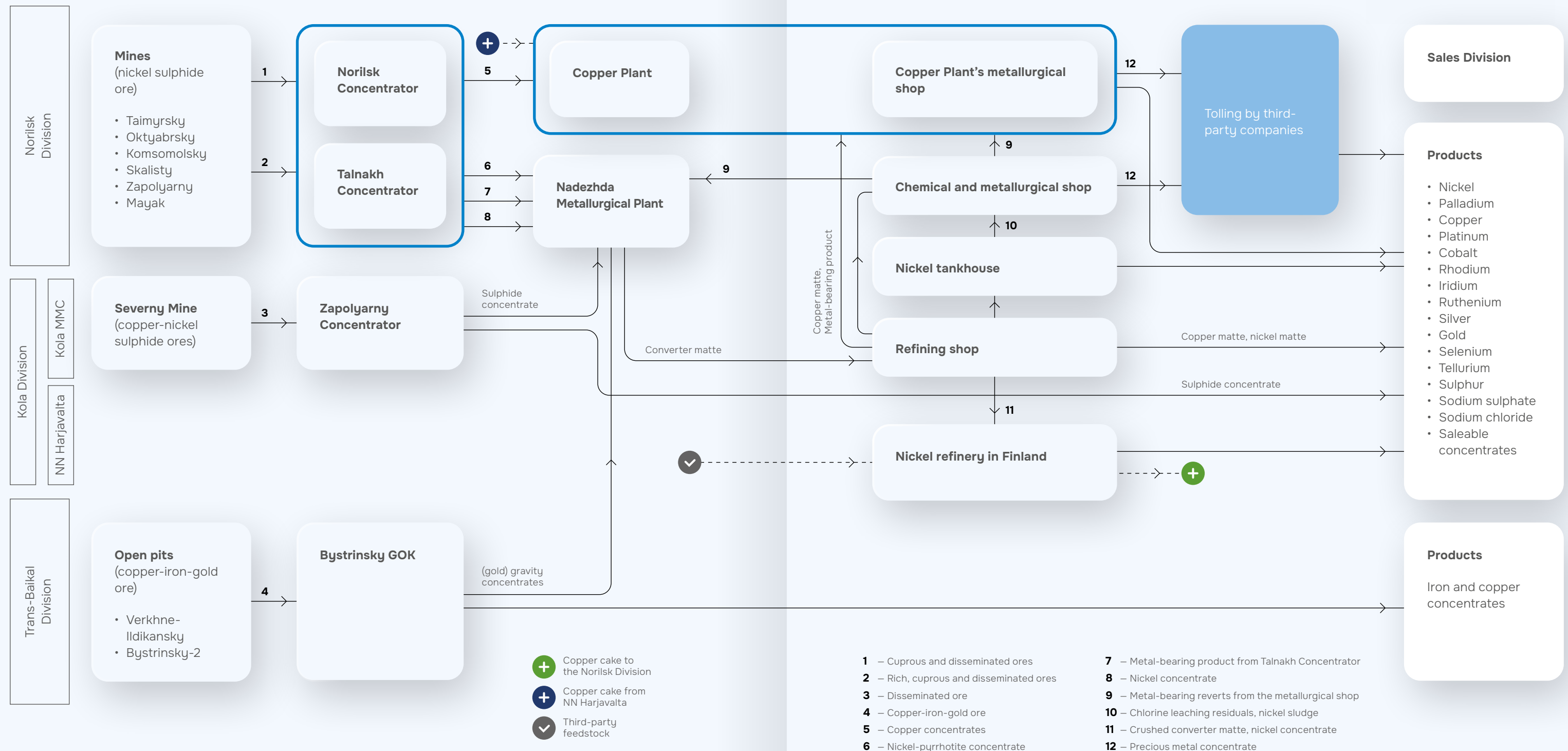
Refining



PGM refining



Sales



Operational highlights

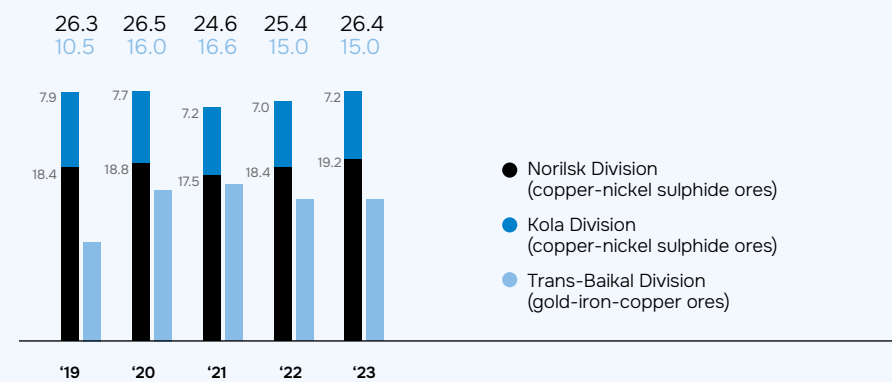
Average mined grades

Divisions	2019	2020	2021	2022	2023
NICKEL (%)					
Norilsk Division	1.32	1.30	1.20	1.27	1.14
Kola Division (Kola MMC)	0.55	0.53	0.57	0.49	0.52
COPPER (%)					
Norilsk Division	2.24	2.27	2.09	2.18	1.98
Kola Division (Kola MMC)	0.24	0.24	0.25	0.21	0.22
Trans-Baikal Division	0.58	0.60	0.50	0.57	0.63
PGMs (g/t)¹					
Norilsk Division	6.89	6.89	6.69	6.64	6.48
Kola Division (Kola MMC)	0.10	0.10	0.29	0.08	0.08

Metals recovery in concentration, %

Divisions	2019	2020	2021	2022	2023
NICKEL					
Norilsk Division	83.1	84.8	84.3	85.3	84.7
Kola Division (Kola MMC)	67.9	62.9	67.7	67.4	66.5
COPPER					
Norilsk Division	95.2	95.1	95.5	96.3	96.2
Kola Division (Kola MMC)	73.2	71.8	76.8	73.7	73.1
Trans-Baikal Division	87.7	87.4	86.9	88.1	88.8
PGMs					
Norilsk Division	85.2	86.4	85.6	85.8	85.3

Group ore output, MLN T



¹ The PGMs include palladium, platinum, rhodium, ruthenium, and iridium.

