NORNICKEL

STAYING STRONG

100%
self-sufficiency
from ore to finished products

Annual Report

2023

Contents

ABOUT NORNICKEL

4 Company profile
6 Footprint
8 Performance highlights
10 Investment highlights
12 Our history
14 Business model

STRATEGIC REPORT

18 Chairman's letter
20 President's letter
22 Commodity markets
38 Our strategy

BUSINESS OVERVIEW

48 Mineral resource base
57 Operational performance
64 Logistics and distribution
74 Energy assets
76 Innovation and digital technology
84 Financial performance (MD&A)

SUSTAINABLE DEVELOPMENT

96 Strategic approach
102 Employees
119 Health and safety
127 Environment and climate
139 Social policy

CORPORATE GOVERNANCE

146 Chairman's letter
148 Corporate governance system
157 General Meeting of Shareholders
160 Board of Directors and Board committees
178 Executive bodies
185 Control system
199 Remuneration report
202 Risk management

SHAREHOLDER INFORMATION

224 Share capital
228 Dividend policy
231 Debt portfolio management
233 Shareholder relations

ADDITIONAL INFORMATION

234 Financial statements
294 Glossary
296 Contacts

1 2 3 4 5 6

About the Report

We are pleased to present to you the Annual Report of MMC Norilsk Nickel and entities comprising the same group of companies (collectively, the "Group", "Nornickel", or the "Company") for 2023. Nornickel is a Russian vertically integrated metals and mining company producing non-ferrous and precious metals.

The Report discloses all aspects of Nornickel's operations both from strategic standpoint and in the context of sustainability. Nornickel has a unique resource base underpinning its strategy of production growth and operational excellence as well as its unprecedented environmental programme. This clean growth strategy not only lays out long-term production targets but also sets out concrete action plans to reduce the Company's environmental footprint in its regions of operation.

Standards

This Annual Report was prepared by the Investor Relations Department, taking into account the requirements and recommendations of:

- the Bank of Russia's Regulations No. 714-p On Information Disclosure by Issuers of Issue-Grade Securities, dated 27 March 2021
- the Bank of Russia's Letter No. IN-06-28/102 On Disclosure of Compliance with the Principles and Recommendations of the Corporate Governance Code in the Annual Report of a Public Joint Stock Company, dated 27 December 2021
- the Bank of Russia's Letter No. 06-52/2463 On the Corporate Governance Code, dated 10 April 2014
- the Bank of Russia's Letter No. IN-06-28/49 On Recommendations for Public Joint Stock Companies to Disclose Non-financial Information Related to Their Activities, dated 12 July 2021
- the Bank of Russia's Letter No. IN-06-28/96 On Recommendations for the Board of Directors of a Public Joint Stock Company to Consider ESG Factors and Sustainable Development Issues, dated 16 December 2021
- the Bank of Russia's Letter No. IN-06-28/57 On Recommendations for a Public Joint Stock Company to Disclose Information on the Remuneration of Members of the Board of Directors (Supervisory Board), Executive Bodies, and Other Top Management of the Public Joint Stock Company in Its Annual Report, dated 11 December 2017
- the Listing Rules of PJSC Moscow Exchange.

Scope

The scope of disclosure corresponds to the scope covered by the Group's IFRS consolidated financial statements.

The Report also discloses financial metrics based on the Group's IFRS consolidated financial statements for 2023 audited by Kept in accordance with International Standards on Auditing (ISAs).

THIS ANNUAL REPORT WAS APPROVED by the Annual General Meeting of Shareholders (Minutes No. 1 dated 28 June 2024)

PRE-APPROVED by the Board of Directors (Minutes No. GMK/11-pr-sd dated 22 May 2024)

ACCURACY OF INFORMATION IS CONFIRMED by the Audit Commission (Opinion dated 16 May 2024)

Vladimir Potanin
President, Chairman of the Management Board

Sergey Malyshev
Senior Vice President – Chief Financial Officer

Nornickel's reports for 2023

Interactive version of the Annual Report

Sustainability Report

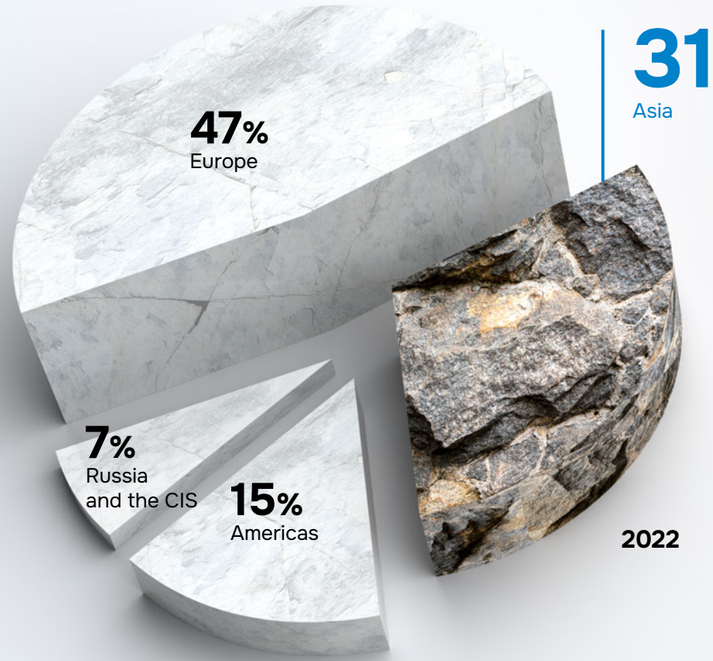
Human Rights Report

Responsible Supply Chain Report

Climate Change Report

ADAPTING TO CHANGE

Metal product sales by region: successful shift to the Asia-Pacific and domestic markets, % OF REVENUE

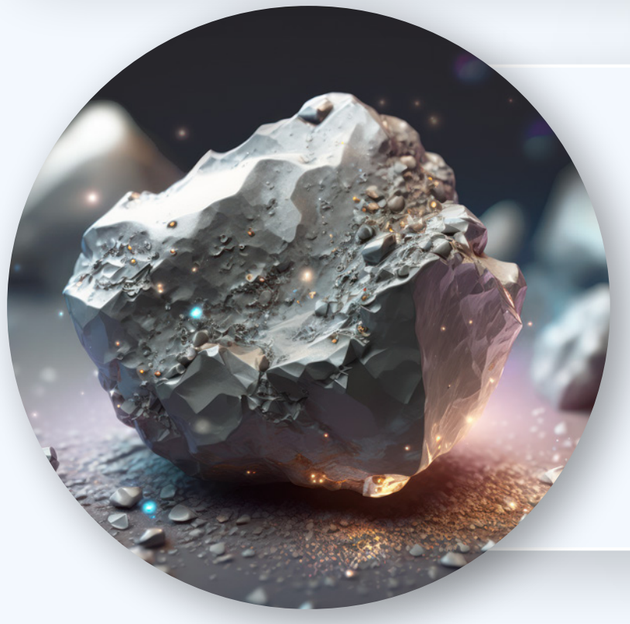


Company profile

The Norilsk Nickel Group 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, and selenium.

The Company also produces

Co cobalt · **Rh** rhodium · **Ag** silver · **Au** gold · **Ir** iridium · **Ru** ruthenium · **Se** selenium



Mission and values

Efficiently using natural resources and equity, we supply mankind with non-ferrous metals, which make the world a more reliable place to live in, and help people to realise their aspirations for development and technological progress

Reliability

Addressing any challenges to ensure success for the business

Efficiency

Delivering against our targets in due time and at minimum cost

Professionalism

Effectively delivering a strong performance

KEY ASSET

The Company views its people as the key asset and is willing to invest in their professional and personal development while enabling a corporate culture that would help it and its people to successfully achieve their core mission

>80 THOUSAND
employees

184 THOUSAND
average pay

RUB 1.3 BN
invested in employee development in 2023

Responsibility

A desire to honour our commitments and take on responsibility for our decisions

Growth

Effective production ramp-up and upgrade, leverage of groundbreaking technologies, and development of our people

Collaboration

Ability and desire of our employees to achieve goals through teamwork

Footprint

Nornickel enterprises are focused on the exploration, mining, and processing of minerals, as well as the production and sale of non-ferrous and precious metals.

The Group's operations are managed and coordinated by its parent company, PJSC MMC NORILSK NICKEL, incorporated in Dudinka, Krasnoyarsk Territory. The Company's Head Office is based in Moscow.

10.3%
the Company's share of Russia's metals production

28 COUNTRIES
consume the Company's products

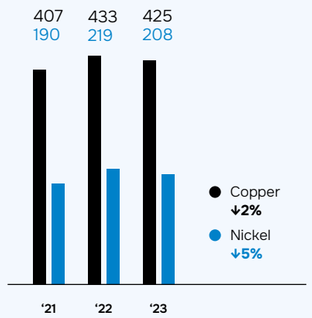
The Group's major production assets are located in Russia: on the Taimyr Peninsula (Norilsk Division), on the Kola Peninsula (Kola Division), and in the Zabaykalsky Territory (Trans-Baikal Division).

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, 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 to distribute its products across the world.

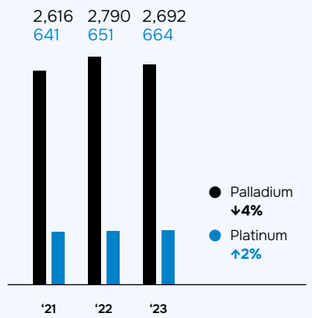
Performance highlights

Operational

Production of nickel and copper, FROM OWN FEED, KT

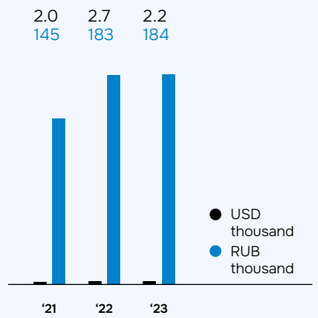


Production of palladium and platinum, FROM OWN FEED, KOZ

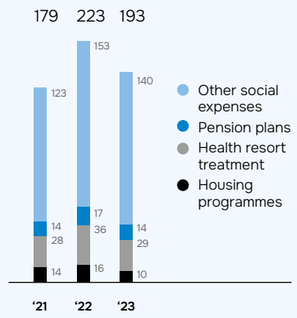


Sustainability

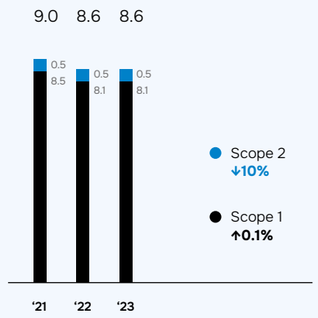
Average monthly salary



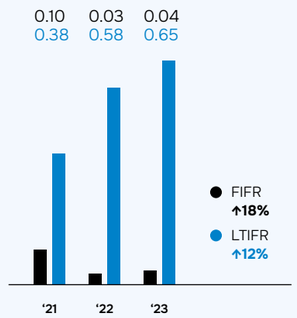
Social expenses for employees, USD MLN



GHG emissions from production assets, MLN T

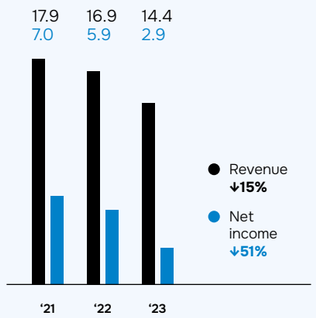


Injury rates, PER MILLION HOURS WORKED

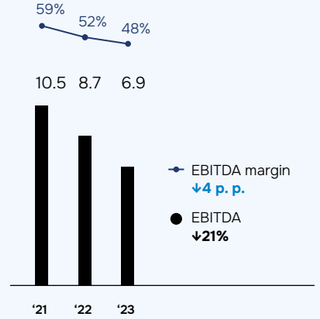


Financial

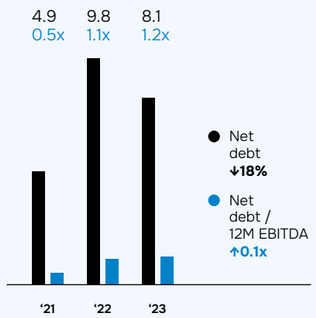
Revenue and net income, USD BN



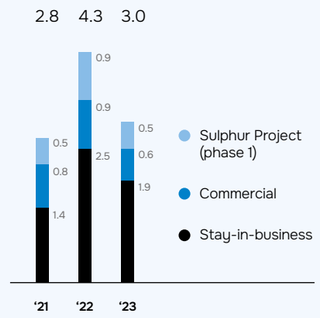
EBITDA and EBITDA margin, USD BN



Debt, USD BN



CAPEX breakdown, USD BN



Investment highlights

Unique resources

The Company's unique mineral resource base secures the most advantaged position in the global mining industry.

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 20 years

Ni

- Transport electrification
- Increasing demand for stainless steel

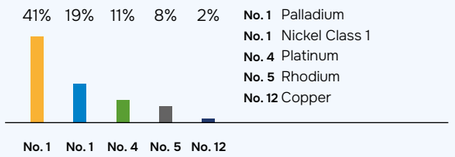
Cu

- Global infrastructure development programmes
- Transport electrification and growth of charging infrastructure

Leading position in global markets

Nornickel is the global leader in palladium and metal nickel production.

Position in the metals and mining industry[1]



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.

[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.

- Higher number of vehicles across the world
- Vehicle hybridisation
- Introduction of tests for emissions during driving in real time
- Deployment of H_2 storage, transportation, and purification solutions

Pd

Indispensable metals for green energy

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

Pt

Hydrogen energy and fuel cell cars

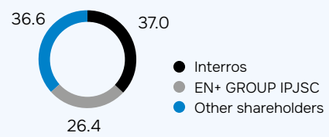
Co, Rh

Cobalt in batteries and rhodium in clean ICE-powered vehicles

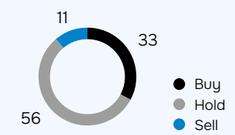
Highly liquid shares in the market

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).

Shareholding structure as of 2023-end



Analysts' recommendations on Company shares



Nornickel shares are included in the Moscow Exchange's indices[1]:

MOEX Metals and Mining Index – **14.32%**
Blue Chip Index – **9.63%**
MOEX 15 Index – **8.74%**
MOEX Russia Index – **6.98%**

Low carbon footprints of nickel production

The carbon footprint of nickel metal production according to international standards totalled

8.5 KG
of CO_2 equivalent per kg of metal

Best-in-class feedstock mix

Natural diversification and solid long-term fundamentals.

[1] As of 29 December 2023.

Our history

Nornickel is the leader in Russia's metals and mining industry, a reliable social partner, and one of the world's largest producers of palladium and Class I nickel.

1935–1959

Construction of the Norilsk Metallurgical Plant on the Taimyr Peninsula and of the Severonikel plant on the Kola Peninsula were launched. The first batch of converter matte and salable nickelproduced in 1939.

By late 1953, Norilsk Plant produced:

35% of nickel,
12% of copper,
30% of cobalt,
90% of PGMs of the Soviet Union's total output.

1960–1992

New deposits developed and new facilities put online

- Major sulphide deposits of copper-nickel ores of the Talnakhskoye deposit were discovered.
- The construction of mines and the town of Talnakh started on the Taimyr Peninsula.
- The first batch of carbonyl nickel was produced at Severonickel Plant.
- Komsomolsky, Oktyabrsky, and Taimyrsky Mines were launched; Talnakh Concentrator and Nadezhda Metallurgical Plant were commissioned. Severonickel Plant celebrated first production of electrolytic copper.

1993–2012

Company transformation

The Norilsk Nickel State Concern for the Production of Precious and Non-ferrous Metals was transformed into RJSC Norilsk Nickel and privatised. In 2001, the Company was restructured, with shareholders owning a combined 96.9% stake in RJSC Norilsk Nickel exchanging their shareholdings for shares in OJSC MMC Norilsk Nickel. Company shares started trading on the RTS and MICEX stock exchanges, and first American Depositary Receipts (ADRs) were issued in June.

2013–2020

Implementing a new strategy

Vladimir Potanin and his new management team took the helm of the Company. The Board of Directors adopted a new long-term development strategy focused on world-class assets of the Polar Division and Kola MMC. Bystrinsky GOK, the largest greenfield project in the Russian metals industry, was constructed from scratch in the Zabaykalsky Territory. At that time, a programme was launched to improve the environmental conditions across the Company's footprint, including the shuttering of Nickel Plant in Norilsk, the launch of the Sulphur Project to drastically reduce sulphur dioxide emissions, and the closure of obsolete metallurgical facilities in the Murmansk Region.

2021–2030

Environmentally friendly growth strategy

The Company announced a new investment cycle aimed at the comprehensive development of mining assets and the expansion of processing capacities as well as the implementation of its environmentally friendly growth strategy, which not only lays out long-term performance targets for ore production and capital investment but also sets out concrete action plans to reduce the Company's environmental footprint in its regions of operation.

Nornickel in 2023

- Nornickel fully delivered on its production programme in line with management guidance.
- A development licence was obtained for the Kolmozerskoye deposit located in the Murmansk Region, which envisages annual production of **45 ktpa** of lithium carbonate and hydroxide.
- **RUB 60 billion** 5-year exchange-traded bonds with a floating RUONIA linked rate were issued.
- The Digital Investor corporate programme was launched for employees to receive a digital financial asset linked to the market value of Nornickel shares.
- The Sulphur Project was launched at Nadezhda Metallurgical Plant in Norilsk. This major environmental project is aimed at drastically reducing sulphur dioxide emissions in Norilsk and improving the city's air quality.
- The Company started the development of the deepest ore horizons in Eurasia and put onstream the Glubokaya shaft at Skalisty Mine reaching depths of **almost 2 km**. This move will enable Nornickel to substantially boost extraction of the most valuable high-grade ore.
- In a first for the Company, Nornickel published a standalone Climate Change Report disclosing its initiatives around climate action and climate change adaptation from 2021 to date, the development of its risk management system, and the resilience of Nornickel's strategy in three climate scenarios.

Business model

Contribution to the UN SDGs

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: Gipronickel Institute

Performance highlights

Mining

Norilsk Division

19.2 MT of ore

Ni	Cu	PGMs
1.14%	1.98%	6.48 g/t

Kola Division

7.2 MT of ore

Ni	Cu	PGMs
0.52%	0.22%	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

Financial highlights

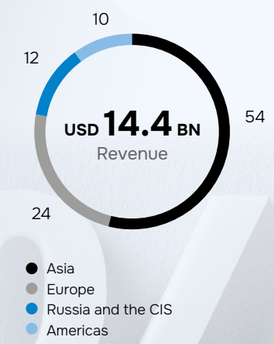
USD 6.9 BN EBITDA

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

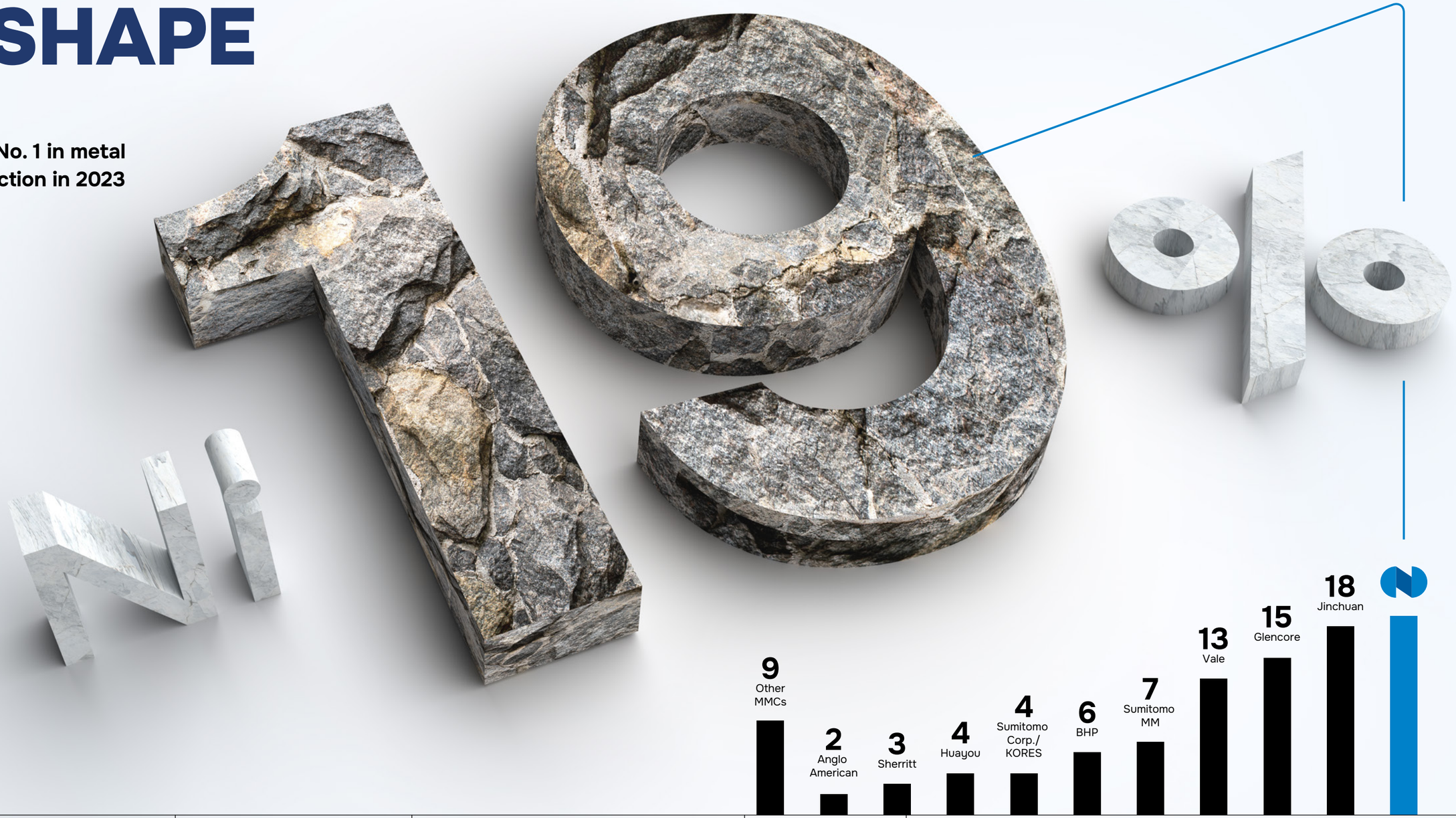
RUB 281 BN / USD 3.3 BN
Tax and other payments to budgets

Group's metals production

Ni	Cu	Pd	Pt
209 KT	425 KT	2,692 KOZ	664 KOZ

STAYING IN SHAPE

Nornickel – No. 1 in metal nickel production in 2023



Strategic report

18 Chairman's letter

20 President's letter

22 Commodity markets

38 Our strategy

Chairman's letter

The Company's leadership managed to fully deliver on its production guidance and – more importantly – to sell all metals produced in the reporting period by redirecting sales to friendly countries.