Metals recovery in smelting, %

Divisions	2018	2019	2020	2021	2023
NICKEL					
Norilsk Division ¹	94.6	94.1	94.4	95.1	94.9
Kola Division (Kola MMC) ²	97.0	96.3	98.3	98.4	98.5
Kola Division (NN Harjavalta) ²	97.9	98.2	98.1	97.8	98.3
COPPER					
Norilsk Division ¹	94.1	94.6	95.1	95.4	95.6
Kola Division (Kola MMC) ²	96.5	95.4	99.5	99.6	99.2
Kola Division (NN Harjavalta) ²	99.8	99.8	99.8	99.8	99.8
PGMs					
Norilsk Division ¹	95.8	96.4	96.5	96.6	96.7
Kola Division (Kola MMC) ²	91.6	92.9	92.9	97.8	98.1
Kola Division (NN Harjavalta) ²	99.8	99.9	99.9	99.9	99.9

Production of saleable metals

Saleable metals	2019	2020	2021	2022	2023
Nickel (t)	228,687	235,709	193,006	218,970	208,577
from own feed	225,204	232,532	189,945	218,703	208,155
Copper (t)	499,119	487,186	406,841	432,985	425,350
from own feed	498,838	486,816	406,815	432,984	425,350
Palladium (koz)	2,922	2,826	2,616	2,790	2,692
from own feed	2,919	2,820	2,616	2,790	2,692
Platinum (koz)	702	695	641	651	664
from own feed	700	693	641	651	664

¹ Feedstock to finished products.

² In refining, converter matte to finished products.

Norilsk Division

Location

Russia, above the Arctic Circle on the Taimyr Peninsula in the north of the Krasnoyarsk region.

It is 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.

The number of employees –

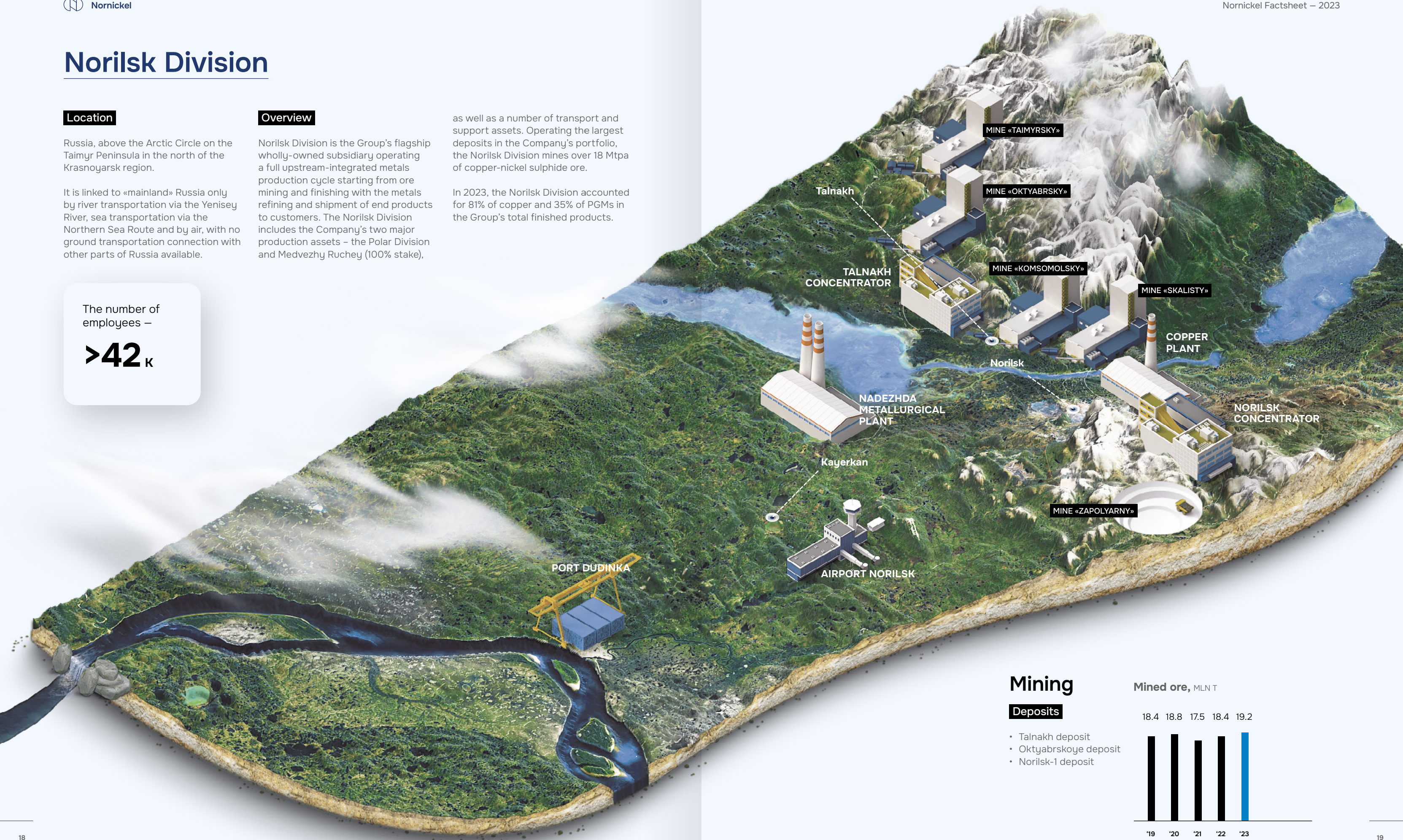
>42k

Overview

Norilsk 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. The Norilsk Division includes the Company's two major production assets – the Polar Division and Medvezhy Ruchey (100% stake),