Dear shareholders,

The year 2023 was marked by a slump in prices for our core metals and lingering external political pressure on Russian business, which could not but impact our annual financial results. Our revenue decreased 15% to USD 14.4 billion while EBITDA was down 21% to USD 6.9 billion.

Nevertheless, the Company's leadership managed to fully deliver on its production guidance and – more importantly – to sell all metals produced in the reporting period by redirecting sales to friendly countries. At the same time, effective cost control measures backed by forex tailwind resulted in lower cash operating costs and a solid EBITDA margin of 48%.

Despite challenging conditions in the global financial and commodities markets and non-cooperation by certain equipment suppliers, we continued to execute our investment programme, which amounted to USD 3 billion in 2023. I would like to specifically highlight the launch of the keenly anticipated Sulphur Project at Nadezhda Metallurgical Plant, which became the largest environmental programme in Russia in recent years. When the project reaches its full capacity, it will help meet legal requirements for reducing pollutant emissions in Norilsk by at least 20% in 2024, and by 45% in 2025, from a 2015 baseline.

48%
EBITDA margin

USD 3 BN
Total investments

48%
Targeted reduction in pollutant emissions by 2026

Our environmental efforts were not limited to the Sulphur Project. For example, we made significant progress in cleaning up legacy pollution in the Norilsk Industrial District, reducing wastewater discharge, and boosting waste utilisation. The Company also teamed up with several research teams from the Siberian Branch of the Russian Academy of Sciences to conduct a biodiversity study across the Company's footprint that was unique in scope and depth.

As far as occupational health and safety is concerned, we continued our mine safety programmes by deploying new digital solutions and improving equipment and personnel tracking systems.

Tragically, five fatal accidents were recorded at the Company in 2023, compared to four such accidents in the year prior. All accidents were thoroughly investigated, with the resulting reports submitted to the Board of Directors and action plans developed to eliminate their root causes. The Company continues improving the quality of its incident investigations to prevent new accidents, while also redesigning its occupational safety communications with employees. As Board Chairman, I reiterate that achieving zero work-related fatalities is a top strategic priority for Nornickel.

Last year, the Company also focussed on joint business diversification projects to support technology innovation. Polar Lithium, a joint venture between Nornickel and ROSATOM, has been awarded a licence to develop Kolmozerskoye, Russia's largest lithium deposit. The development of this deposit will enable us to become Russia's first-ever producer of lithium-bearing raw materials and eventually high-tech products such as lithium-ion batteries. Nornickel also acquired an interest in Russian Stainless Company, which is implementing a project for the production of flat-rolled stainless steel products in the Volgograd Region. Through this project, Nornickel will substantially boost its nickel sales in the domestic market and integrate into the manufacturing of high-tech products from steels and alloys.

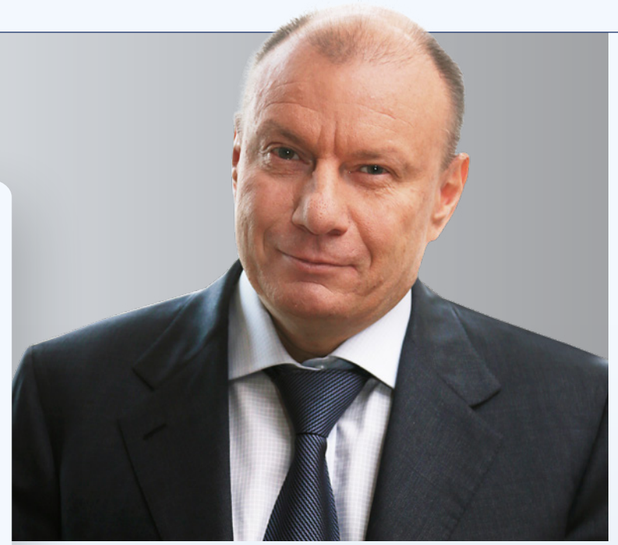
On top of this, Nornickel was lauded as a top performer in sustainability and responsible business practices and recognised as a first-degree winner of the Responsible Business Leaders national award.

Finally, to accommodate our more than 400,000 shareholders, we have decided to do a share split to boost our stock's liquidity and make our shares more accessible to a wider range of retail investors, as well as to pay a dividend for the first nine months of 2023. We believe that this move will contribute to further expansion of Nornickel's shareholder base and the growth of the Russian stock market more broadly.

Andrey Bougrov

Chairman of the Board
of Directors MMC Norilsk Nickel

President's letter



2023 results confirmed Nornickel's ability to demonstrate operational resilience even in a challenging economic and geopolitical environment.

Dear shareholders,

Looking back on 2023, I would immediately highlight the fact that the year confirmed Nornickel's ability to demonstrate operational resilience even in a challenging economic and geopolitical environment. As this Report shows, we have succeeded in highlighting that the Company we all build together is ready to face any critical challenge through strict adherence to our production schedule, a responsible approach to investment, and coordinated efforts of the entire team.

Last year, Nornickel and the broader Russian economy grappled with severe sanctions, which, coupled with inflation and volatility across global commodity and financial markets, adversely affected the Company's key financials. Lower market prices for almost all of our metals drove down our revenue and EBITDA. However, we were able to reverse the negative trends of 2022, caused by the need to rethink our logistics and distribution chains. The Company sold all metal volumes produced in 2023 as well as some of its inventories that built up over 2022.

We have maximised our focus on metrics within our control and achieved notable successes in these areas, substantially cutting our operating costs and working capital. CAPEX totalled close to USD 3 billion in 2023, remaining at a record-high level in rouble terms.

We are currently adjusting our long-term investment plans due to a changing geopolitical situation, self-sanctioning by some of our partners, and a more challenging macroeconomic environment. We are redesigning some projects, exploring alternative solutions, and looking into import substitution opportunities.

In October 2023, Nornickel launched the Sulphur Project at Nadezhda Metallurgical Plant in Norilsk. This is a flagship project of national importance, believed to be the largest environmental programme in Russia.

Construction has taken more than three years. Although certain international vendors refused to provide critical equipment to Russia, we successfully sourced alternative suppliers and completed the project on schedule. As a result, Norilsk now hosts in effect a brand new facility with approximately 500 new jobs. The key thing, however, is that air quality in Norilsk has improved dramatically.

Last year, we approved our Sustainable Development Strategy until 2030, which encompasses four pillars: occupational health and safety, talent management, technological development, and social advancement and enhancements to the quality of life. We fully recognise that major businesses are responsible for developing local communities and for promoting the well-being of wider society, and we reiterate our commitments to stakeholders.

In 2023, Nornickel launched an innovative corporate programme, Digital Investor, under which as many as over 60 thousand employees have already been granted digital financial assets with a value equivalent to the price of Nornickel shares and received their first dividends.

In conclusion, I would like to express confidence that together we will achieve our goals and will unlock the full potential of our business to the benefit of our employees, investors, and all stakeholders who care about our success.

Vladimir Potanin
President
Chairman of the Management Board MMC Norilsk Nickel

Commodity markets

Nornickel metals' applications

Application area	Description
PGMS	
Automotive industry	Palladium, platinum, and rhodium are used as the active material in automotive exhaust gas catalysts to minimise the vehicles' environmental impact
Hydrogen solutions	Platinum, palladium, iridium, and ruthenium are widely used in rapidly developing hydrogen technologies. Platinum group metals find application as catalysts in low-carbon hydrogen production as well as for hydrogen purification, transportation, and use as an energy source in fuel cells
Chemical and petrochemical industries	Palladium, platinum, and rhodium are used as catalysts in chemical and petrochemical processes to boost process performance
Jewellery	Palladium and platinum are used in all kinds of jewellery, which is renowned for its beauty but also for durability
Electronics	Palladium is used as material for capacitors, motherboards, and other components, while platinum is primarily used in hard drives, and rhodium in coatings for connectors and contacts
Healthcare	PGMs are extensively used as catalysts in drug synthesis. Palladium has also found wide application in dentistry, while platinum is used in medical devices such as pacemakers and as an active ingredient in anti-cancer medicines
Glass fibre and optical glass	Platinum and rhodium are used to manufacture bushings for making glass fibre and optical glass
NICKEL	
Mechanical engineering, chemical and petrochemical industries, and construction	Nickel is used in stainless steel production. Adding nickel as an alloying element to stabilise the austenite structure enhances steel's corrosion resistance, high-temperature properties, weldability, formability, and resistance to aggressive environments
EV batteries	Nickel is a key element used in the production of precursor cathode active materials for EV batteries. The dominating technologies include nickel-intensive NCM and NCA batteries, owing to their higher volumetric and gravimetric energy density, which increases drive range. Nickel-based batteries are also more recyclable and reusable than other types of batteries
Aerospace industry	Nickel alloys are highly resistant to heat and aggressive environments and are used in the manufacturing of aircraft engines
Renewable energy	Nickel alloys are used in wind, solar, and geothermal power generation
COPPER	
Automotive industry	The automotive industry uses copper in batteries, electric motors, inverters, wiring, and charging infrastructure. Transport electrification is expected to become a key driver behind copper demand in this decade
Construction and air conditioning and cooling systems	The construction sector uses copper in pipes and tubing, heating and cooling systems as well as in wall cladding. Electrical and communication cables are also mostly made of copper
Renewable energy	Copper is intensively used in the construction of wind, solar, and other types of renewable power plants
Electronics and home appliances	Copper is used in electronics and home appliances due to its excellent electrical and thermal conductivity
Network infrastructure	Copper is used in power generation, transmission, and distribution as well as in all types of wiring. A strong push for transport electrification and transition to renewable energy will require significant expansion of distribution networks

Nickel market

Key market trends

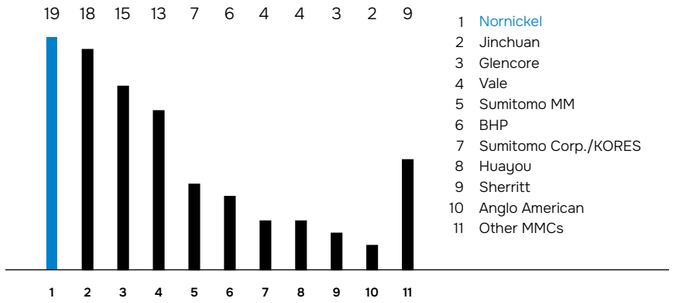
Nickel surplus persisted in 2023, exceeding 200 kt (compared to 113 kt of surplus in 2022), mostly in the low-grade nickel market. However, the high-grade exchange nickel market remained balanced as the inflow of metal to exchange warehouses was insignificant while alloys and specialty steels continued to generate steady demand.

In 2023, nickel was the worst performer among base metals on the London Metal Exchange (LME) due both to a significant surplus in the Class 2 market owing to oversupply of NPI in Indonesia following the commissioning of new capacities to produce nickel cathodes in China and Indonesia and the price correction following a massive short squeeze and growing speculative trading in the past year.

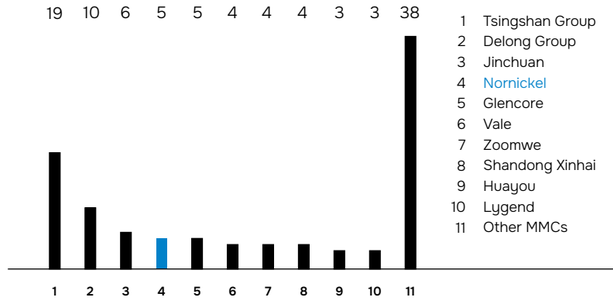
Early in the year, the price exceeded USD 31,000/t but dropped to USD 22,000/t in mid-March triggered by news that some Chinese nickel producers were considering launching production of nickel cathodes in China and Indonesia as early as in 2023. Another headwind was weak domestic demand in China amid prospects of further monetary policy tightening in the US and Europe.

In April, nickel prices rebounded to above USD 25,000/t, spurred by the short covering by speculative players, lower exchange inventories, and a weaker US dollar. The growth, however, was curbed by weak market fundamentals, and as a result the price slipped to USD 20,000–21,000/t in late May.

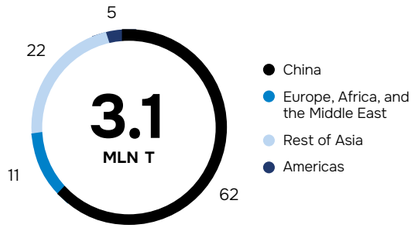
Nornickel – No. 1 in Class I nickel production, %[1]



Nornickel – No. 4 in primary nickel production, %[1]



Primary nickel consumption by region, %



Source: Company data

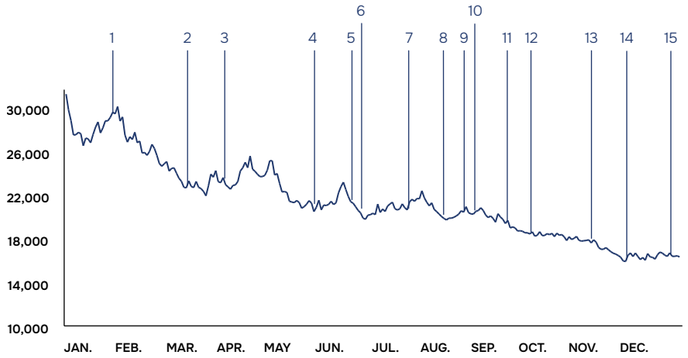
[1] Sources: producer reports, Company analysis as of early March 2024

In June–July, the LME nickel fluctuated within the range of USD 20,000–23,000/t as the expected recovery of the Chinese economy slowed down. In August, the price was supported by the news of a clampdown on illegal mining in Indonesia, followed by delays in the distribution of Indonesia's new quotas for nickel ore mining.

In the fourth quarter, nickel price fell below USD 20,000/t due to a surge in supply, weak demand from the European and US stainless steel sectors, and a record-high number of LME short positions of investment funds amid inflationary pressure and high interest rates around the world. Despite news that Indonesia wouldn't approve any new nickel mining quotas for 2023 and the country's high-grade nickel resources could face depletion in six years, the LME nickel plunged to USD 16,000/t late in the year.

As a result, the average nickel price in 2023 amounted to USD 21,474/t, or 16% below the average 2022 price (USD 25,605/t).

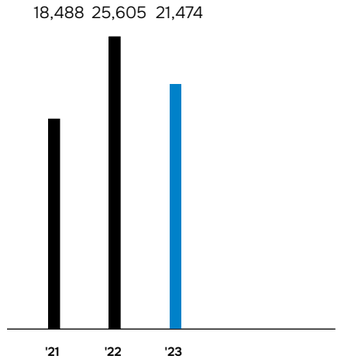
LME nickel price in 2023, USD/T



1. EV producers start to cut prices due to slowdown of demand growth
2. US banking crisis
3. LME announces action plan to strengthen its markets
4. Indonesia puts nickel export levy on hold
5. Huayou Cobalt launches Huafei HPAL project in Indonesia
6. China extends EV tax benefit scheme to 2027
7. LME approves Huayou's nickel cathodes as new brand
8. Indonesia arrests former top official accused of illegal mining
9. Tsingshan starts production of nickel cathodes in Indonesia
10. Distribution of Indonesia's mining quotas is delayed
11. The announcement, that Indonesia will not approve any new nickel ore mining quotas for 2023
12. Glencore to stop funding its Koniambo FeNi project
13. LME approves listing of GEM's nickel cathodes
14. Talks about a new Indonesian nickel price index
15. Germany cancels tax benefits for EVs

Source: London Metal Exchange, Company analysis

Average annual nickel prices, USD/T



Source: London Metal Exchange (cash settlement)

Market balance

In 2023, primary nickel use grew 4% y-o-y to 3.1 mln t amid steady growth in the stainless steel sector (up 4% y-o-y). Demand in the battery sector was down (–1% y-o-y) due to the continued destocking cycle in the EV supply chain, a greater share of non-nickel LFP batteries, and a partial shift from BEV to PHEV sales in China. In 2023, nickel use in other industries (alloys, special steels, plating, etc.) increased by 6% y-o-y amid a stable environment in the aerospace, oil and gas, and military industries.

On the other hand, global primary nickel production grew 9% y-o-y to 3.4 mln t in 2023, driven by the continued growth in the Indonesian NPI (up 16% y-o-y) and nickel compounds output for the battery sector (up 31% y-o-y). The increase was due to the launch of new NPI-to-matte conversion and high-pressure acid leaching (HPAL) projects. Metal nickel production grew 7% y-o-y due to new nickel cathode production capacities launched in China and Indonesia.

As a result, in 2023, the nickel market moved into a surplus of more than 200 kt, mostly in low-grade nickel as last year, while the high-grade nickel market remained relatively balanced. However, given the substantial increase in current working stocks over the last years, which, according to our calculations, rose by as much as 100–200 kt Ni, the actual market surplus, i.e. excessive material available for immediate delivery, could be much smaller.

Consumption

Stainless steel remained the key sector of primary nickel use in 2023 (about 65% of total demand).

Stainless steel production uses almost all types of nickel feed (except for some special products, such as nickel powder and compounds). However, since the quality of nickel used has almost no effect on stainless steel quality, steelmakers primarily use cheaper low-grade nickel such as NPI, ferronickel, and nickel oxide. As a result, the share of high-grade nickel used in stainless steel has decreased in recent years.

In 2023, global output of stainless steel grew 3% y-o-y to 58 mln t amid the launch of new capacities in China, where production rose 10% y-o-y. In other Asian countries, stainless steel output declined 5% y-o-y, primarily due to lower production in Indonesia, which faced operational issues at a steelmaker caused by a conflict between shareholders, as well as due to weak operational performance in Japan and Taiwan. Meanwhile, stainless steel output dropped 7% y-o-y in Europe and the US due to destocking, higher imports from Asia, and weak consumer demand. As a result, primary nickel consumption in the stainless steel sector increased by 4% in 2023 and exceeded 2Mt.

The **battery industry** uses nickel as a key element in the production of cathode precursors for batteries. Despite record-high EV sales, nickel demand in the battery sector slipped 1% to 0.5 mln t in 2023 due to destocking across the battery value chain in China, higher non-nickel LFP share, and a partial shift from BEV to PHEV sales

3.1 MLN T
Primary nickel consumption in 2023

3.4 MLN T
Primary nickel production in 2023

Nickel production and consumption balance, KT
(excluding changes in current reserves)

Source: Company's assessment as of March 2024

in China, which have lower battery capacity and, in turn, lesser nickel content.

In 2023, global EV sales[1] grew 29% y-o-y. Following several years of rapid growth, the EV market seems to be entering a maturity phase and grappling with the associated challenges of further expansion.

Sales in China decelerated to 23% y-o-y following the country's partial withdrawal of the EV subsidies at the end of 2022. However, EV sales have been consistently rising in absolute terms. For instance, 5.7 million battery electric vehicles (BEVs) were sold in China in 2023, up 19% y-o-y from 4.8 million in 2022, while plug-in hybrid electric vehicle (PHEV) sales surged almost twofold to 2.7 million (up 88% y-o-y). Additionally, China has surpassed Japan as the world's largest automotive exporter, a core part of which has been EVs.

Furthermore, support for the EV sector in China continues to flow. Recently, a national pilot involving eight separate ministries was launched to replace internal combustion engine (ICE) vehicles with EVs in public domain vehicle fleets. This incorporates not only public buses but also taxis and government vehicles. When coupled with ongoing support for a rural EV buildout, this should ensure that the domestic China market continues to grow faster than the rest of the world.

Sales in Europe rose by 28% y-o-y, while constrained by the removal of subsidies in several countries. Additionally, there has been an influx of cheap Chinese EVs into the European market. In 2023, the share of Chinese BEV deliveries increased twofold to about 10% of total European BEV sales, with SAIC-owned MG being the fourth best-selling brand after Tesla, Volkswagen, and BMW. In September, the European Commission launched an anti-subsidy investigation to impose additional tariffs on Chinese EVs to protect local producers, potentially slowing down EV penetration rates in Europe, especially in the low-cost segment.