as well as a number of transport and support assets. Operating the largest deposits in the Company's portfolio, the Norilsk Division mines over 18 Mtpa of copper-nickel sulphide ore.

In 2023, the Norilsk Division accounted for 81% of copper and 35% of PGMs in the Group's total finished products.



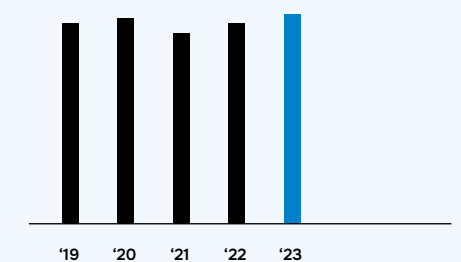
Mining

Deposits

- Talnakh deposit
- Oktyabrskoye deposit
- Norilsk-1 deposit

Mined ore, MLN T

18.4 18.8 17.5 18.4 19.2



Concentration

Concentration facilities

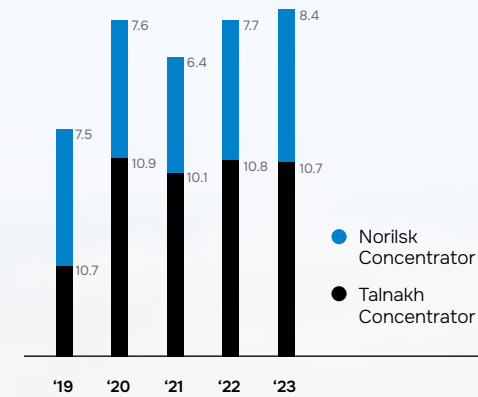
Talnakh Concentrator processes high-grade, cuprous and disseminated ores from the Oktyabrskoye and Talnakhskoye deposits to produce nickel-pyrrhotite and copper concentrates, as well as metal-bearing products. Its key processing stages include crushing, milling, flotation, and thickening. In 2023, Talnakh Concentrator increased its ore processing to 8.4 mln t.

Norilsk Concentrator processes all disseminated ores from the Norilsk-1 deposit, cuprous and disseminated

ores from the Oktyabrskoye and Talnakhskoye deposits, and some metal-bearing products from Talnakh Concentrator to produce nickel and copper concentrates. Its key processing stages include crushing, milling, flotation, gravity concentration, and thickening. In 2023, Norilsk Concentrator increased its ore processing to 10.7 mln t.

The resulting thickened concentrates from Talnakh Concentrator and Norilsk Concentrator are transported via slurry pipelines to the metals operations of the Norilsk Division for further processing.

Ore processing, MLN T



Smelting

Downstream facilities

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

Production chain

The produced nickel concentrates, including steam-cured sulphide concentrate, secondary materials and metal-bearing feed from Kola MMC, are fed into flash smelting furnaces at Nadezhda Metallurgical Plant. The

matte produced in flash smelting furnaces is then converted into high-grade converter matte, which is shipped to the Kola MMC.

Copper Plant processes all of the copper concentrate from the Norilsk Division’s concentrators, metal-bearing feed from Kola MMC, and copper cake from Norilsk Nickel Harjavalta to obtain copper cathodes, elemental sulphur, and sulphuric acid for the operational needs of the Norilsk Division. Copper Plant’s metallurgical shop recycles

sludge from the copper tankhouses of Copper Plant to produce precious metal concentrates and commercial selenium.