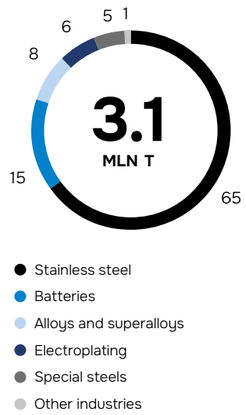
EV sales in the US increased by 50% in 2023, which could be attributed to the adoption of the US Inflation Reduction Act (IRA).

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 demand in batteries in the long run. Despite the mounting competition across technologies, high-nickel formulations will remain the preferred option for automakers owing to their higher energy density, longer range, and better recyclability. In its base case scenario, the Company estimates that the nickel use in batteries will reach approximately 1.5 mln t of nickel by 2030, or 30% of total primary nickel demand (compared to 15% in 2023). Meanwhile, this figure may require further revisions given the continuous introduction of more ambitious carbon neutrality goals, subsidies-driven transport electrification, and cost optimisation of battery cell production.

In 2023, nickel use in **other industries** (alloys, special steels, plating, etc.) increased by 6%, or 0.6 mln t, amid the gradual post-COVID recovery of industrial demand and robust economic performance in the aerospace, oil and gas, and military industries.

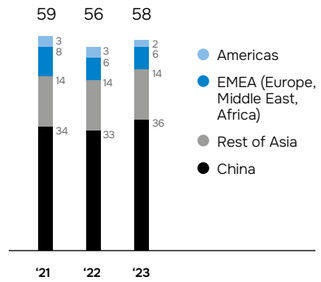
[1] Under this methodology, HEV and PHEV are recalculated according to their relative battery capacity ratio: HEV 2 kWh vs PHEV 12 kWh vs BEV 55 kWh.

Primary nickel consumption by industry, %



Source: Company data

Stainless steel production, MLN T



Sources: Eurofer, ISSF, USGS, SMR, METI, TSIIA, Company data

Supply

Primary nickel production can be divided into the high-grade and low-grade nickel segments.

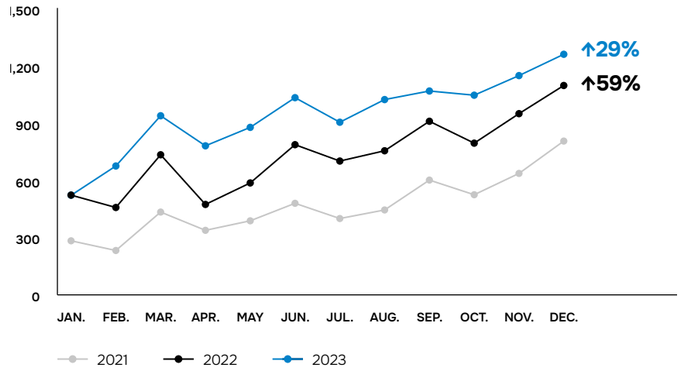
High-grade nickel is produced in the form of nickel cathodes, briquettes, pellets and powder, rounds, and other small special forms as well as chemical compounds, both from sulphide and from more common and available laterite raw materials. 2023's leading producers of high-grade nickel were Jinchuan, Nornickel, Glencore, Vale, Zoomwe, Huayou, and Sumitomo Metal Mining (SMM).

Low-grade nickel includes nickel pig iron, ferronickel, nickel oxide and utility nickel, which are produced from laterite raw materials only. In 2023, the key producers of low-grade nickel were Indonesian and Chinese NPI smelters, owned by Tsingshan and Delong, as well as the largest ferronickel producers: Anglo American, Eramet, South32, POSCO, etc.

The nickel market had been fundamentally divided into the low-grade and high-grade segments. However, these markets became interconnected once the practical implementation of the NPI-to-matte conversion started in early 2021 along with the massive launches of HPAL capacities and the launch of nickel cathode production from low-grade Indonesian s of HPAL capacities and the launch of nickel cathode production from low-grade Indonesian feedsources in 2023.

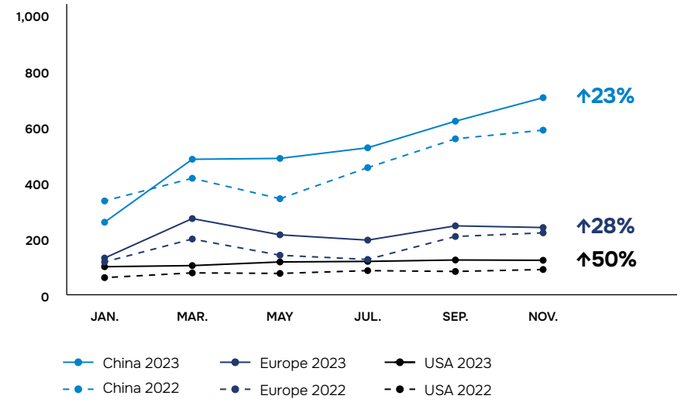
In 2023, nickel producers around the world were affected both by high interest rates, inflationary pressure,

Global sales of electric vehicles, THOUSAND UNITS

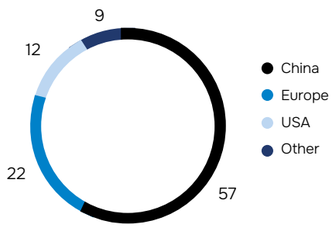


Source: Company analysis

Sales of electric vehicles by region in 2023, THOUSAND UNITS.



Sales of electric vehicles by region in 2023, %



logistical issues, and operational disruptions, and by negative price trends amid oversupply and continued surplus on the market. Nonetheless, primary nickel production grew by 0.3 mln t, or 9% y-o-y, to 3.4 mln t in 2023, driven by the growth in the Indonesian NPI production capacities and the continued underlying growth of nickel compounds for the EV battery sector, mainly fuelled by the launches of new HPAL capacities and NPI-to-matte conversion lines. Another contributor was the rise in metal nickel (Class 1) supply from new refining capacities in China and Indonesia.

Production of high-grade nickel grew 15% to 1.4 mln t in 2023.

Production of metal nickel rose 7% y-o-y to 0.9 mln t. In 2023, metal nickel production was steadily growing, mainly due to the launch of new nickel cathode capacities in China and Indonesia.

On top of this, Class 1 nickel output grew in Norway (due to the local enterprise's ramp-up to designed capacity after last year's strikes) and Japan (as a result of an increase in nickel converter matte exports from Indonesia) but declined in Canada and Australia on the back of operational issues and maintenance shutdowns.

Nornickel decreased its nickel output somewhat in 2023 owing to the decrease in mined ore volumes due to testing of the mining machinery from new suppliers and the gradual replacement of the existing equipment fleet. Nornickel mines recovered to the scheduled mining volumes in the fourth quarter. In 2023, the Company's nickel output came in line with the annual production guidance.

During the year, **production of nickel compounds**, including nickel sulphate from primary sources (excluding sulphate produced by high-grade nickel dissolution), increased by 31% y-o-y to 0.5 mln t.

Nickel sulphate can be produced from a variety of raw materials by different processes: directly from nickel intermediates such as mixed hydroxide precipitate (MHP), mixed sulphide precipitate (MSP), nickel matte, and crude nickel sulphate (product of copper processing), by dissolving Class 1 nickel (such as nickel briquettes or powder), or from recycled materials.

Despite the fact that nickel sulphate was traded at discounts to LME prices almost throughout the year, its output grew in 2023. The increase was fuelled by scheduled launches of new and ramp-ups of existing intermediates production capacities in Indonesia both at HPAL projects and at NPI-to-matte conversion lines. Chinese producers were the largest nickel sulphate producers in 2023, including Zoomwe, GEM, Huayou, and Jinchuan.

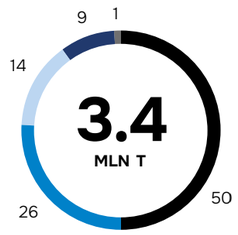
At the same time, nickel sulphate production by high-grade nickel dissolution, considered to be one of the most expensive production method, decreased several times over y-o-y amid the abundance of cheaper intermediates on the market.

Low-grade nickel output grew by 6% y-o-y to 2.0 mln t.

Indonesia continued ramping up its **nickel pig iron capacities,** which was the main driver behind the growing supply of low-grade nickel in 2023. The growing stainless steel output in China provided significant support to NPI production in Indonesia, but its growth rates slowed down somewhat year-on-year due to some furnaces switching to converter matte production and temporary suspension of new quotas issue for nickel ore mining later in the year, resulting in higher ore cost in the country.

3.4 MLN T
Primary nickel output in 2023

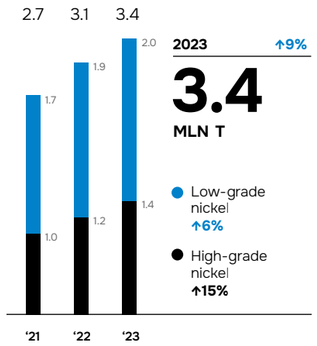
Primary nickel production by product, %



- Nickel pig iron
- Metal nickel
- Nickel compounds
- Ferronickel
- Nickel oxide and utility nickel

Source: Company data

Primary nickel production, MLN T



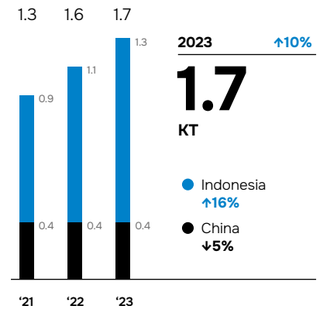
Source: Company data

Overall, we estimate the total 2023 NPI production in Indonesia at 1.3 mln t (up 16% y-o-y).

In 2023, **China's NPI output** continued to decline, falling 5% y-o-y to 0.4 mln t amid stronger imports of Indonesian NPI. Nevertheless, despite the growing competition from Indonesian NPI, the Chinese NPI output was supported by robust stainless steel production and showed a much more moderate decrease than expected.

In 2023, **ferronickel output** continued to decline, slipping to 0.3 mln t of nickel (down 13% y-o-y), a record low for more than a decade. The primary factors behind the decrease are: the continuing negative price dynamics (FeNi is traded at a discount to the LME, at a level close to the NPI prices); high production costs; fuel and electricity issues; some major producers' capacity utilisation rates being low. For instance, there were production shutdowns across several sites, including facilities in Guatemala, Serbia, North Macedonia, Greece, and Ukraine. Technical, operational, and financial disruptions were also observed at projects in the Dominican Republic, Myanmar, Japan, and New Caledonia.

NPI production, KT[1]



Source: Company data

[1] Note: Figures may not sum up due to rounding.

Copper market

Key market trends

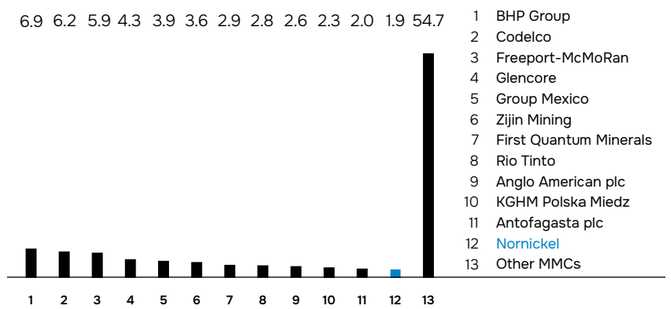
In 2023, factors that affected the copper market included: weaker-than-expected consumption growth in China amid the construction crisis; weak macroeconomic performance across global major economies; tougher monetary policies; low exchange and bonded stocks in China; strikes and social unrest in Latin America; new renewable installed capacity additions; and a stronger push for transport electrification.

During the year, copper prices showed mixed dynamics, trading between USD 7,900–9,400/t. Peak values were recorded in January amid the lifting of COVID-19 restrictions in China and low exchange stocks. Then, driven by higher interest rates in major global economies, fears of investors related to the US public debt ceiling, and weaker-than-expected demand in China, the price retraced down to USD 7,900/t towards the end of the first half of the year. Once the US public debt had been handled, the copper price rebounded to USD 8,700/t in early August. However, macroeconomic challenges, especially in China, continued to have a negative impact on the market, and the price dropped below USD 8,000/t in early October. Late in the year, protests in Panama resulting in the shutdown of the Cobre Panamá mine supported the copper price, which rose to USD 8,600/t.

The total exchange stocks on the LME, SHFE, and CME grew 13% to 215 kt but remain at their historically-low level. Bonded stocks in China plummeted 86% from the start of the year to 8 kt.

In 2023, the LME copper price averaged at USD 8,478/t vs USD 8,797/t in 2022 (down 4%).

Nornickel – No. 12 in copper mine production, %



Sources: producer reports, Company analysis as of late March 2024

Refined copper consumption by region, %

Average annual copper prices, USD/T

Source: London Metal Exchange (cash settlement)

Market balance

In 2023, copper mine output increased by 2% to 22.3 Mt, and refined copper production by 4% to 25.6 Mt. Global refined copper consumption totalled 25.4 Mt, up 2%. Overall, the copper market was balanced in 2023, with a statistical surplus of 130kt, or less than 1% of global consumption.

Consumption

In 2023, global refined copper consumption totalled 25.4 Mt, up 2% y-o-y.

Despite weaker-than-expected demand recovery due to the construction crisis, China ramped up its domestic consumption to 14.5 Mt, or up 6% y-o-y. Imports of refined copper to China fell 4% y-o-y to 3.5 Mt, while imports of scrap and concentrates grew 12% and 9% to 2 Mt and 27.6 Mt, respectively.

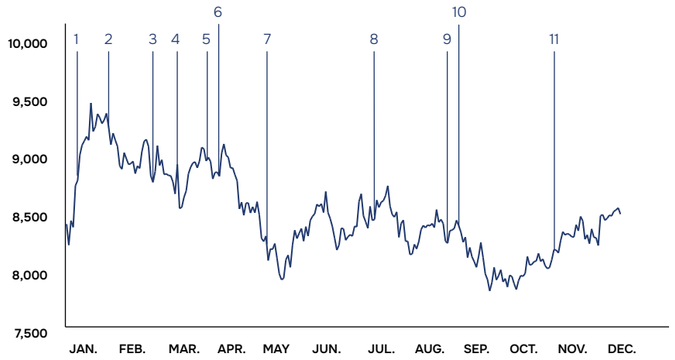
Demand in Europe and North America dropped to 3.1 Mt (down 5% y-o-y) and 2.1 Mt (down 4% y-o-y), respectively, while Asia (excluding China) showed a 1% growth to 5.2 Mt. In Russia, apparent primary copper consumption is estimated at 450kt.

Supply

Global copper production increased 2% to 22.3 Mt driven by the launch of new and expansion of existing projects.

Chile, the world's leading copper producer, slightly cut its copper output in 2023, by 1% to 5.3 Mt, due to technical and operational disruptions faced by Codelco, the country's top producer of the metal. Meanwhile, Peru ramped up its output by 9% y-o-y to 2.7 Mt.

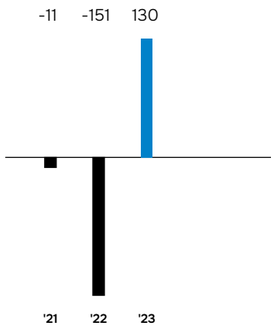
LME copper price in 2023, USD/T



1. China lifts COVID-19 restrictions
2. The Las Bambas mine decides to suspend operations
3. US increases import tariffs for Russian metals
4. Start of the US banking crisis
5. Teck Resources rejects Glencore's 22.5 billion asset acquisition offer
6. BHP buys out OZ Minerals for USD 6.6 billion
7. Chile's senate approves progressive mining royalty bill
8. US sanctions UMMC
9. Udokan Copper starts Cu concentrate production
10. LME stocks are at 2-year highs
11. Cobre Panamá halts operations due to protests of local residents

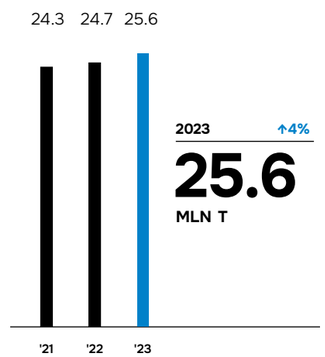
Source: London Metal Exchange, Company analysis

Copper market balance, KT



Source: Company's data as of March 2024

Production of refined copper, MLN T



Source: Company data

Africa managed to increase its output by 9% to 3.6 Mt, with DRC being the top producer through its Ivanhoe's Kamoa-Kakula project.

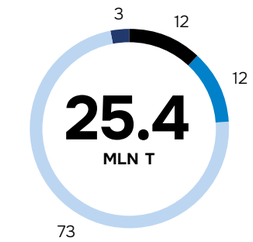
China ramped up its production by 2% to 1.9 Mt, while copper mine production in Indonesia declined 5% to 0.9 Mt.

Production in North America decreased, except for Canada where the output grew 4% to 0.4 Mt. In the US, the decline was 8% to 1.2 Mt, and in Mexico 2% to 0.7 Mt.

Refined copper production grew 4% y-o-y to 25.6 Mt amid new capacity launches in China. In South and Central America, production dropped 4% to 2.5 Mt due to the macroeconomic pressure throughout the year. Africa saw a 16% increase in production to 2.2 Mt, while Asia (including China) ramped up its output by 5% to 15.6 Mt. China's refined copper output increased by 9% to 11.5 Mt, while in Japan it decreased by 1% to 1.5 Mt. Copper output in Europe fell 2% to 3.5 Mt, in North America 4% to 1.5 Mt.

Refined copper consumption by industry

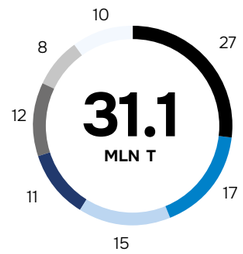
First use, %



- Tubes
- Flat rolled products
- Wire rod
- Other

Source: Company data

End use by industry, %

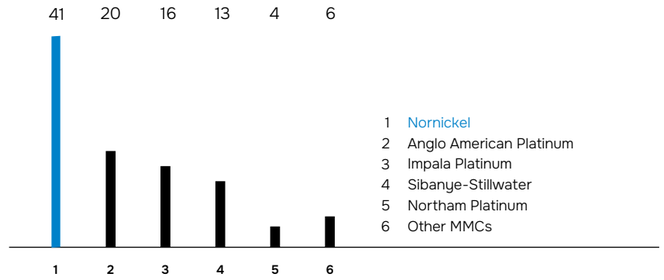


- Construction
- Utility
- Machinery
- Transport
- Consumer goods
- Air conditioning and refrigeration
- Other

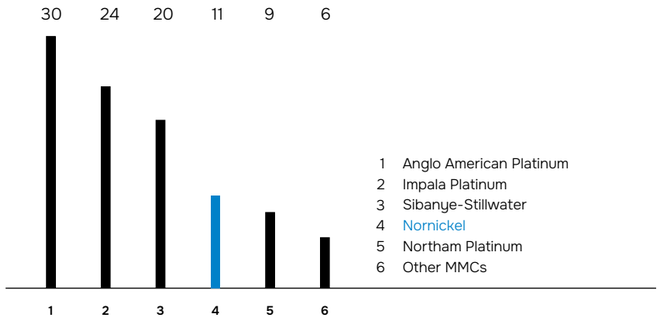
Source: Company data

PGM market

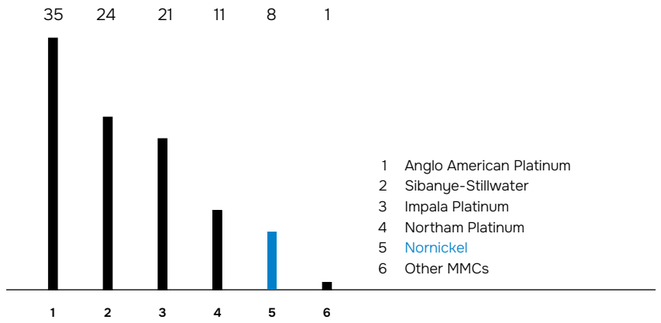
Nornickel – No. 1 in palladium production, %[1]



Nornickel – No. 4 in platinum production, %[1]



Nornickel – No. 5 in rhodium production, %[1]



Sources: producer reports, Company analysis as of early March 2024

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

Key market trends

Palladium

Due to low ICE-powered vehicle sales in the first two months of 2023, the palladium price was declining, getting closer to the important USD 1,300/oz support level up until mid-March, when it entered into a horizontal trend, fluctuating between USD 1,300/oz and USD 1,600/oz levels. The trend change was triggered by the US banking crisis, which has supported prices for precious metals as the market lowered its expectations regarding the terminal rate level.

The price continued its downward movement in May to find the next support level at USD 1,225/oz by the end of June. Later, it started trading sideways, fluctuating between USD 1,225/oz and USD 1,300/oz as inflation expectations eased. The sideways trend continued until the beginning of October, when it made a stepdown to a lower price corridor, reaching its bottom at USD 1,125/oz. This occurred amid the Fed representatives' statements regarding the higher-for-longer interest rates environment.

The price plateaued at USD 1,125/oz up until 7 November, when it fell by 4% to USD 1,080/oz. Fed's hawkish statements yet again pressured all the precious metals. This led the palladium price to fall below the psychological level of USD 1,100/oz, which triggered a 3-year-record daily open interest increase on the NYMEX, dipping palladium down to USD 965/oz. Nevertheless, right after that, palladium bounced back and stabilised above the USD 1,050/oz level.

Late in the year, the palladium price showed increased volatility: the excessive volume of short positions resulted in a short squeeze in December, with prices soaring to USD 1,225/oz and then dropping again to USD 1,050/oz.

Platinum

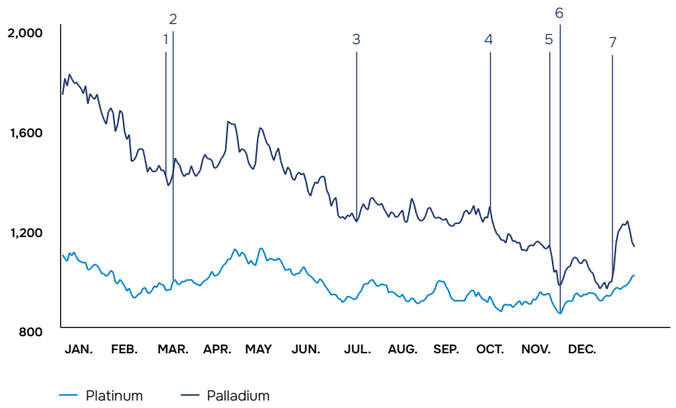
In early January, the platinum price rose slightly above USD 1,100/oz but began to decline by mid-January amid weak car sales. As the automotive market started to recover, the significance of macroeconomic factors in platinum pricing started to strengthen, which led to the platinum price following the upward trend of gold since the end of February.

The price rally continued as the next noticeable resistance level of USD 1,050/oz was broken on 13 April, when South African Eskom announced the return of Stage 6 load-shedding, which drove the price up above USD 1,100/oz level. However, in mid-May, the platinum price started to fall sharply, reaching its bottom at USD 900/oz by late June. This drop was caused, among other factors, by resilience of South African producers to electricity supply disruptions, weak macroeconomic data from China, and hawkish statements by the ECB, which put noticeable pressure on prices for precious metals.

Until the end of October, the price fluctuated between USD 900/oz and USD 1,000/oz, followed by an overall adjustment of prices for precious metals, which led the platinum price to a support level of USD 875/oz.

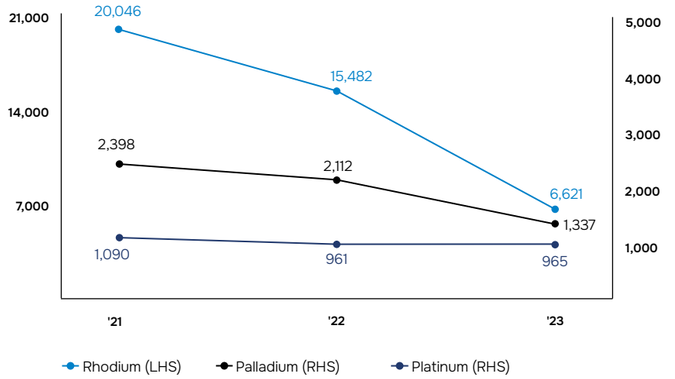
In December, the platinum price soared to above USD 1,000/oz amid statements by South American PGM producers about cutting their output given the depressed PGM basket prices.

Palladium and platinum prices in 2023, LPPM



1. The US and Europe's banking crisis reversed the pricing trend in the PGM market
2. Worsening of the power crunch in South Africa
3. Stabilisation of inflation expectations
4. Fed's hawkish statements
5. Fed representatives' statements regarding the higher-for-longer interest rates environment, and a surge in short speculative positions for palladium
6. Top foreign PGM producers announce production plan cuts amid cost optimisation efforts
7. Short squeeze in the palladium market

Average annual PGM prices, USD/OZ



Source: Company analysis

Market balance

In 2023, the palladium market remained in a significant deficit estimated at 30 tonnes, net of investment demand and consumer stock movement. Sales of stocks by automakers and autocatalyst producers provided additional liquidity to balance the market. Amid stable demand, the deficit increase was mainly driven by lower production. In 2023, palladium supply declined due to lower recycling and output in Russia amid the transition to new mining equipment and scheduled maintenance at Nadezhda Metallurgical Plant and Talnakh Concentrator of the Norilsk Division.

The platinum market moved into a deficit of 12 tonnes in 2023. During the year, global platinum consumption grew amid residual palladium-with-platinum substitution in autocatalytic converters and the launch of new capacities in China's glass industry. Meanwhile, global platinum production stagnated, as lower recycling was offset by the recovery of primary production in South Africa after the lack of smelting capacities and widespread power outages in 2022.

A moderate deficit of 3 tonnes remained in the rhodium market in 2023, which, as in the case of palladium, was balanced by stocks sold by market players. Rhodium production remained at the 2022 level: the recycling fall was offset by the recovery of primary production in South Africa while moderate consumption growth was driven by stronger demand from the chemical and automotive industries.

Consumption

Automotive industry. Exhaust treatment systems account for the bulk of total PGM consumption. In this sector, palladium, platinum, and rhodium are used in catalytic converters, which are mandatory for road transport and legally regulated in most countries. These solutions drastically reduce emissions of hazardous substances.

Due to their unique catalytic properties ensuring effective chemical reactions throughout the entire vehicle life cycle, there are almost no alternatives to PGMs in this sector.

Due to their catalytic properties, palladium and rhodium are the key choice for exhaust treatment systems in petrol vehicles, while platinum is used mostly in diesel vehicles. There has been a partial substitution of platinum for palladium in petrol vehicle catalysts in recent years due to a significant price spread between the metals. The peak level of substitution was reached in 2023, as the narrowed price spread between palladium and platinum leaves no incentives for a short-term substitution.

In 2023, Western regulators decided to adopt new environmental standards in the US and Europe, which will support PGM consumption in the automotive industry in the longer run. Moreover, in late 2023, global demand for EVs began to slow down to the benefit of HEVs (with PGM content even higher than in conventional ICE-powered vehicles), which makes automakers revisit their transport electrification strategies.

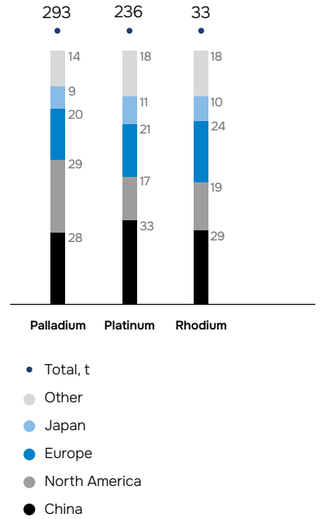
30 TONNES
Palladium market deficit in 2023

12 TONNES
Platinum market deficit in 2023

3 TONNES
Rhodium market deficit in 2023

Source: PGM balance estimate as of March 2024

PGM consumption by region, %



In 2023, palladium consumption in the automotive industry decreased by 1 tonne to 240 tonnes. The reason for sluggish demand for the metal in the automotive industry was that the minor increase in ICE-powered vehicle output was offset by residual palladium-with-platinum substitution in autocatalytic converters.

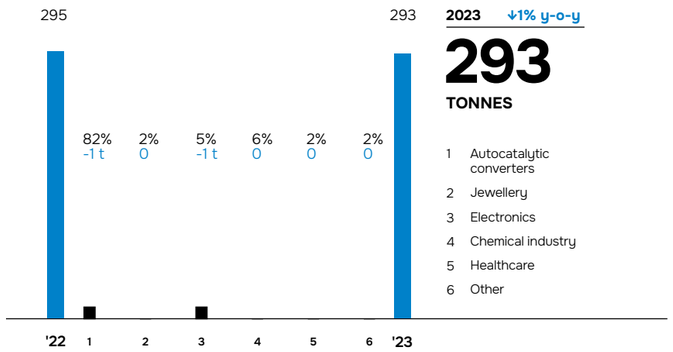
At the same time, palladium consumption in the automotive industry is supported by the declining share of diesel cars in the fleet mix as they are replaced with petrol cars and hybrids, which make greater use of palladium-based catalytic converters for exhaust fumes. The market share of diesel vehicles in Europe (27 EU countries + the UK + European Free Trade Association countries) dropped from 16% to 13% over the year. Despite the declining share of diesel vehicles, global demand for platinum from the automotive industry grew by 12 tonnes in 2023, driven by the recovery in production of trucks and residual substitution of platinum for palladium in petrol vehicles.

Rhodium consumption in this industry grew by 1 tonne amid a slight increase in vehicle production.

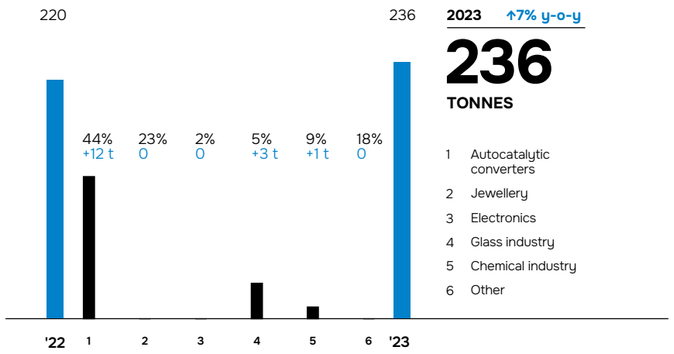
Electronics. Palladium has found its way into the electronics industry primarily as a material for capacitors and motherboards, while platinum is used in hard drives. In 2023, palladium consumption in the electronics industry decreased by 1 tonne to 16 tonnes on the back of weaker sales of household appliances. Platinum demand from the industry stayed flat at 5 tonnes.

Chemical industry. In 2023, the use of platinum in catalysts grew by 1 tonne to 21 tonnes amid the expansion of production capacities in China. Palladium demand in this industry remained at 19 tonnes.

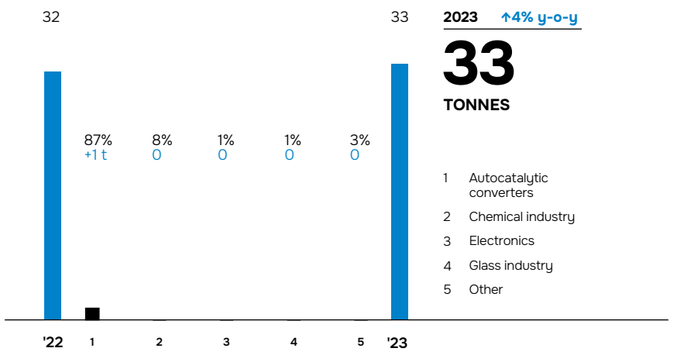
Palladium: consumption by industry, % and by application, T in 2023



Platinum: consumption by industry, % and by application, T in 2023



Rhodium: consumption by industry, % and by application, T in 2023



Healthcare. Palladium consumption in this industry decreased slightly, by 0.2 tonnes to 6 tonnes, driven by the long-term substitution trend, while demand for platinum stagnated at 8 tonnes.

Jewellery. The use of palladium and platinum in jewellery stayed flat at 5 tonnes and 54 tonnes, respectively. Although the macroeconomic uncertainty continues to put pressure on the demand for luxury goods in Europe and the US, jewellery sales growth in India offset the demand fall in developed economies.

Glass industry. Platinum containing products are needed to produce glass fibre and optical glass. Demand for the metal in this industry grew by 3 tonnes in 2023 as China expanded its production capacities.

Investments. Palladium and platinum are widely used as an investment instrument. Physical investments may vary from coins and smaller bars to investments in ETFs. Palladium stocks in ETFs increased by 2.1 tonnes to 16.0 tonnes in 2023, while platinum stocks decreased by 2.4 tonnes to 91.7 tonnes.

Supply

In 2023, primary refined palladium production decreased 1% y-o-y to 198 tonnes, while platinum and rhodium production grew 3% and 4% to 184 tonnes and 24 tonnes, respectively.

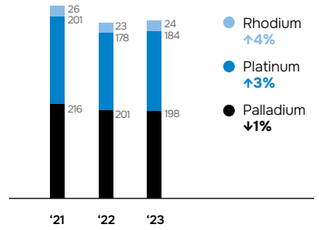
In Russia, the key palladium producer, palladium supply declined (by 3 tonnes) due to the transition to new mining equipment and scheduled maintenance at Nadezhda Metallurgical Plant and Talnakh Concentrator of the Norilsk Division. Platinum production stayed flat at 20.5 tonnes.

In 2023, South Africa, a key platinum and rhodium producer, saw its palladium, platinum, and rhodium output grow by 1 tonne, 5 tonnes, and 1 tonne to 75 tonnes, 133 tonnes, and 20 tonnes, respectively, – primarily because the shortage of smelting capacities was addressed.

Primary palladium and platinum production in Zimbabwe rose by 1 tonne to 14 tonnes and 17 tonnes, respectively, while rhodium output remained flat at 1.5 tonnes. Palladium production in the North America decreased by 1 tonne to 25 tonnes, while platinum production remained at 9 tonnes.

The main sources of recycled PGM supply are scrapped autocatalytic converters. In 2023, recycled palladium, platinum, and rhodium production decreased by 11 tonnes, 7 tonnes, and 1 tonne to 65 tonnes, 40 tonnes, and 7 tonnes, respectively. Such a noticeable decline in recycled supply was due to lower prices for PGMs, a tough monetary policy, stricter KYC policies in the US, and tightening of state regulation of the industry in China.

Primary PGM production, T



Source: Company data

2.1 TONNES

Increase in palladium inventories held by ETFs over 2023

2.4 TONNES

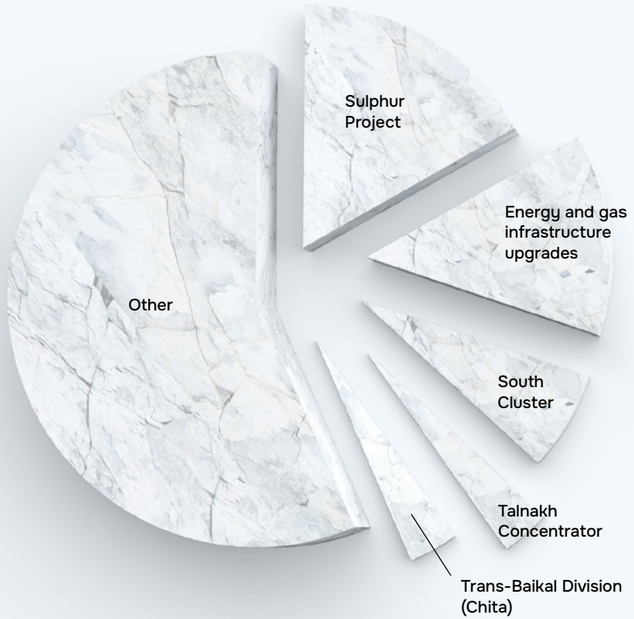
Reduction in platinum inventories held by ETFs over 2023

Strategic investment projects

Structure of the Company's investment programme
for 2023–2024

2023
3.0
USD BN

2024 (plan)
3.0–3.2
USD BN



The Company's key production projects

Sulphur Project at Copper Plant

Reduction in pollutant emissions in line with regulations

TOF-3

Boosting the capacity of Talnakh Concentrator to 18 Mtpa, improving nickel recovery rate

Sulphur Project at Nadezhda Metallurgical Plant

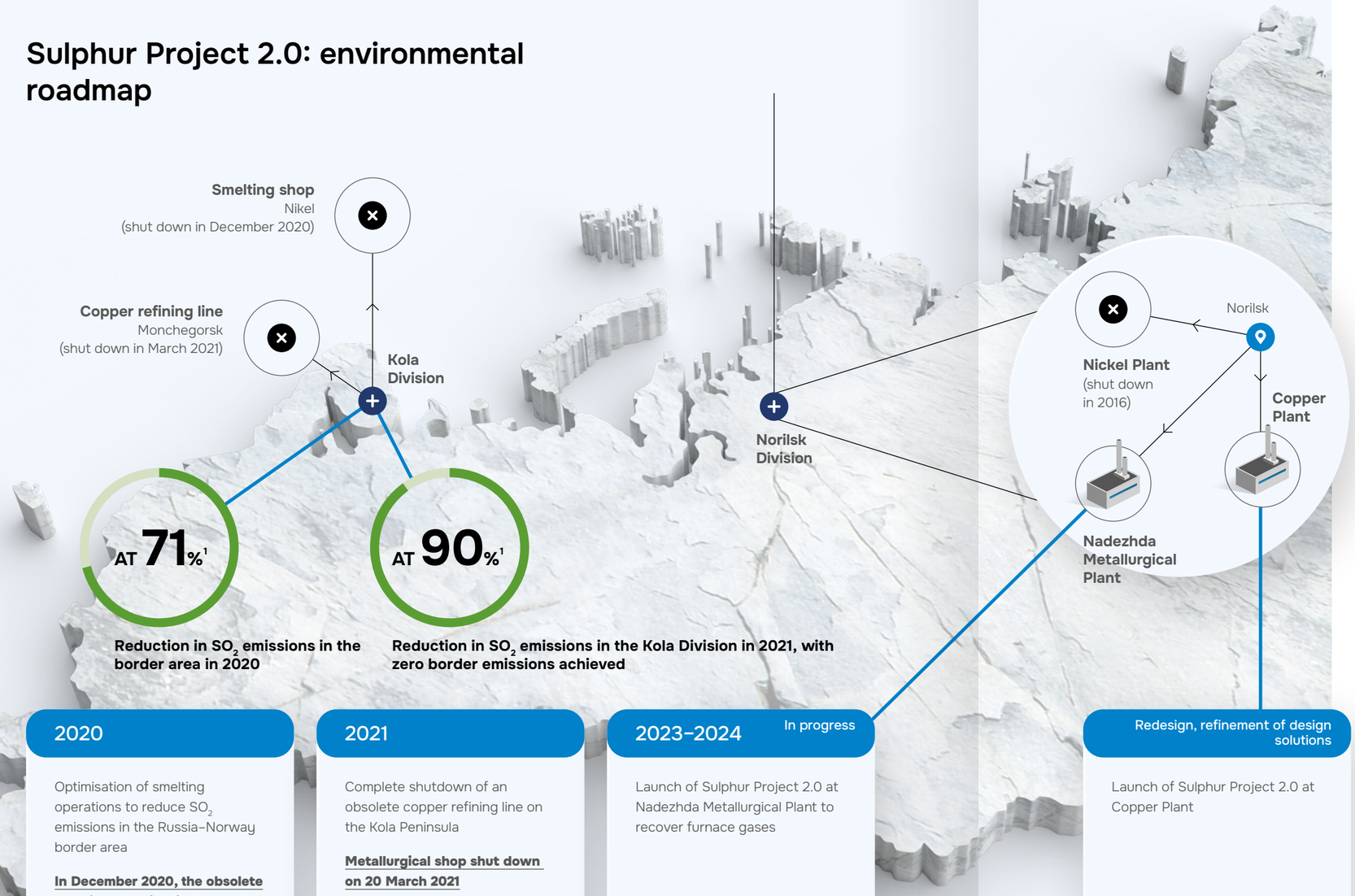
Construction of facilities to recover sulphur dioxide from furnace gases (sulphuric acid production and neutralisation lines) and associated infrastructure

Nickel refining at Kola MMC

Development of long-term solutions to improve performance and optimise the product portfolio

In progress
Redesign
Pre-feasibility study

Sulphur Project 2.0: environmental roadmap



2020

Optimisation of smelting operations to reduce SO_2 emissions in the Russia–Norway border area

In December 2020, the obsolete smelting shop in Nikel was shut down

50%[1]
Reduction in SO_2 emissions in Nikel and Zapolyarny

2x

2021

Complete shutdown of an obsolete copper refining line on the Kola Peninsula

Metallurgical shop shut down on 20 March 2021

90%[1]
Reduction in total SO_2 emissions at the Kola Division facilities

7x

2023–2024 In progress

Launch of Sulphur Project 2.0 at Nadezhda Metallurgical Plant to recover furnace gases

45%[1]
Reduction in SO_2 emissions in the Norilsk Division once the design capacity is reached

~2x

Redesign, refinement of design solutions

Launch of Sulphur Project 2.0 at Copper Plant

up to 90%[1]
Reduction in SO_2 emissions in the Norilsk Division

10x

[1] From a 2015 baseline.

Sulphur Project 2.0: Norilsk Division

Nadezhda Metallurgical Plant

The Sulphur Project at Nadezhda Metallurgical Plant includes technological upgrades to recover SO_2 from off-gases of the main smelting units (flash smelting furnaces) by converting them into sulphuric acid and then neutralising it with limestone to produce gypsum – practically non-hazardous waste to be placed in a gypsum storage facility.

2023 highlights:

- Construction of core and infrastructure facilities under the Sulphur Project at Nadezhda Metallurgical Plant
- Installation and pre-commissioning of process equipment
- Comprehensive testing of the first process line started in October 2023, first sulphur dioxide recovery

Sulphur Project 2.0 facilities at Nadezhda Metallurgical Plant are expected to ramp up to design capacity by the end of 2024

Copper Plant

The Sulphur Project at Copper Plant comprises the development and deployment of technology solutions to reduce SO_2 emissions from Copper Plant operations to the level specified by applicable standards and includes several interconnected initiatives. Amid external restrictions, the Company is taking comprehensive efforts to refine the design solutions to incorporate technology and equipment import substitution options.