Products

- Copper cathodes
- Precious metals
- Commercial sulphur
- Selenium.



Selected facts about the city of Norilsk

The population of

~183 K

8 MONTHS

a year, when an average monthly temperature is below zero

45 DAYS

(from November 30th until January 13th) - the average duration of the polar night

Home to

5 INDIGENOUS ETHNIC GROUPS

2 MT

of snow fall in winter

68 DAYS

(from May 19th until July 25th) - the average duration of the polar day

¹ Hydrometallurgical product.

Kola Division

Location

- Kola Peninsula in Russia's Murmansk Region
- Finland, Harjavalta.

Overview

Kola Division includes two Nornickel's wholly owned subsidiaries: Kola MMC, a production company; and Norilsk Nickel Harjavalta. NN Harjavalta is located in Harjavalta, Finland. Founded in 1959, Harjavalta is now the only nickel refinery in Finland and one of the largest in Europe with a total throughput capacity of up to 65 ktpa of nickel products.

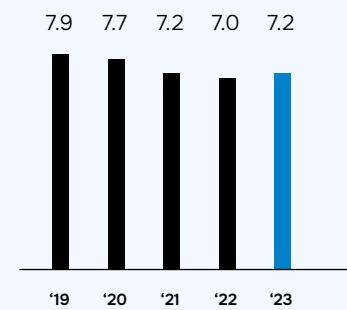
In 2023, Kola Division accounted for 100%, 3% and 65% of the Group's total nickel, copper, and PGM finished products, respectively.

Mining

Deposits

- Zhdanovskoye deposit
- Zapolyarnoye deposit
- Kotselvaara
- Semiletka

Mined ore, MLN T



The number of employees –

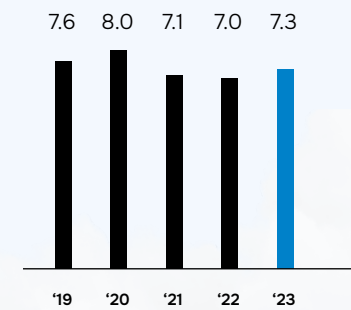
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Concentration

Concentration facility

Zapolyarny Concentrator processes disseminated ores from Kola MMC deposits. The concentrator produces nickel sulphide concentrate, which is then sold via third parties or partially shipped to the Norilsk Division for further processing. In 2023, the concentrator processed 7.3 mln t of ore.

Ore processing, MLN T



Smelting

Downstream facilities

- Tankhouses 1 and 2, Monchegorsk
- Chemical-and-metallurgical shop, Monchegorsk
- Refining shop, Monchegorsk
- Refinery plant, Harjavalta

Production chain

Kola MMC's refining facilities in Monchegorsk refine converter matte from the Norilsk Division. Supplied to the converter matte separation section, converter matte is crushed, milled, and separated into copper and nickel concentrates by flotation, while part of the converter matte after crushing is immediately sent for processing to Norilsk Nickel Harjavalta. The resulting copper concentrate is sent to the Norilsk Division's Copper Plant. The nickel

concentrate flow is then separated, with some of it after magnetic separation and recovery of precious metals sent to NN Harjavalta for further processing. The remaining nickel concentrate is processed at the roasting and electric furnace sections to produce tube furnace nickel powder, anodes, and granulated nickel alloy. Anodes are processed using the conventional electrorefining technology at Tankhouse 1 to produce cathodes. Tube furnace nickel powder is processed at Tankhouse 2 using a new technology involving leaching plus electrowinning to produce cathodes. The granulated nickel alloy is processed at the nickel carbonyl section to produce pellets and powder.