2023 highlights:

- Survey and engineering works, refinement of design solutions to meet the need for import substitution of technology and equipment for core facilities
- Positive opinions of the Main Department of State Expertise (Glavgosexpertiza) and State Environmental Review Office were secured for several facilities following expert reviews of the design documents
- Priority upgrades were made as part of a retrofit project for the wet gas cleaning facility

South Cluster:
growing production volumes

Project summary

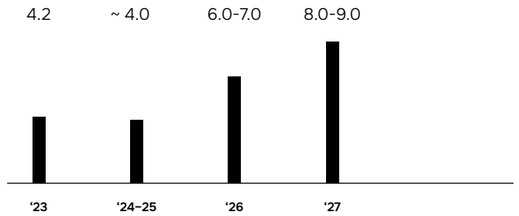
A large existing deposit with more than a 20-year reserve and resource life in the bottom quartile of the PGM cost curve.

137 MLN T[1]
Ore reserves

Project status

- In 2023, positive opinion of Glavgosexpertiza was secured.
- Deployment of an automated control system (ACS) for mine infrastructure facilities was completed.
- Energy infrastructure facilities are in the construction and pre-commissioning phase.
- Construction and development of the underground mine and related infrastructure are in progress.

Ramp-up to design capacity in 2023–2027, MLN T



2027–2028 mining targets

Ore	**9** mln t
Ni	**13+** kt
Cu	**20+** kt
PGMs	**750–850** koz

[1] Calculated to the JORC Code as at 1 January 2024.

Trans-Baikal Division

Project summary

One of the largest greenfield projects in Russia's mining industry. 50.01% owned by Nornickel. Life of mine: 27 years.

Project status

- In 2023, a new major strategic project was launched to upgrade the concentrator's milling section; utilities design documents for the mill construction project were developed and approved.
- Plans for 2024 include commissioning the first growth projects under the long-term strategy – magnetic separation capacity additions and a gold concentrate dehydration unit.

283 MLN T[1]
Ore reserves, grading:
Cu ~0.53% **Fe** ~18.67% **Au** ~0.66 g/t

USD 963 MLN
2023 EBITDA

15 MLN T
Production in 2023, with 0.63% **Cu** content

Production volumes		2023	2024E
Cu in concentrate	kt	69	64-68

Upgrade of Talnakh Concentrator: Stage 3

Project summary

Major capacity expansion based on proven technology to process growing Talnakh ore volumes and unlock strategic optionality of the South Cluster development project.

Project status

- In 2023, the installation of metal frames of ore dressing units and ore feeders was 90% complete, installation of supports for the process equipment is in progress.
- Installation of reinforced concrete and metal structures is in progress. Foundations for process equipment were built.
- Groundworks at power supply and water recycling facilities were completed.
- Plans for 2024 include completing the installation of metal frames and fences for ore dressing units and ore feeders as well as the bulk of process equipment installation works.

Projected implementation timeline[1]

Commissioning date is to be confirmed as it depends on the projected ore production schedule.

8 MTPA
Capacity additions

4%–7%
Expected increase in metal recovery

[1] Subject to import substitution of flotation equipment and the target delivery schedule being met.

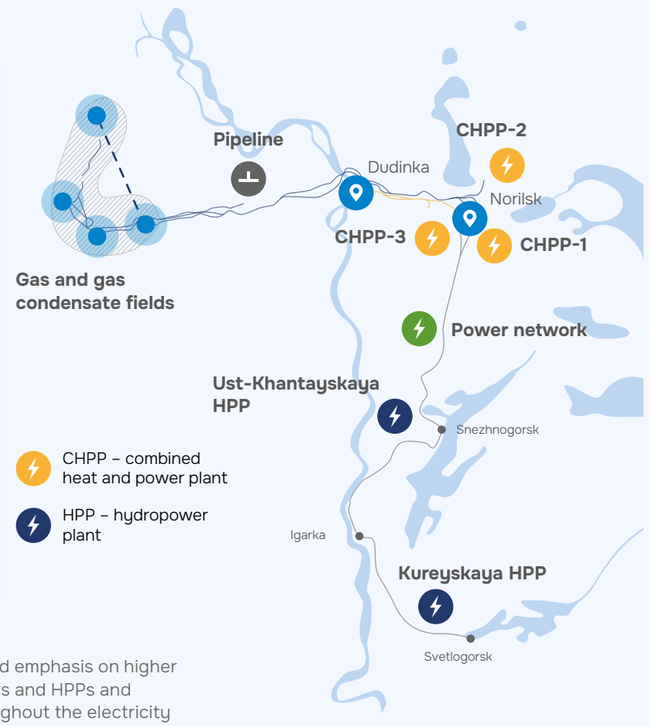
Energy infrastructure upgrade programme

Programme goal: renovate generation facilities and energy grid infrastructure to ensure reliable supply of all types of energy to consumers in the Norilsk Industrial District.

Gas and gas condensate exploration, production, and transportation

- Drilling of five new gas wells at the Pelyatkinskoye gas condensate field.
- In 2023, the bulk of construction and installation works was completed as part of retrofitting a gas pipeline's underwater crossing of the Bolshaya Kheta River.
- In 2023, stage one of retrofitting the Tukhard–Messoyakha–Yuzhno-Soleninskoye–Severo-Soleninskoye methanol pipeline was completed.
- In 2023, at the Severo-Soleninskoye gas condensate field, construction and installation of a booster compressor station were completed, with the station now at the pre-commissioning stage.

Energy infrastructure



Contribution to energy efficiency: reinforced emphasis on higher output of the new generating units at CHPPs and HPPs and comprehensive energy loss reduction throughout the electricity value chain.

Combined heat and power plants

Revamps of Units Nos. 1 and 2 at NTEC's CHPP-2. The new Unit No. 1 was commissioned.

The core equipment of Unit No. 2 of CHPP-2 was completely installed in 2023 and is scheduled for commissioning in 2024.

Also in 2023, three tanks at CHPP-1 and CHPP-2 were installed, and the installation of a tank at CHPP-3 is nearing completion.

Logistics Infrastructure Development Programme

Programme rationale

Growing eastbound shipments of construction equipment and raw materials as the investment programme is entering its active phase, and growing westbound shipments of intermediate products as projects move to the post-investment phase

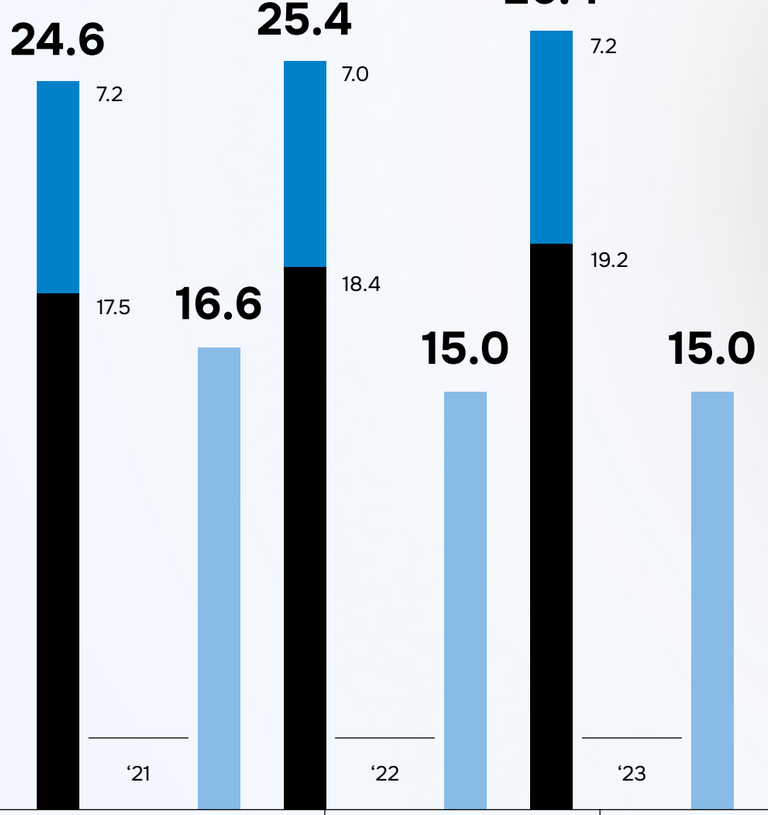
Accelerated pace of production equipment upgrades

Expansion of Northern Sea Route operations and increased freight volumes for major investment projects of other players using the route in the Russian Arctic

The Company owns Dudinka Port, which is Taimyr's main cargo gateway with no reasonable alternative

STAYING STRONG

Group ore output, MLN T



- **Norilsk Division** (copper-nickel sulphide ores)
- **Kola Division** (copper-nickel sulphide ores)
- **Trans-Baikal Division** (gold-iron-copper ores)

BUSINESS OVERVIEW

48 Mineral resource base

57 Operational performance

64 Logistics and distribution

74 Energy assets

76 Innovation and digital technology

84 Financial performance (MD&A)

Mineral resource base

The Group's mineral resources and ore reserves as at 1 January 2024

NORILSK AND KOLA DIVISIONS[1] (copper-nickel sulphide ores)	Ore mln t	Metal grade						Contained metal					
		Ni, (%)	Cu, (%)	Pd (g/t)	Pt (g/t)	Au (g/t)	6PGM[2] (g/t)	Ni (kt)	Cu (kt)	Pd (koz)	Pt (koz)	Au (koz)	6МПГ[2] (koz)
TOTAL PROVEN AND PROBABLE RESERVES	**1,267**	**0.70**	**1.26**	**3.26**	**0.88**	**0.18**	**4.30**	**8,918**	**15,946**	**132,756**	**35,955**	**7,236**	**175,044**
TOTAL MEASURED AND INDICATED RESOURCES[3]	**1,869**	**0.74**	**1.22**	**3.22**	**0.89**	**0.18**	**4.26**	**13,890**	**22,875**	**193,341**	**53,345**	**11,001**	**256,067**
TOTAL INFERRED RESOURCES	**888**	**0.68**	**1.14**	**2.87**	**0.76**	**0.17**	**3.76**	**6,033**	**10,157**	**81,997**	**21,796**	**4,814**	**107,284**
NORILSK DIVISION													
Proven and probable reserves	**1,203**	**0.71**	**1.31**	**3.43**	**0.93**	**0.19**	**4.52**	**8,511**	**15,740**	**132,697**	**35,917**	**7,217**	**174,945**
Proven reserves	**709**	**0.65**	**1.28**	**3.25**	**0.87**	**0.19**	**4.26**	**4,628**	**9,081**	**73,995**	**19,828**	**4,217**	**97,050**
Talnakh ore field, including:	676	0.67	1.33	3.25	0.85	0.19	4.25	4,547	8,975	70,751	18,571	4,083	92,291
• rich	71	2.66	3.26	6.19	1.27	0.19	8.00	1,886	2,313	14,138	2,888	439	18,273
• cuprous	76	0.70	2.36	5.96	1.53	0.37	7.59	530	1,786	14,495	3,727	902	18,457
• disseminated	529	0.40	0.92	2.47	0.70	0.16	3.26	2,131	4,876	42,118	11,955	2,741	55,561
Norilsk-1 deposit (disseminated ore)	32	0.25	0.33	3.11	1.20	0.13	4.56	81	106	3,244	1,257	134	4,759
Probable reserves	**494**	**0.79**	**1.35**	**3.69**	**1.01**	**0.19**	**4.90**	**3,883**	**6,658**	**58,701**	**16,089**	**3,000**	**77,895**
Talnakh ore field, including:	389	0.94	1.64	3.98	1.01	0.21	5.17	3,649	6,386	49,802	12,594	2,617	64,775
• rich	75	2.84	3.80	7.37	1.49	0.28	9.38	2,120	2,836	17,660	3,576	681	22,489
• cuprous	63	0.63	2.18	5.18	1.34	0.32	6.59	399	1,382	10,549	2,720	652	13,433
• disseminated	252	0.45	0.86	2.67	0.78	0.16	3.57	1,131	2,168	21,593	6,298	1,284	28,853
Norilsk-1 deposit (disseminated ore)	105	0.22	0.26	2.64	1.04	0.11	3.89	233	272	8,900	3,495	383	13,121
Measured and indicated resources	**1,569**	**0.75**	**1.39**	**3.82**	**1.05**	**0.21**	**5.06**	**11,822**	**21,866**	**192,869**	**53,044**	**10,829**	**255,236**
Talnakh ore field, including:	1,429	0.80	1.50	3.87	1.02	0.22	5.07	11,431	21,391	177,601	47,077	10,179	232,754
• rich	124	3.46	4.46	8.79	1.81	0.32	11.28	4,308	5,541	35,124	7,254	1,272	45,111
• cuprous	136	0.83	2.74	7.03	1.85	0.43	9.00	1,131	3,725	30,757	8,087	1,870	39,389
• disseminated	1,169	0.51	1.04	2.97	0.84	0.19	3.95	5,991	12,126	111,720	31,736	7,036	148,253
Norilsk-1 deposit (disseminated ore)	140	0.28	0.34	3.39	1.33	0.14	5.00	392	474	15,268	5,967	650	22,482
Inferred resources	**750**	**0.69**	**1.30**	**3.40**	**0.90**	**0.20**	**4.44**	**5,160**	**9,727**	**81,839**	**21,692**	**4,762**	**107,007**
Talnakh ore field, including:	741	0.69	1.31	3.39	0.89	0.20	4.43	5,138	9,697	80,826	21,272	4,720	105,491
• rich	43	3.19	5.31	10.32	2.15	0.56	13.08	1,358	2,265	14,137	2,953	766	17,931
• cuprous	55	0.78	2.37	6.08	1.55	0.37	7.79	427	1,292	10,652	2,713	653	13,658
• disseminated	644	0.52	0.95	2.71	0.75	0.16	3.57	3,353	6,139	56,036	15,606	3,301	73,902
Norilsk-1 deposit (disseminated ore)	9	0.25	0.34	3.62	1.50	0.50	5.41	22	30	1,013	420	41	1,516
KOLA DIVISION (DISSEMINATED ORE)													
Proven and probable reserves	**64**	**0.63**	**0.32**	**0.03**	**0.02**	**0.01**	**0.05**	**407**	**206**	**59**	**39**	**18**	**99**
Proven ore reserves	33	0.59	0.25	0.03	0.02	0.01	0.05	192	82	30	22	9	53
Probable reserves	32	0.68	0.39	0.03	0.02	0.01	0.05	215	124	29	17	9	46
Measured and indicated resources	**300**	**0.69**	**0.34**	**0.05**	**0.03**	**0.02**	**0.09**	**2,068**	**1,010**	**472**	**302**	**172**	**831**
Inferred resources	**138**	**0.63**	**0.31**	**0.04**	**0.02**	**0.01**	**0.06**	**873**	**430**	**158**	**104**	**52**	**277**

[1] 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.

ZABAYKALSKY DIVISION[1] (gold-iron-copper ores)	Ore mln t	Metal grade				Contained metal			
		Cu (%)	Au (g/t)	Ag (g/t)	Fe (%)	Cu (kt)	Au (koz)	Ag (koz)	Fe (koz)
PROVEN AND PROBABLE RESERVES	283	0.53	0.66	2.75	18.67	1,505	6,028	25,074	52,874
MEASURED AND INDICATED RESOURCES	303	0.59	0.65	3.08	21.54	1,801	6,328	30,020	65,268
INFERRED RESOURCES	44	0.6	0.4	3.34	4.29	262	563	44,741	1,891

The Company conducts exploration in three regions of Russia – on the Taimyr and Kola Peninsulas and in the Zabaykalsky Territory. Through exploration at new and existing mine sites, Nornickel drives increases in its high-grade and cuprous ore reserves to support future production from existing sites, viewing it as a key driver of its long-term growth.

>70 YEARS
of resources for sulfide copper-nickel ores

>20 YEARS
of resources for gold-iron-copper ores

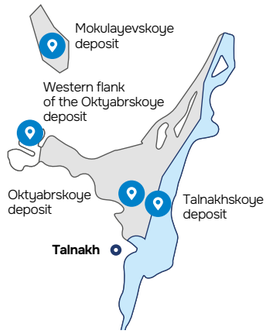
at the current production rate.

Existing ore deposits

Deposits: Talnakhskoye and Oktyabrskoye

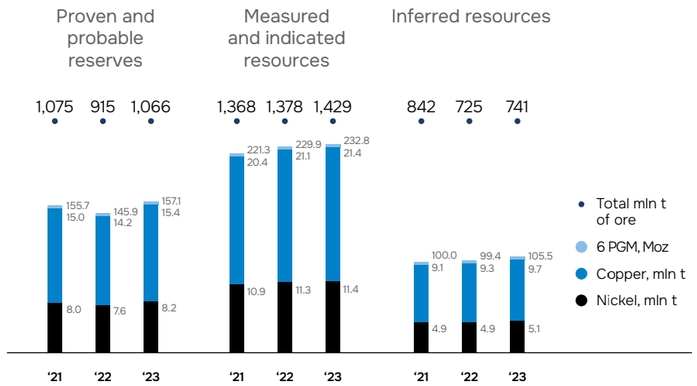
Minerals: copper-nickel sulphide ores.

Location: Krasnoyarsk Territory, Norilsk. Geologically, the deposits are part of the Talnakh Ore Cluster.



The Company has been developing the Talnakhskoye and Oktyabrskoye deposits since the early 1960s, when multiple deposits of high-grade, cuprous, and disseminated ores were discovered within the area. Nornickel is still well supplied with non-ferrous and noble metals from the uniquely rich and vast resource base of the Talnakh Ore Cluster deposits.

Reserves and resources of the Talnakhskoye and Oktyabrskoye deposits

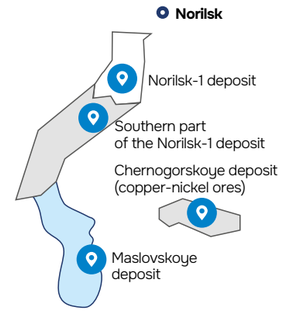


[1] In 2021, SRK Consulting (Russia) completed an estimate of mineral resources and ore reserves using its own methodology.

Deposit: Norilsk-1

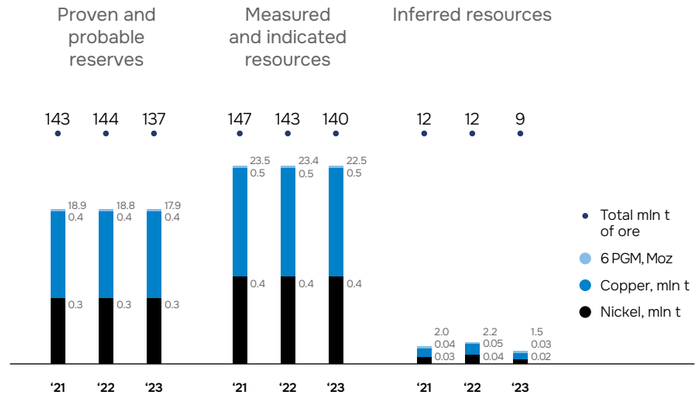
Minerals: copper-nickel sulphide ores.

Location: Krasnoyarsk Territory, Norilsk. Geologically, the deposit is part of the Norilsk Ore Cluster.



The Company has been developing Norilsk-1 since the 1930s, currently mining disseminated ores from the deposit's northern portion. In 2020, the resource estimate for the deposit was updated against new permanent exploratory standards for open-pit and underground mining.

Reserves and resources of the Norilsk-1 deposit



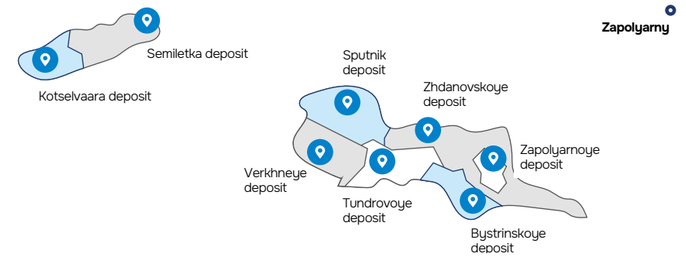
Deposits: Kotselvaara, Semiletka, Zhdanovskoye, Zapolyarnoye, Bystrinskoye, Tundrovoye, Sputnik, and Verkhneye

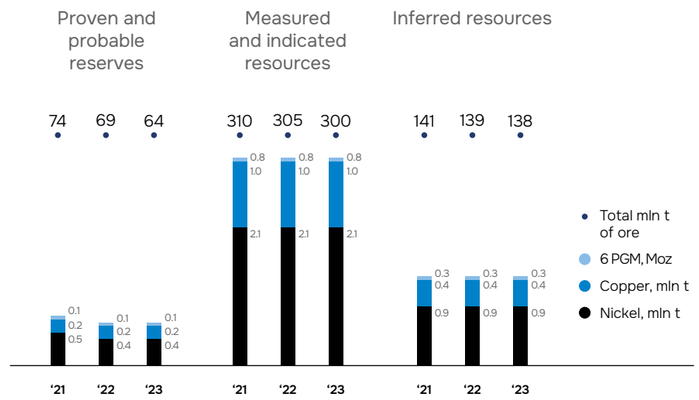
Minerals: copper-nickel sulphide ores.

Location: Murmansk Region, Pechengsky District.

The deposits are located within a 25 km stretch between Nikel and Zapolyarny 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 of the Kola Division

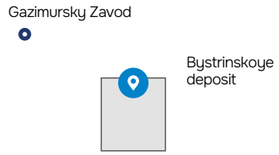




Deposit: Bystrinskoye

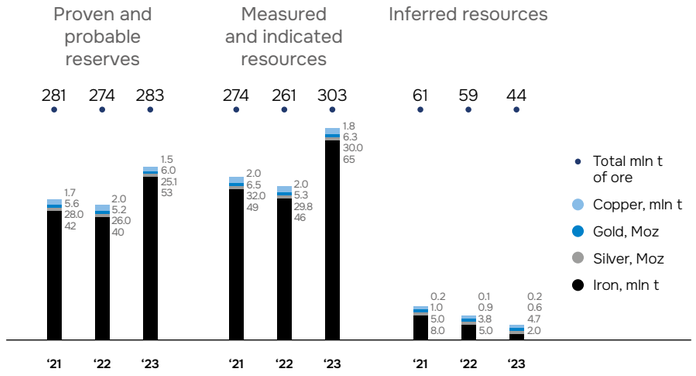
Minerals: gold-iron-copper ores.

Location: Zabaykalsky Territory, Gazimuro-Zavodsky Municipal District.



Developed since 2017, the Bystrinskoye deposit currently comprises two open-pit mines, Verkhne-Ildikansky and Bystrinsky-2, with two more – Medny Chainik and Yuzhno-Rodstvenny – scheduled to come online in 2030.

Reserves and resources of the Bystrinskoye deposit[1]



[1] In 2021, CSA Global completed an estimate of the Trans-Baikal Division's mineral resources in line with the JORC Code based on an updated resource model, which reflects both the complexity and diversity of the deposit's ore types.

Existing non-metallic deposits

Deposit: Mokulayevskoye

Minerals: limestone.

Location: Krasnoyarsk Territory, Taimyrsky Dolgano-Nenetsky Municipal District.

The deposit lies 10 km north-west of the production sites of the Oktyabrsky and Taimyrsky Mines. The exploration and 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. It included the deposit's 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.

In 2022, an exploration campaign was completed to look into dolomite overburden within the Mokulayevskoye limestone deposit. 1.2 Mcm of reserves at the Verkhne-Mokulayevskoye dolomite deposit were confirmed, which will be used to construct roads for a project to develop the limestone deposit.

Its B + C_1 + C_2 balance reserves of limestone are 135 Moz as at 1 January 2024.

135 MLN T

Limestone balance reserves of the Mokulayevskoye deposit

Deposit: Ozero Lesnoye

Minerals: magmatic rock (basalts).

Location: Krasnoyarsk Territory, Norilsk.

Located 22 km to the north of Norilsk, the deposit consists of two adjacent licence areas (No. 1 and No. 2) which share a common boundary. The deposit is developed within licence area No. 1. In 2017, Nornickel obtained a survey, exploration, and mining licence for the magmatic basalt reserves at licence area No. 2.

In 2022, Nornickel updated its reserve estimate for the deposit's two licence areas to 189.2 Mcm. In 2023 a technical project developed to further develop the deposit, enabling mining the two licence areas as one open-pit mine to ensure continuous production.

Deposit: Gribanovskoye

Minerals: sand.

Location: Krasnoyarsk Territory, Taimyrsky Dolgano-Nenetsky Municipal District.

In 2020, Nornickel obtained an exploration and mining licence upon the discovery of the Gribanovskoye deposit, located on the Yenisei River, 22.5 km south of Dudinka. Exploration phase activities were completed, and a pilot operation was started at the deposit in 2020. A state expert review of the feasibility study of permanent conditions and the reserve statement was conducted in 2021.. Sand production was launched in 2022.

Deposit: Gorozubovskoye

Minerals: anhydrite.

Location: Krasnoyarsk Territory, Norilsk.

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 C_2 to C_1. A certificate issued by the State Commission for Mineral Reserves confirmed the parameters of updated standards. The deposit is currently under development.

Deposit: Kayerkanskoye

Minerals: quartzose sandstone, coal, tuffaceous argillite.

Location: Krasnoyarsk Territory, Norilsk.

Since 1967, the Kayerkanskoye deposit has been supplying the needs of the Company's Polar Division plants in materials used to produce fluxes for concentration and metallurgical processes at the metallurgical plants, as well as to manufacture building materials.

The deposit is currently under development.

Growth projects

Deposit: Maslovskoye

Minerals: copper-nickel sulphide ores.

Location: Krasnoyarsk Territory, Norilsk. Geologically, the deposit is part of the Norilsk Ore Cluster.

The Company obtained the licence to explore and mine the Maslovskoye deposit upon its discovery in 2015.

A feasibility study of permanent exploratory standards and a reserve statement for the Maslovskoye deposit were approved by the State Commission for Mineral Reserves, and its copper-nickel ore reserves were included into the State Register of Mineral Reserves. B + C_1 + C_2 ore reserves: 206.8 mln t.

Deposit: Kolmozerskoye

Minerals: beryllium, niobium, lithium, lithium ore, tantalum

Location: Murmansk Region, Lovozersky District

In 2023, Polar Lithium, a joint venture between Nornickel and ROSATOM, obtained an exploration and mining licence for the Kolmozerskoye deposit, located within an area of federal significance.

The balance (economic) reserves of the deposit were confirmed through exploration in 1960 at 75 mln t of ore and 844.2 kt of lithium oxide. In 2023, follow-up exploration was initiated at the deposit to confirm the quality and quantity of the minerals. The exploration is expected to continue in 2024–2025.

Deposit: Bugdainskoye

Minerals: molybdenum and associated elements.

Location: Zabaykalsky Territory, Alexandrovo-Zavodsky Municipal District.

The deposit's mineral reserves, comprising 813 mln t of B + C_1 + C_2 ore reserves, including 600 kt of molybdenum, were included into the State Register of Mineral Reserves in 2007.

Deposit: Bystrinsko-Shirinskoye

Minerals: gold ore. gold ore.

Location: Zabaykalsky Territory, Gazimuro-Zavodsky Municipal District.

In 2023, based on an expert review, further exploration was recommended for the deposit's flanks and deep levels given the high complexity of the ore body structures. The exploration will be followed by a feasibility study and a reserve statement.

Deposit: western flank of the Oktyabrskoye deposit

Minerals: copper-nickel sulphide ores.

Location: Krasnoyarsk Territory, Norilsk. Geologically, the deposit is part of the Talnakh Ore Cluster.

Licensed for prospecting in 2017, the area shares a boundary with the earlier licensed mining area at the Oktyabrskoye deposit. In 2022 and 2023, exploration was carried out on the Zapadny section, where prospecting had earlier confirmed the presence of copper-nickel ores, suggesting potential for reserve additions of 500 kt in high-grade ores, 2,140 kt in cuprous ores, and 546 kt in disseminated ores. Plans for 2024 include conducting laboratory tests and compiling a final report to be followed by a state expert review and a reserve statement approval.

206.8 MLN T
B + C_1 + C_2 copper-nickel ore reserves of the Maslovskoye deposit

Balance reserves of the Kolmozerskoye deposit

75 MLN T
of ore

844.2 KT
of lithium oxide

813 MLN T
B + C_1 + C_2 ore reserves of the Bugdainskoye deposit, including

600 KT
of molybdenum

Deposit: flanks of the Bystrinskoye deposit

Minerals: lode gold, iron ore, copper ore.

Location: Zabaykalsky Territory, Gazimuro-Zavodsky Municipal District.

Licensed for prospecting in 2021, the area shares a boundary with the earlier licensed exploration and mining area at the Bystrinskoye deposit. In 2022 and 2023, to assess the potential for adding gold-iron-copper ore and gold ore reserves to its the mineral resource base, the Company conducted prospecting at the flanks of the Bystrinskoye deposit but found no prospects.

Potential for reserve additions at the Western flank of the Oktyabrskoye deposit:

500 KT
in high-grade ores

2,140 KT
in cuprous ores

546 KT
in disseminated ores

Promising areas and prospects

Area: Yuzhno-Norilskaya

Minerals: copper-nickel sulphide ores.

Location: Krasnoyarsk Territory, Taimyrsky Dolgano-Nenetsky Municipal District.

In 2019, the Company obtained exploration licences for the Morongovsky and Yuzhno-Yergalakhsky copper-nickel sulphide ore prospects within the Yuzhno-Norilskaya area. In 2021 and 2022, prospecting of the areas was completed, including prospecting drilling. A preliminary estimate of the resource potential is currently being prepared. In 2023, an exploration licence was obtained for the adjacent Mezhdurechensky area, where further prospecting is planned.

Area: Mikchangdinskaya

Minerals: copper-nickel sulphide ores.

Location: Krasnoyarsk Territory, Taimyrsky Dolgano-Nenetsky Municipal District.

In 2019 and 2020, the Company obtained exploration licences for the Neralakhsky, Yuzhno-Neralakhsky, Snezhny, Yuzhno-Ikensky, and Medvezhy prospects within the Mikchangdinskaya area. Prospecting drilling conducted in 2021-2023 confirmed that the area has a potential for containing copper-nickel sulphide ores. In 2024, there are plans to assess the effectiveness of mining the identified disseminated copper-nickel mineralisation before continuing the development.

Area: Arylakhskaya

Minerals: copper-nickel sulphide ores.

Location: Krasnoyarsk Territory, Taimyrsky Dolgano-Nenetsky Municipal District.

In 2020, the Company obtained exploration licences for the Yttakhsky, Samoyedsky, and Mastakh-Salinsky prospects within the Arylakhskaya area. In 2021 and 2022, prospecting drilling was completed at prospects identified by geophysical and geochemical prospecting across areal zones. In 2024, after the ongoing laboratory tests are completed, a report on the area's potential and an opinion on further prospecting will be prepared.

Area: Alenuyskaya

Minerals: gold-copper porphyry ores.

Location: Zabaykalsky Territory, Alexandrovo-Zavodsky District.

In 2020, the Company obtained exploration licences for the Severo-Alenuysky and Yuzhno-Alenuysky prospects within the Alenuyskaya area. In 2023, prospecting drilling was completed at the Tsentralno-Alenuysky area. In 2024, after the ongoing laboratory tests are completed, a report on the area's potential and an opinion on further prospecting will be prepared.

Area: Mostovskaya

Minerals: gold-silver ores, copper ore, molybdenum ore.

Location: Zabaykalsky Territory, Mogochinsky District.

In 2020, the Company obtained exploration licences for the Zapadno-Mostovsky and Vostochno-Mostovsky prospects within the Mostovskaya area. In 2022, prospecting drilling was completed at prospects identified by geophysical and geochemical prospecting across areal zones. In 2024, after the ongoing laboratory tests are completed, a report on the area's potential and an opinion on further prospecting will be prepared.

Area: Dogyinskaya

Minerals: gold-copper and gold-silver ores.

Location: Zabaykalsky Territory, Gazimuro-Zavodsky District.

In 2021, the Company obtained exploration licences for the Severo-Dogyinsky and Yuzhno-Dogyinsky prospects within the Dogyinskaya area. In 2022 and 2023, prospecting drilling was completed at prospects identified by geophysical and geochemical prospecting across areal zones. In 2024, after the ongoing laboratory tests are completed, a report on the area's potential and an opinion on further prospecting will be prepared.

Area: Shamyanskaya

Minerals: gold ore, copper-molybdenum ore.

Location: Zabaykalsky Territory, Zabaykalsky District.

In 2021 and 2022, the Company obtained exploration licences for the Zapadno-Shamyansky, Tsentralno-Shamyansky, and Vostochno-Shamyansky prospects within the Shamyanskaya area. In 2023, prospecting drilling was completed at prospects identified by geophysical and geochemical prospecting across areal zones. In 2024, after the ongoing laboratory tests are completed, a report on the area's potential and an opinion on further prospecting will be prepared.

Operational performance

The Company does not mine or manufacture its products in areas of conflict and/or to finance conflicts. Nornickel's mining and production comply with human rights policies.

The Group owns three production assets: the Norilsk and Kola Divisions mining copper-nickel sulphide ores and the Trans-Baikal Division producing gold-iron-copper ores.

The Norilsk Division is the Group's flagship asset, which includes its two major production assets – the Polar Division and Medvezhy Ruchey (100% stake), as well as a number of support enterprises. The Norilsk Division's assets are located on the Russian Taimyr Peninsula – in the Norilsk Industrial District (northern part of the Krasnoyarsk Territory, within the Arctic Circle) – and linked to other regions by the Yenisei River, the Northern Sea Route, and by air.

Located on **the Kola Peninsula** in the Murmansk Region, the Kola Division includes two Nornickel's wholly owned subsidiaries: Kola MMC, a production company; and Norilsk Nickel Harjavalta. Norilsk Nickel 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.

The Trans-Baikal Division is located in the Zabaykalsky Territory of Russia, 350 km away from Chita. The Division includes Bystrinsky GOK (via 50.01% held in GRK Bystrinskoye), the construction of which was started by Nornickel in 2013 (put into commercial operation in 2019). This asset includes open-pit ore mining operations and a mining and processing plant with full infrastructure, including a power line, a 227-km Borzya–Gazimursky Zavod railway line (25% held by Nornickel and 75% by the government), as well as a rotation camp.

The Group also holds 50% in **Polar Lithium**, which develops Kolmozerskoye lithium deposit in the Murmansk Region. The Kolmozerskoye deposit contains about 24% of lithium balance (economic) reserves in Russia. Polar Lithium will produce lithium carbonate and/or hydroxide used in the growing Li-ion battery industry. Exploration is currently underway at the site to prepare a feasibility study of the deposit's permanent conditions, and the process is being developed for the future facilities – a mining and processing plant and a chemical and metallurgical plant.

Norilsk Division

- Polar Division
- Medvezhy Ruchey

Taimyr Peninsula

Kola Division

- Kola MMC

Kola Peninsula, Murmansk Region

- Norilsk Nickel Harjavalta

Finland, Harjavalta

Trans-Baikal Division

- Bystrinsky GOK

The Zabaykalsky Territory of Russia, 350 km away from Chita

Polar Lithium

- Kolmozerskoye lithium deposit

Murmansk Region

Production flow

Mining

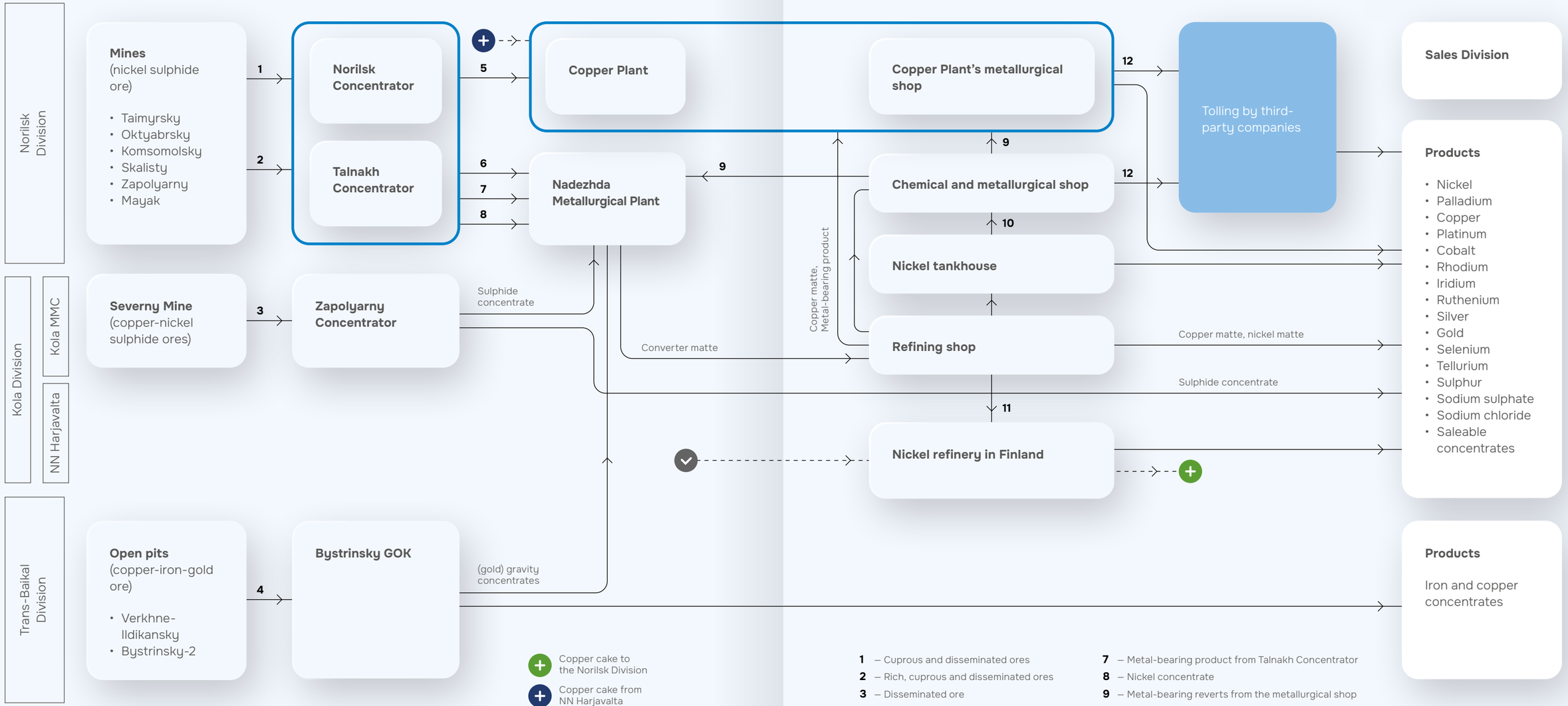
Concentration

Smelting

Refining

PGM refining

Sales



Mining

Average metal content in mined ore

For more details on ore production, metal content, and metal recovery percentage in our concentration and metallurgical operations, please see the Data Book section on the Company website.

The Norilsk and Kola Divisions mine copper-nickel sulphide ores of three grades: high-grade ores with a higher content of non-ferrous and precious metals; cuprous ores with a higher copper content as compared to nickel; and disseminated ores with a lower content of all metals. The Trans-Baikal Division mines gold-iron-copper ores of the Bystrinskoye deposit.

The **Norilsk Division** develops the Talnakhskoye and Oktyabrskoye deposits through underground mining at the Taimyrsky, Oktyabrsky, Komsomolsky, Skalisty, and Mayak Mines. The mines deploy slicing and room-and-pillar methods with the cut-and-fill system, with stopes refilled with backfill mixtures.

The Norilsk-1 deposit is developed by the Zapolyarny Mine of the Norilsk Division through open-pit and underground mining. Underground mining is carried out through sublevel caving using front ore passes and self-propelled vehicles.

In 2023, total ore production by the Norilsk Division was 19.2 mln t, up 0.74 mln t y-o-y (up 4%). High-grade ore output decreased by 9% (–0.6 mln t), while production of cuprous ores decreased by 11.0% (–0.6 mln t). The decline in ore output was caused by self-propelled diesel machinery breakdowns, lack of spare parts, and undersupply of new mining equipment. Disseminated ore production increased by 34% (+1.9 mln t). The year-on-year increase in the production of disseminated ores was driven by higher ore production at the Zapolyarny Mine, which only produces disseminated ores, as was anticipated in the mining option.

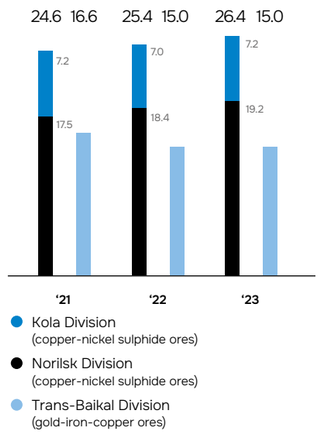
The **Kola Division** mines disseminated ores at Kola MMC, which operates four deposits: Zhdanovskoye, Zapolyarnoye, Kotselvaara, and Semiletka. Kola MMC uses various ore mining methods. The Zhdanovskoye and Zapolyarnoye deposits use three mining methods: gravity caving with front ore passes, sublevel caving with room-and-pillar ore removal, and room-and-pillar mining. The Kotselvaara and Semiletka deposits primarily use stoping from sublevel drifts and sublevel caving. Room-and-pillar short-hole and long-hole stoping is also used on a limited scale.

In 2023, Kola MMC produced 7.2 mln t of ore (up 3% y-o-y). The increase in ore production (+0.2 mln t) was driven by the concentrator tapping into off-balance (sub-economic) ore reserves with partial replacement of the output from the Kaula-Kotselvaara mine due to preparations for mothballing in 2024.

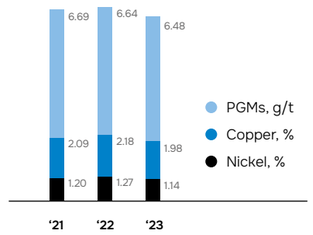
The **Trans-Baikal Division** mines gold-iron-copper ores of the Bystrinskoye deposit through open-pit mining at the Verkhne-Ildikansky and Bystrinsky-2 mines.

In 2023, total ore production by the Trans-Baikal Division was 15.0 mln t, virtually flat year-on-year.

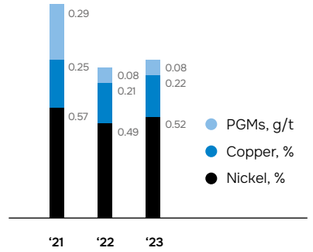
Group ore output, MLN T



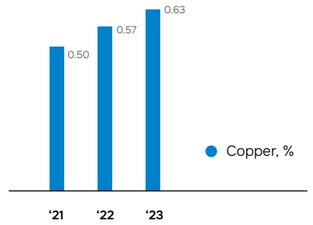
Norilsk Division



Kola Division



Trans-Baikal Division



Concentration

Concentrators

- Talnakh Concentrator, Norilsk Division
- Norilsk Concentrator, Norilsk Division
- Zapolyarny Concentrator, Kola Division
- Bystrinsky GOK, Trans-Baikal Division

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, ore processing volumes at Talnakh Concentrator stayed flat at 10.7 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 8.4 mln t, up 0.7 mln t y-o-y.