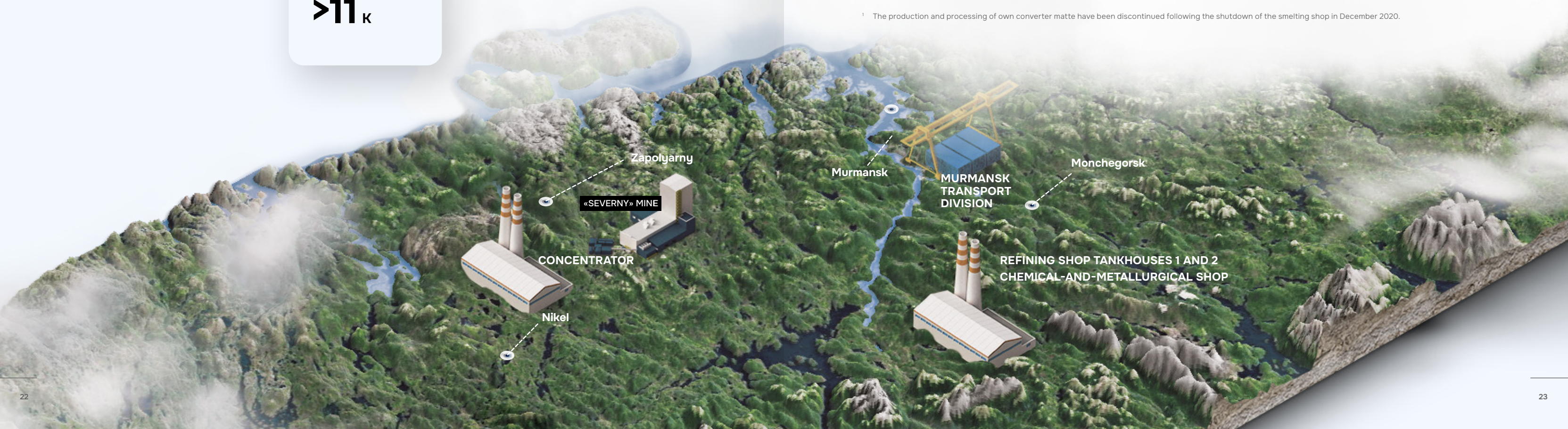
NN Harjavalta uses sulphuric acid leaching with high metal recovery rates – above 98%. The refinery processes nickel feedstock (matte and crushed converter matte

with precious metals recovered from it) supplied by Kola MMC and feedstocks purchased from third parties (nickel salts). Once leached, copper cake is sent to the Norilsk Division or sold to third parties, while purified nickel solutions are sent for further processing to produce nickel cathodes, nickel briquettes, powder, salts, as well as salts and solutions of cobalt.

Products

- Nickel cathodes and carbonyl
- Nickel sulphide concentrate
- Nickel salts, briquettes, cathodes, powders, and solutions
- Nickel and copper matte
- Copper cake
- Cobalt cathodes, cobalt concentrate, cobalt sulphate, cobalt solutions
- Precious metals
- Sulphuric acid.

¹ The production and processing of own converter matte have been discontinued following the shutdown of the smelting shop in December 2020.



Trans Baikal Division

Location

Trans Baikal Region, 16 km away from Gazimursky Zavod, 350 km away from Chita.

Overview

The Trans Baikal Division includes Bystrinsky GOK, which is a subsidiary of the Company with a 50.01% share. This asset includes open-pit ore mining operations and a mining and processing plant with full infrastructure, including a power line, a 227-km Borzuya–Gazimursky Zavod railway line (25% held by Nornickel and 75% by the government), as well as a rotation camp.

In 2023, Trans Baikal Division accounted for 16% of the Group's total copper production

The number of employees –

>2.6к

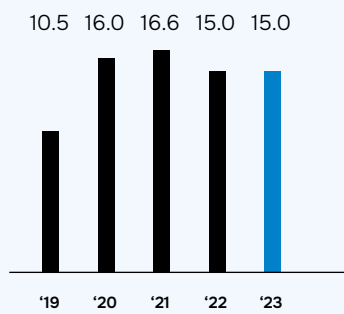
Mining

Deposit

- Bystrinskoye deposit

The Trans-Baikal Division mines gold-iron-copper ores of the Bystrinskoye deposit through open-pit mining at the Verkhne-Ildikansky and Bystrinsky-2 mines. In 2023, total ore production by the Trans-Baikal Division was 15.0 mln t.