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

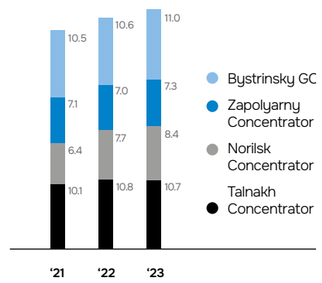
Zapolyarny Concentrator processes disseminated ores from Kola MMC deposits. The concentrator produces nickel sulphide concentrate, which is then sold via third parties or partially shipped to the Norilsk Division for further processing. In 2023, the concentrator processed 7.3 mln t of ore, up 0.3 mln t y-o-y due to an increase in open-pit ore production.

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 of ore, up 0.4 mln t y-o-y.

Metals recovery in concentration, %

Division	2021	2022	2023
NICKEL			
Norilsk Division	84.3	85.3	**84.7**
Kola Division (Kola MMC)	67.7	67.4	**66.5**
COPPER			
Norilsk Division	95.5	96.3	**96.2**
Kola Division (Kola MMC)	76.8	73.7	**73.1**
Trans-Baikal Division	86.9	88.1	**88.8**
PGMS			
Norilsk Division	85.6	85.8	**85.3**

Concentrators' throughput, MLN T



10.7 MLN T

Ore processing at Talnakh Concentrator in 2023

0.7 MLN T

Growth in ore processing volumes at Norilsk Concentrator in 2023

0.3 MLN T

Growth in ore processing volumes at Zapolyarny Concentrator in 2023

0.4 MLN T

Increase in ore processing volumes at Bystrinsky GOK from 2022

Smelting and refining

Downstream facilities

- Nadezhda Metallurgical Plant, Norilsk Division
- Copper Plant, Norilsk Division
- Metallurgical shop of Copper Plant, Norilsk Division
- Chemical and metallurgical shop, Kola Division
- Refining shop, Kola Division
- Nickel tankhouse, Kola Division
- Refinery, Kola Division, Harjavalta

Production chain

Norilsk Division

The produced nickel concentrates, including pressure oxidised sulphide concentrate[1], 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.

Kola Division (Kola MMC)

Kola MMC's refining facilities in Monchegorsk refine converter matte from the Norilsk Division[1]. 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 Norilsk Nickel 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.

The production of nickel cathodes at Tankhouse 1 and Tankhouse 2 results in semi-finished products with a high content of precious metals. These semi-finished products are processed at the chemical and metallurgical shop to produce precious metal concentrates. The production of nickel cathodes at Tankhouse 1 and Tankhouse 2 also generates primary cobalt cake, which is used by the cobalt section to produce saleable cobalt concentrate and cobalt cathodes.

Kola Division (NN Harjavalta)

Norilsk Nickel 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.

Precious metals produced by Nornickel are refined under tolling agreements by third-party companies.

Metals recovery in smelting, %

Division	2021	2022	2023
NICKEL			
Norilsk Division[3]	94.4	95.1	**94.9**
Kola Division (Kola MMC)[4]	98.3	98.4	**98.5**
Kola Division (NN Harjavalta)[4]	98.1	97.8	**98.3**
COPPER			
Norilsk Division[3]	95.1	95.4	**95.6**
Kola Division (Kola MMC)[4]	99.5	99.6	**99.2**
Kola Division (NN Harjavalta)[4]	99.8	99.8	**99.8**
PGMS			
Norilsk Division[3]	96.5	96.6	**96.7**
Kola Division (Kola MMC)[4]	92.9	97.8	**98.1**
Kola Division (NN Harjavalta)[4]	99.9	99.9	**99.9**

[1] Hydrometallurgical product.
[2] The production and processing of own converter matte have been discontinued following the shutdown of the smelting shop in December 2020.
[3] Feedstock to finished products.
[4] In refining, converter matte to finished products.

Products

Production volumes by Bystrinsky GOK

Products	2021	2022	2023
Ore processing (mln t)	10.47	10.60	**11.02**
Copper (in copper concentrate, t)	67,798	67,240	**68,958**
Copper content in the concentrate (%)	22.87	22.97	**22.96**
Iron ore concentrate (kt)	2,582	2,545	**2,892**
Iron content in the concentrate (%)	63.72	64.68	**65.09**

Finished product output by the Group

Saleable metals	2021	2022	2023
Nickel (kt)	193.0	219.0	**208.6**
including from own feed	189.9	218.7	**208.2**
Copper (kt)	406.8	433.0	**425.4**
Palladium (koz)	2,616	2,790	**2,692**
Platinum (koz)	641	651	**664**

The Group's saleable products

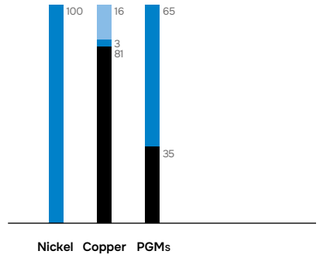
Norilsk Division:
- Copper cathodes
- Commercial sulphur
- Selenium
- Precious metals

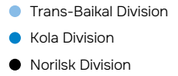
Kola Division:
- Nickel cathodes and carbonyl
- Nickel sulphide concentrate
- Nickel matte
- Copper matte
- Cobalt cathodes, cobalt concentrate
- Precious metals
- Sulphuric acid

Norilsk Nickel Harjavalta:
- Nickel salts, briquettes, cathodes, powders, and solutions
- Copper cake
- Cobalt sulphate, cobalt solutions

Trans-Baikal Division:
- Iron ore concentrate
- Copper concentrate

Finished products by division in 2023, %





Logistics and distribution

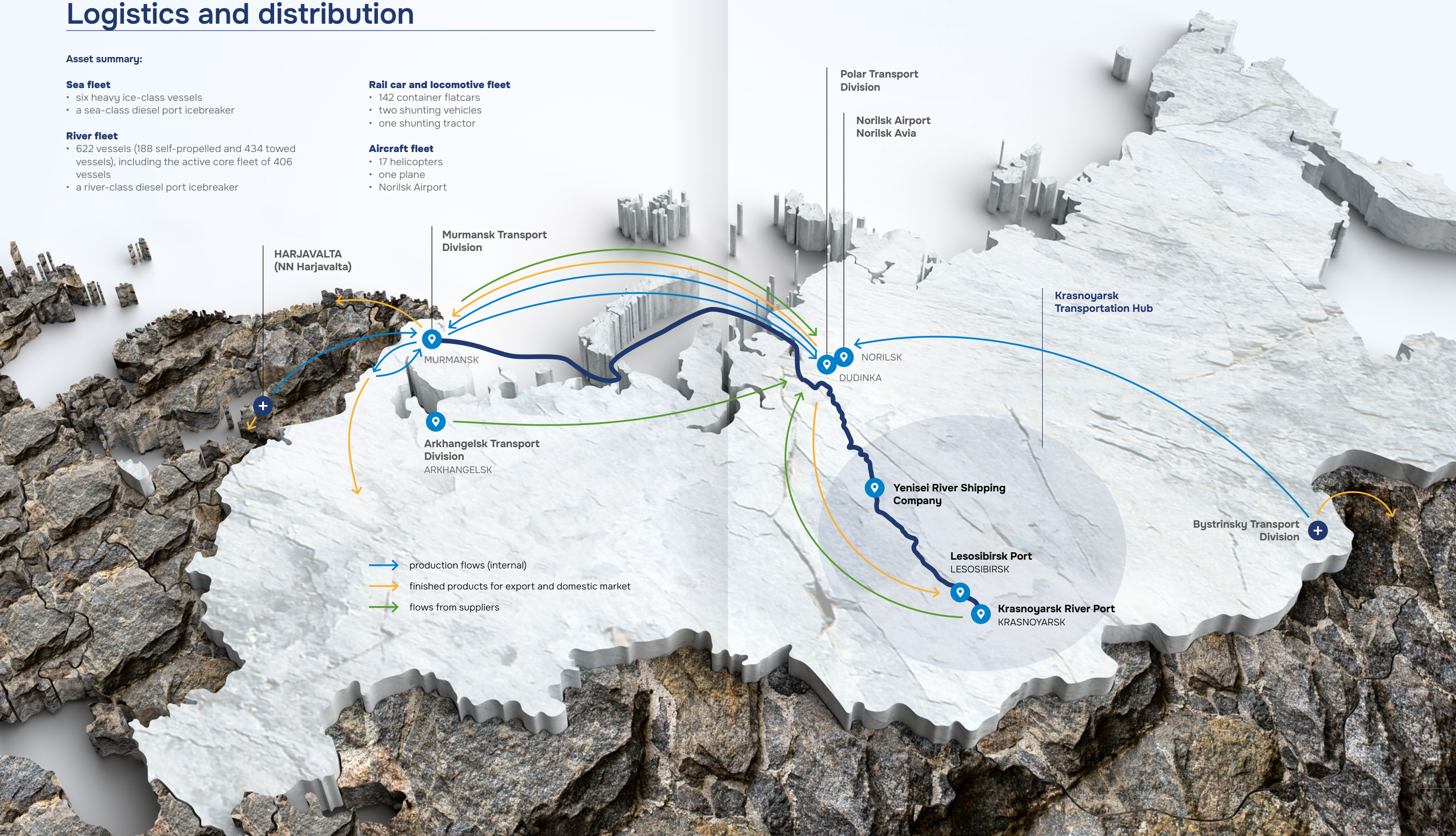
Asset summary:

Sea fleet
- six heavy ice-class vessels
- a sea-class diesel port icebreaker

River fleet
- 622 vessels (188 self-propelled and 434 towed vessels), including the active core fleet of 406 vessels
- a river-class diesel port icebreaker

Rail car and locomotive fleet
- 142 container flatcars
- two shunting vehicles
- one shunting tractor

Aircraft fleet
- 17 helicopters
- one plane
- Norilsk Airport



The **Arkhangelsk Transport Division** is responsible for smooth year-round transshipment services for Nornickel's cargoes via the Arkhangelsk sea port, which is conveniently linked to other Russian and foreign regions by road, air, and rail.

The **Krasnoyarsk Transport Division** is responsible for the transportation and forwarding of Nornickel's cargoes and for the carriage of precious metal concentrates.

Nornickel-YRSC was established in 2019 to coordinate the operations of the Krasnoyarsk and Lesosibirsk ports and Yenisei River Shipping Company, which operate a strictly seasonal service due to the Yenisei River freezing over in winter. When ice flows pass, the ports are used to transship Nornickel's cargoes to Dudinka, including crushed stone, clinker, materials, equipment, and socially significant cargoes (as part of the Northern Deliveries programme).

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

Krasnoyarsk River Port is one of the largest ports in the Yenisei basin. The port transships cargoes delivered by road, rail, and water. The port has three operating areas – Yenisei, Zlobino, and Peschanka.

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

- The only dedicated port on the Yenisei 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 navigation periods)
- Has access to the federal Baikal Highway (M53) via the Krasnoyarsk–Yeniseisk Highway
- A railway to Achinsk links Lesosibirsk to the Trans-Siberian Railway

Nornickel has a unique Arctic fleet capable of breaking through Arctic ice up to 1.5 m thick without icebreaker support, which enables the Company to provide year-round dry and liquid cargo shipping services between sea ports.

In 2023, Nornickel also shipped liquid cargoes, including by the Company-owned tanker, Yenisei. The transport services involved export of gas condensate from the Pelyatkinskoye field, delivery of petroleum products to the Norilsk Industrial District, and commercial trips to other destinations.

In addition to sea transportation with its own fleet of Arc7 heavy ice-class vessels, the Company engages a fleet of lower ice-class Arc4/Arc5 vessels to transport additional cargoes for major investment projects in Taimyr. These sea vessels require icebreaker escort in the Yenisei River, the Yenisei Bay, and the Kara Sea between November and May, with three icebreakers providing this support.

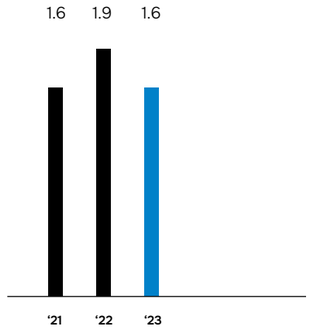
Nornickel signed a long-term contract with ROSATOM (valid until 2041 and renewable until 2051) to engage a nuclear-powered Project 22220 icebreaker with a shaft power of about 60 MW to make sure the Company's strategic needs for icebreaker support are fully covered.

The Company operates Dudinka Port on the Taimyr Peninsula as well as a fleet of port service vessels, which includes towboats, motorboats, a bunker barge, and a floating crane. Dudinka Port is Taimyr's main cargo gateway with no reasonable alternative. In addition, Dudinka is the world's only port that gets flooded every year during the spring thaw. From November to May, its water area and the Yenisei 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.

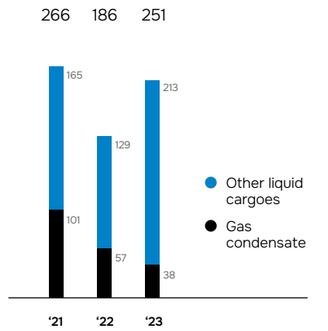
The port transships cargoes for the Norilsk Division and residents of the Taimyr Peninsula. In summer, river vessels deliver equipment and materials (sand, round timber, clinker, process materials, etc.) for production needs from Krasnoyarsk and Lesosibirsk. Converter matte and metal products are shipped by sea from Dudinka throughout the year.

To reduce its environmental footprint, the Company implements programmes aimed at reducing fuel consumption and preventing contamination of the Dudinka and Yenisei Rivers and finances the release of fry.

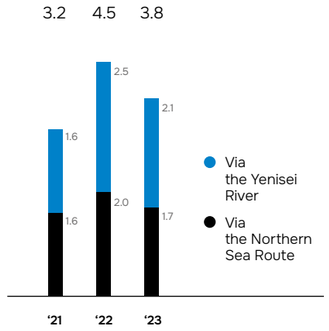
Dry cargo transportation by fleet, MLN T[1]



Liquid cargo shipments, KT[1]



Cargo traffic at Dudinka Port, MLN T



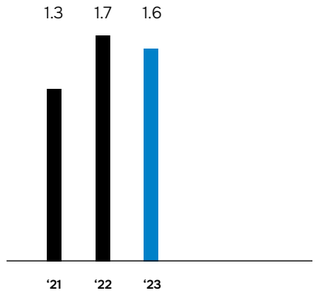
[1] Includes a third-party fleet

Nornickel's own terminal in Murmansk ensures year-round transshipment of the Company's finished metal products for export, acceptance of converter matte from Dudinka and its shipment by rail to the Kola Division, and shipment of semi-finished products to Dudinka for further processing at the Norilsk Division facilities as well as of cargoes to meet the needs of the Norilsk region. Along with sea transportation, the Company's Murmansk-based operations include transport and freight forwarding services, cargo transshipment and storage, as well as railway services between Murmansk and Monchegorsk.

The Company also owns the airline Norilsk Avia and Norilsk Airport, offering air transportation services to local communities across the Taimyr Peninsula. The air carrier has its own fleet of 17 helicopters and one aircraft and provides air services related to the operations of the Norilsk Nickel Group, emergency medical flights, search and rescue operations, and local passenger services.

Norilsk Airport is the only transport infrastructure facility that provides year-round connections between the Norilsk Industrial District and other Russian regions.

Cargo traffic at the Murmansk terminal, MLN T



Distribution

Nornickel's products are listed on the London Metal Exchange and the Shanghai Futures Exchange.

In 2023, the Company supplied its products to 28 countries around the world, with Asia becoming the leading consumer on total portfolio, although Europe retained the considerable share on some of the products. The share of supplies to the Russian market also increased.

28 COUNTRIES
getting supplies of Company products in 2023

Sales and distribution strategy

As the world's largest producer of several metals, Nornickel sees distribution as one of its core activities alongside production. The key objective of sales and distribution is to ensure current and future liquidity across the entire product range.

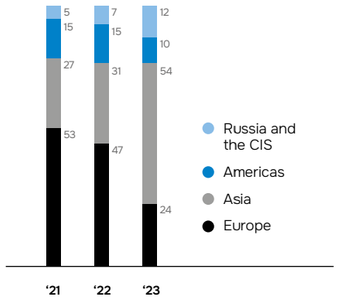
Nornickel places an emphasis on strong positioning within the end markets for its core products. The Group operates its own global network of sales offices in Russia, China, and Switzerland[1].

The Company's market reach enables it to respond promptly to the needs of these offices in terms of product quality and services as well as to changes in the market environment and other external conditions affecting sales and distribution. Nornickel favours direct sales to industrial customers while also engaging other professional market participants willing to partner with the Company to promote its products.

Nornickel has traditionally positioned itself as a responsible supplier promoting the sustainable development of end markets for its core products. Consumers can rely on Nornickel for a stable supply of and unrestricted access to consistent-quality products in the volumes required by the market, whatever the external challenges.

The Company's nickel product sales mix matches the global nickel consumption mix, with the production of stainless and specialty steels and alloys as well as electroplating as its main segments. At the same time, the battery sector is increasingly gaining importance.

Revenue metal sales by region, %



[1] The US-based sales company was sold to an independent operator in 2023.

To capture the expected mid- and long-term growth in nickel demand from the battery sector, Nornickel continues implementing a number of initiatives to enhance and expand its existing product range supporting the battery supply chain. Growing Indonesian nickel supply could limit implementation of these initiatives. Nevertheless, the competitive advantages of Norilsk Nickel products, such as their low carbon footprint and full compliance with generally accepted international environmental standards, make it possible to reach a certain presence in the market, which traditionally pays attention to the specified ESG metrics to ensure sustainable EV production.

This is a major competitive advantage of Nornickel's products that have one of the lowest carbon footprints and fully meet all internationally recognized environmental standards.

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

Electric vehicles and batteries are a priority segment in the nickel consumption mix, as its growth rates suggest that in the long term, it can become the key source of demand for high-grade nickel. Given the Company's wide range of low-carbon nickel products, high reliability of supply, own global sales platform, and long-term experience of partnering with automakers and chemical companies, Nornickel sees itself as a key element in the development of the electric-vehicle market and related value chains. The Company is strongly focused on building long-term relationships with key market participants and considers various forms of cooperation with the battery sector players. Nornickel also conducts research in battery recycling and works on developing integrated solutions for the future battery supply chain.

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

The automotive industry and the production of other process catalysts, as well as the jewellery and medical products industries traditionally remain the key market segments for **platinum group metal (PGM) products.**

At the same time, Nornickel engages in various initiatives to further promote the use of palladium in various future industrial applications.

As the world's largest producer of palladium, the Company keeps favouring relations with big end consumers and key participants in **PGM market** to sustain strong demand over the long term. Nornickel is actively developing palladium applications in potential new technologies, including hydrogen energy, new chemistry, solar energy, and other areas to expand palladium usage going forward.

Product sales

In 2023, Nornickel once again confirmed its reputation as a reliable supplier of high-quality products. The Company prioritises the offering of high-quality products and related services to maximise customer satisfaction. Procedures for managing substandard products are in place at Nornickel production sites to ensure that no sub-par products are supplied to customers. The handling of such products, responses to customer complaints, and corrective actions are governed by documented procedures compliant with ISO 9001:2015. With regard to the procedure for acceptance of products by consumers, the Company is guided by the instruction on the procedure for acceptance of products in terms of quantity and quality, as well as by the product supply contract.

Every year, the Company conducts customer satisfaction analysis in line with ISO 9001 to get feedback from its customers. Customer feedback is reviewed and incorporated into initiatives to improve product and service quality. Nornickel is committed to continuous improvement. The integrated index of customer satisfaction with the Company's products and services was fully in line with our target for 2023.

Despite the geopolitical challenges and related logistical issues, the Company successfully met all its obligations to customers in 2023, having never failed to deliver on its commitments. This solid performance was to a large extent driven by Nornickel's long-standing policy of independent positioning in the market and building direct relationships with market players.

In 2023, we developed and set up backup routes to ensure uninterrupted product supplies to consumers. In addition, during the year, Nornickel retained considerable part of its customers and established new relationships in new markets, promptly adding them to the Company's customer portfolio.

Consumer personal data protection

Protection of personal data at Nornickel is governed by the Regulations on Personal Data Protection and the Personal Data Processing Policy developed in line with legal requirements. Documents provided by consumers and containing personal data, among other information, are stored in the information system in line with applicable data protection requirements.

In 2023, there were no data-related incidents involving consumers personal data.

Procurement and responsible supply chain

Approach to management

Nornickel takes a responsible approach to attracting suppliers and consumers, prioritising partners who comply with applicable laws and regulations, ensure safe working conditions, and care for the environment. The Company expects its suppliers to comply with international best practices and standards in sustainability and environmental stewardship.

To mitigate operational and financial risks and costs, reduce working capital, and improve supply reliability and cadence, the Company applies procurement policies. As of the end of 2023, there were 48 category procurement policies in place, four of which were updated during the year.

In the reporting year, the Company also approved a programme to improve procurement efficiency aimed at:

- optimising the costs of inventory, works, and services (zero inflation)
- meeting working capital targets in terms of inventory reduction
- increasing supplier competition
- increasing transparency and strengthening control of procurement procedures.