Mined ore, MLN T



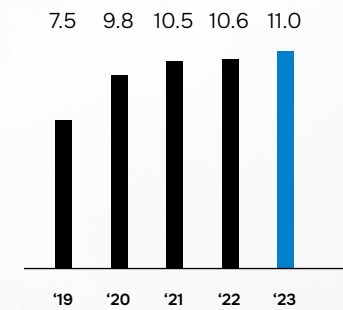
Concentration

Concentration facility

Bystrinsky GOK

Bystrinsky GOK processes ores from the Bystrinskoye deposit into copper, iron ore, and gold concentrates. Its key processing stages include crushing, milling, flotation, thickening, filtration, and end product packaging. The concentrator has two processing lines. Copper and iron ore concentrates are sold via third parties, while gold concentrates are further processed at the Norilsk Division. In 2023, Bystrinsky GOK processed 11.0 mln t.

Ore processing, MLN T



Saleable metal production, ON A 100%-BASIS

Products	2019	2020	2021	2022	2023
Copper in copper concentrate (kt)	43,489	62,664	67,798	67,240	68,958
Iron ore concentrate (kt)	1,311	2,047	2,582	2,545	2,892







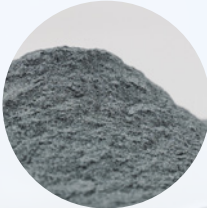
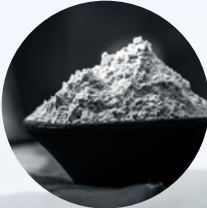


Products

- Copper concentrate
- Iron ore concentrate.



Products

Types of saleable products

<h3>Ni</h3> <p>Nickel</p>	<h3>Cu</h3> <p>Copper</p>	<h3>Co</h3> <p>Cobalt</p>	<h3>Pd</h3> <p>Palladium</p>	<h3>Pt</h3> <p>Platinum</p>	<h3>Rh</h3> <p>Rhodium</p>	<h3>Ru</h3> <p>Ruthenium</p>	<h3>Ir</h3> <p>Iridium</p>	<h3>Ag</h3> <p>Silver</p>	<h3>Au</h3> <p>Gold</p>
<ul style="list-style-type: none"> • Full plate cathodes (thickness up to 16 mm) • Cut cathodes (thickness up to 16 mm) • Briquettes • Carbonyl pellets • Nickel sulphate (STD grade, EN grade) • Nickel powder (carbonyl nickel powder, hydrometallurgical nickel powder) • Nickel hydroxycarbonate (paste, granules, paste) 	<ul style="list-style-type: none"> • Cathodes 	<ul style="list-style-type: none"> • Cobalt cathodes • Cobalt concentrate • Cobalt sulphate 	<ul style="list-style-type: none"> • Powder • Ingots 	<ul style="list-style-type: none"> • Powder • Ingots 	<ul style="list-style-type: none"> • Powder 	<ul style="list-style-type: none"> • Powder 	<ul style="list-style-type: none"> • Powder 	<ul style="list-style-type: none"> • Granules • Bars 	<ul style="list-style-type: none"> • Granules • Bars
									



Products

Types of saleable products

Se

Selenium

- Powder



S

Sulphur

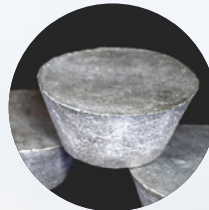
- Technical lump



Te

Tellurium

- Ingots



Na

Sodium

- Sodium sulfate
- Sodium chloride



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