The following key documents guide supply chain and procurement management at Nornickel:

- Business Ethics Code
- Human Rights Policy
- Supplier Code of Conduct
- Responsible Sourcing Policy
- Internal corporate procurement standards

Procurement

Nornickel engages with suppliers via open tender procedures. Nornickel's procurement system focuses on timely and fully meeting the Company's needs for required materials and services of specified quality and at an acceptable price.

Procurement process

Nornickel's procurement process is certified to international standards ISO 9001 and ISO 14001.

The Company procures over 40 aggregated purchasing categories, from heavy industrial equipment to food. In doing so, Nornickel provides equal competitive opportunities for large, medium, and small businesses alike, guided by generally accepted standards of fair business practices and the principles of avoiding conflicts of interest. To maximise procurement effectiveness and transparency, the Company's procurement activities are mostly centralised at its Head Office through automated systems and electronic trading platforms.

Depending on the budgeted cost, procurement can follow a tendering, simple, or simplified procedure. Based on the materiality and parameters of purchases, the qualification results and the winning bidder in the procurement process are approved by the collective procurement body composed of representatives from various functions of Nornickel. The contract with the winning bidder is signed in accordance with the approved results of the procurement procedure.

All details of the Group's centralised procurement transactions are published on the Company website.

In 2023, procurement by collective bodies of the Head Office (tender committee, tender commissions) amounted to about RUB 99 billion.

As the Company aims to work with reliable suppliers meeting their obligations regarding delivery dates and the quantity and quality of products supplied, during the procurement procedure, all suppliers undergo mandatory qualification screening against formalised criteria and rules.

Nornickel gives preference to local suppliers to provide social support to 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.

Nornickel has in place a hotline that can be used by any stakeholder to report any violations.

Nornickel has in place a supplier relationship management (SRM) system to drive seamless and effective engagements with suppliers.

Supplier engagement

Efficient and convenient communications with suppliers at Nornickel are enabled through its SRM procurement management system that gives suppliers anytime access to information about the Company's procurement procedures. As at 2023-end, over 11 thousand potential suppliers were accredited in the system. The Company also engages with original equipment manufacturers (OEMs) to accredit them on this e-platform.

To raise market awareness and attract new suppliers, the automated management system (SAP SRM) was integrated with the TEK-Torg electronic trading platform. Information on procurement by the Company's Russian subsidiaries is also published on the TEK-Torg platform.

Sign-up for the supplier relationship management (SRM) system is free of charge and does not impose any obligations on users.

One of the channels used by the Company to interact with suppliers is the Suppliers section on its website, containing key information on the procurement principles and procedures, planned needs, as well as announcements and invitations to participate in tenders.

Nornickel procurement specialists are active members of the professional community in their respective purchasing categories, attending industry exhibitions and participating in conferences.

The Company's priority in driving supplier engagement is to provide robust feedback mechanisms, which are also implemented, improved, and enhanced in the supplier's personal account in SRM. Designed for communicating with counterparties during contract execution, the system is continuously improved to optimise and boost performance for all users. Suppliers can get updates on Nornickel's procurement procedures and opportunities by communicating online with procurement teams in all product categories in Nornickel's SRM procurement management system.

In their personal accounts, counterparties can manage the documents generated for contract purposes, track work stages, and exchange files and instant messages with contract owners to request clarifications and accelerate communication. The service helps to keep suppliers better informed about contract execution progress while also ensuring transparency of transactions and significantly speeding up daily communication between the parties. All supply terms and conditions are specified in the contracts or agreements signed with suppliers.

The supplier's personal account also enables sign-up for other services, such as electronic document management, factoring, and dynamic discounting, forging a stronger partnership.

Nornickel is also working on expanding and supplementing the list of services and consolidating them in the personal account to develop relationships with counterparties.

In addition, the Company has implemented and is operating an electronic document management solution for suppliers to speed up mutual settlements and add transparency to the process.

If a counterparty faces difficulties signing in or using the system, they can seek help and advice

via e-mail at suppliers@nornik.ru

or by phone at +7 (495) 783-00-45 ext. 6 (for calls within Moscow)

8 (800) 700-59-11 ext. 6 (toll-free federal number)

ESG factors in the supply chain

Nornickel seeks to create a common information space and set of values with its suppliers. The Company employs a proprietary multi-tier system to evaluate its suppliers. The criteria for review, evaluation, and re-evaluation of external suppliers have been determined in line with the requirements of ISO 9001:2015 Quality management systems. Nornickel is particularly focused on building relationships with suppliers whose equipment is unique and critical for the stable operation of the Company's production facilities.

In 2021, the Company approved its Responsible Sourcing Policy covering all of Nornickel's activities related to supplier selection in the supply chain of raw materials, goods, and services. The purpose of the Policy is to define the approach to responsible sourcing and declare standards and principles to be followed by the Company and its suppliers.

Together with the Policy, the Company approved its Supplier Code of Conduct, which encourages the Company and its business partners to introduce procedures for responsible sourcing in accordance with ESG requirements in all of Nornickel's supply chains.

Provisions of the Policy and the Code are included in contracts with suppliers: contract templates were supplemented with a clause on ESG compliance, which, in particular, provides for access to Nornickel's Corporate Trust Line for feedback.

In 2021, the Company developed a due diligence management system (DDMS) for metallic mineral suppliers and started rolling it out in stages. In the reporting period, the system was rolled out to all production assets. The DDMS is focused on identifying potential risks affecting the sustainability of business processes in the mineral supply chain while also minimising risks of human rights violation, corruption, and misinformation about minerals, as well as risks relating to illegal control of mines and support for non-state armed groups.

The Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas and a five-step model for risk-based due diligence on supply chains by the Organisation for Economic Co-operation and Development (OECD) provided a methodological framework for developing the DDMS.

The DDMS is driven by the following requirements and recommendations:

- London Metal Exchange responsible sourcing policy
- Standards and principles of leading sustainable development initiatives in the industry: ICMM, IRMA, RMI, and JDDS, as well as the Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains of the China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters (CCCMC)
- Requirements of the Company's customers.

The Company's plans and progress towards building a responsible supply chain are disclosed in the Responsible Supply Chain Report, first published in 2023 to cover 2021 and 2022; in 2024, the Responsible Supply Chain Report will disclose 2023 data.

In 2023, Nornickel expanded the scope of its ESG assessment of suppliers to include all categories of suppliers, including non-mineral suppliers. The Company piloted an ESG assessment survey of selected major suppliers of goods, works, and services using a Supplier Self-Assessment Questionnaire (SSAQ) that included sections on environmental, social, and governance (ESG) issues. The purpose was to measure their compliance with the requirements of the Supplier Code of Conduct.

According to the survey findings, the average level of suppliers' compliance with the requirements is 68%. The counterparties were sampled so that 90% were non-public companies, which suggests that the 68% compliance rate is a fairly strong ESG performance. In 2024, the Company plans to expand the counterparty survey sample.

Given the risk of potential negative environmental impact of cargoes in transit, the Company's master agreement sets explicit requirements for cargo packaging. Goods to be shipped must meet the 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. Packaging, labelling, transportation, and storage. Mandatory requirements are established for the transport containers and product packaging that should ensure cargo integrity during multiple transshipments and transportation to the Far North.

Environmental impact is assessed throughout the life cycle of procured products: production, transportation, 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 delivered by them comply with local environmental laws.

Energy assets

Nornickel operates its own energy assets, which are managed by the Energy Division and comprise four natural gas fields, three combined heat and power (CHP) plants, two hydropower plants (Ust-Khantayskaya HPP and Kureyskaya HPP), as well as gas pipelines and power lines. Electricity is generated from renewable (hydropower) and non-renewable (natural gas) sources.

Norilskgazprom, part of the Energy Division, produces gas and gas condensate from the Pelyatkinskoye, Yuzhno-Soleninskoye, and Severo-Soleninskoye gas condensate fields, as well as the Messoyakhskoye gas field.

Norilsktransgaz transports natural gas and gas condensate from fields to consumers. The string length of its gas and condensate pipelines totals 1,653 km.

Taimyr Fuel Company is a strategic supplier of light and heavy oil products to the Far North, performing important commercial and social functions, as well as exporting gas condensate to consumers. The company's operations span vast areas of Russia, including the Norilsk Industrial District, the cities of Krasnoyarsk and Dudinka, the Murmansk Region, and the Zabaykalsky Territory. Taimyr Fuel Company supplies petroleum products to mining, exploration, and transport companies as well as municipal enterprises. Its key consumers are the Norilsk Nickel Group enterprises.

NTEC is an electricity and heat generation, transmission and distribution company. NTEC supplies electricity, heat, and water to Norilsk households, as well as to all industrial and commercial consumers in the Norilsk Industrial District. The local electricity grid is operationally and geographically isolated from the national grid (the Unified Energy System of Russia), which means stricter reliability requirements. NTEC operates five generating facilities: three thermal power plants with a total installed capacity of 1,154 MW and two hydropower plants with a total installed capacity of 1,102 MW. The total installed capacity of all plants is 2,256 MW.

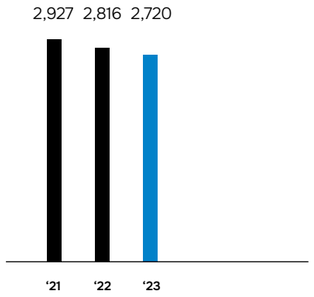
Natural gas production
2,720 MCM

Gas condensate production
85 KT

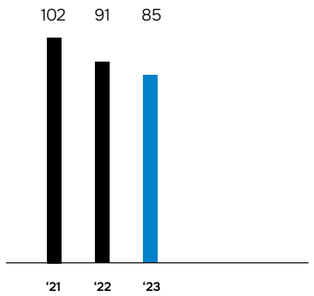
Share of renewables across the Group
55%

Production volume[1]

Natural gas, MCM



Gas condensate, KT



[1] Gas condensate production figures include production losses (carryover with separation gas).

Ust-Khantayskaya and Kureyskaya HPPs are the Company's two renewable electricity generation facilities. In 2023, the share of renewables in total electricity generation stood at 55% for the Group and 58% for the Norilsk Industrial District.

For the Kola and Trans-Baikal Divisions, electricity is purchased in the wholesale electricity and capacity market (WECM). Harjavalta sources electricity from the Finnish electricity market.

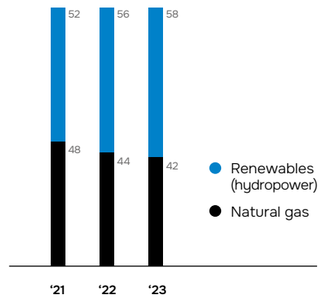
The Company's investment programme includes a number of projects to boost the share of hydropower, capture fuel and energy savings, and improve the reliability of energy and gas supplies.

Start of production
1969

Gas reserves
245.4 BCM

Gas condensate reserves
4,527 KT

Power generation mix in the Norilsk Industrial District in 2023, %



The Company's key projects to improve equipment reliability and energy efficiency and to boost output include:

- A contractor was selected through a tender process to drill five wells at well pad No. 4 of the Pelyatkinskoye gas condensate field.
- Construction and installation were completed for a booster compressor station at the Severo-Soleninskoye gas condensate field, with the station now at the equipment setup and pre-commissioning stage.
- The bulk of construction and installation works was completed as part of retrofitting a gas pipeline's underwater crossing of the Bolshaya Kheta River; stage one of retrofitting the Tukhard–Messoyakha–Yuzhno-Soleninskoye–Severo-Soleninskoye methanol pipeline was completed.
- The core generating equipment of Unit No. 2 at NTEC's CHPP-2 was installed. The new Unit No. 1 was commissioned.
- As part of revamping NTEC's emergency diesel fuel tanks, three tanks at CHPP-1 and CHPP-2 were installed, and the installation of a tank at CHPP-3 is nearing completion.
- As part of a project to upgrade the Norilsk, Kayerkan, and Dudinka tank farms operated by Taimyr Fuel Company, a construction and installation contractor was selected through a tender process for the Norilsk and Kayerkan tank farms.
- Under the programme to build local treatment facilities, LTF No. 94 was put into operation.

Innovation and digital technology

Nornickel relies on innovative solutions such as artificial intelligence (AI) and machine learning (ML) at all stages of its production process, from exploration to smelting, to streamline processes and make its operations safer for people and the environment.

The Company's goal is not only about research, development, and deployment of promising technologies but also about building the Company's own R&D capabilities, shaping internal policies, and fostering a culture of high-tech developments.

Gipronickel Institute, which makes part of the Group and is one of Russia's largest research and design centres for mining, concentration, and metallurgy, is Nornickel's core R&D platform.

In 2023, its continuous converting technology was patented in South Africa, and Roast–Leach–Electrowin technology in Kazakhstan and China.

Contribution to the UN SDGs

In 2023,

RUB 7.6 BN

were spent on the implementation of projects in the field of IT, innovation and digitalization.

Industrial safety technology

Video analytics

To maintain a safety culture at its operations, Nornickel is actively adopting solutions that use AI-enabled video analytics. The Company operates a proprietary solution to monitor the use of personal protective equipment (PPE) by operational staff.

The AI-enabled solution continuously monitors workwear usage on the shop floor, including safety helmets with chin straps buckled up, safety goggles, and other protective equipment. Specialists are also training the system to monitor and record the use of a safety harness when working at height. If an employee violates the rules for using personal protective equipment, the system will generate a violation card and send it to the line manager, who will review each case and make a decision. The card is then submitted to a coordinator from the Occupational Health and Safety Department for final review. Once the decision is approved, the department head conducts a behavioural safety audit of the employee.

New safety incident detection models were also added (detecting unauthorised access to hazardous areas, detecting open fire, etc.) in 2022, and the solution was integrated with personnel tracking and face recognition modules. During the same year, the Norilsk Division launched pilot tests of a video analytics system at its industrial facilities. In 2023, Nornickel launched a PPE enforcement system at Bystrinsky GOK.

Emergency monitoring

A prototype of a system to monitor the areas under gantry cranes was successfully launched in 2023. The system projects a laser beam to illuminate a hazard warning zone under the crane so as to increase operational safety and monitor the presence of people around load handling areas. The Company is planning to further roll out the system to 15 cranes in Trans-Baikal Division.

This video analytics system detects

>89%

of PPE usage violations while its employee identification accuracy exceeds

>70%

Environmental protection technologies

Reduction in emissions

In 2023, Nornickel and subsidiary IT company Norsoft launched a joint project to develop an automated emissions accounting system enabled by digital process twins. The project has been included into the list of approved projects for substituting Russian alternatives for foreign software and into the development roadmap for the New Industrial Software high-tech area. On top of this, the project is on the priority list and is expected to bring significant environmental benefits.

In 2023, an initiative to improve the environmental conditions and reduce air pollutant emissions was launched as part of the Sulphur Project at Nadezhda Metallurgical Plant. The project provides for sulphur dioxide recovery into sulphuric acid to be then neutralised with limestone into gypsum cake, which will be stored in a gypsum storage facility.

The Company continues its research into producing artificial anhydrite from gypsum to be used in solidifying backfill mixtures in mines. The solution will eliminate the continuous expansion of the gypsum storage facility and phase out the production of natural anhydrite.

The Company is considering the launch of a WGCP[1] Retrofit project to boost the performance of the wet gas cleaning plant's pulp filtration section at Copper Plant. Currently, Vanyukov furnace off-gases undergo consecutive wet cleaning from dust and then are cooled, while pulp is filtered, with the cake returned to the melting stage.

Tech-enabled construction

Construction management platform

Nornickel is testing a digital platform that provides a common data environment for specific construction projects based on updatable digital models of buildings and structures. Norilsk renovation projects have been selected for piloting the platform.

Although construction is not the Company's core business, its investment programme includes the construction of industrial facilities, homes, and social infrastructure. Digital technologies enable monitoring of funds allocated for these initiatives, accelerating data exchange between contributors, and identify design errors and deviations from design.

Laser scanning-based analytics

This is one of the most promising technologies for digital control over construction and installation. Ground-based LiDAR scanning is used at each construction stage to automatically detect deviations between the construction project and its initial 3D model.

The solution is used in the Norilsk renovation programme as well as at mining facilities of the Polar Division.

[1] WGCP – wet gas cleaning plant.

Technology in operations

Geological data analysis

The Company is working on creating a single digital platform that will support end-to-end automation of core business processes at mining enterprises: exploration, drilling, sampling, mining, rock bolting, etc. Such a platform will ensure that high-quality reliable process data are accessible at all levels of the Company's management, and accordingly, enable faster and better management decision making.

The project's IT product was presented at the 19th Mining Forum and the 2023 MINEX Russia forum, winning a finalist diploma in the MineDigital category.

PGM production technologies

The Company has developed a technology to recover precious metals from converter matte sent to the Harjavalta nickel refinery. The crushed converter matte is replaced with a non-magnetic fraction from the first milling stage to reduce the amount of WIP PGMs by 1.8 tonnes.

Nornickel has also designed solutions to produce refined platinum, palladium, gold, and silver. The Kola Division is planning to pilot a precious metals refining technology section, which will enable the Company to build in-house capabilities in this area and update core process parameters and parameters of product and semi-product quality using actual concentrates with a view to launch in-house refining projects at later stages. The technologies provide for annual processing of 36 tonnes of concentrate and production of at least 3 tonnes of platinum and at least 12 tonnes of palladium powder.

Palladium Centre

To date, the Centre's portfolio comprises more than 20 new palladium products offered through projects at various development stages:

Hydrogen power. A range of Nornickel products under development is meant to support hydrogen energy, where palladium can be used at every step of the production chain: hydrogen extraction from water, production from gas, transportation, and directly in fuel cells. The Company has obtained catalyst samples for electrolysers with 30% of iridium substituted by palladium, which offer a threefold increase in activity compared to existing commercial alternatives. Another innovation was synthesised catalyst samples for fuel cells with 25% of platinum substituted by palladium, which offer over double the activity of existing commercial alternatives (the plan is to substitute up to 80%). Catalyst samples are currently being tested by respected foreign partners, after which they will be sent to end consumers.

New chemistry. The Company is working on a range of products for new chemistry technologies, such as catalysts for glycolic acid synthesis for cosmetology, FDCA for biodegradable packaging, and elements for water disinfection. The samples are expected to move to customer testing in 2024.

Solar power. Research in this area is focused on developing a prototype of a new thin-film solar cell using palladium chalcogenide, which will improve efficiency and reduce cost compared to existing silicon-, tellurium-, or copper-based cells.

The Company also joined efforts with research institutes for fundamental research to unlock the potential of palladium in longer-term applications, such as superconductors, supercapacitors, microelectronics and spintronics devices, battery technology, and medical devices.

Nornickel is actively building a partner network of experts and customers, conducting R&D jointly with institutes and laboratories in Russia and beyond, and engaging closely with potential customers in the Asian market to accelerate the commercialisation of new products.

More than 100 new palladium-containing materials are planned to be developed in the next 5 to 10 years. The Company estimates that new uses for palladium will add at least 40 tonnes of demand for the metal by 2030.

The Company's technology to recover precious metals from converter matte has reduced work-in-progress PGM volumes

BY 1.8 TONNES

+40 TONNES

in incremental demand for palladium projected by 2030 due to new Palladium Centre products

3x

Increase in activity of catalysts for electrolysers with 30% of iridium substituted by palladium as compared to existing commercial alternatives

Production management optimisation

As part of diagnosing the current production flow and building a project portfolio, the Company has decided to stabilise the parameters of the initial melting charge. To this end, Nornickel has developed digital assistants which make recommendations on the process flow.

In 2023, the Company launched a project for streamlining the management of concentrate charge blending at the concentrate dewatering and storing shop (CDSS) and the flash smelting furnace (FSF). This will optimise the pyrometallurgical process through stabilising the nickel sulphide concentrate charge while reducing the standard deviation of the total amount of non-ferrous metals in the FSF's matte from target levels.

The effectiveness of this approach has been confirmed by pilot tests completed so far. The Company is planning to include expectations of improved process parameters into the efficiency improvement programme. The technical effect of these transformations will be tracked during the first half of 2024, and then the solutions will be put into commercial operation with support from contractors.

Machinery video monitoring

In 2023, the Company developed a software suite to monitor the operation of mining machinery, including autonomous haul trucks, load-haul-dumpers, mine cars, tipping devices, and self-propelled drilling rigs. The suite accurately tracks machinery movements and load through video images and offers video tagging functionality to speed up the acquisition of data sets and leverage the expertise of mine experts to improve accuracy. At the time of writing this Report, the suite was in the testing stage. Four prototypes have already been developed, slated for testing in the Norilsk Division's mines in 2024.

Ore Flow project

The Ore Flow project enabled by computer vision and launched in the Kola Division unlocks new opportunities for better management of underground rail transport and ore logistics. The system detects underload or ore buildup, analyses fractions and ore water content. Ore quality can be assessed using infrared light, enabling video analysis even in dust conditions. The system also locates individual pieces of machinery in a mine by monitoring loading and unloading locations and transport routes.

All detection models built for the system make part of an integrated solution and were being piloted at the Severny Mine at the time of writing this Report. The system is planned to be further rolled out to other mines of the Norilsk Division.

Improving drilling quality

In 2023, the Company, continued the automation of drilling preparations through a solution based on visual navigation and digital beacons. At the first stage, the application displays tips for the operator by projecting a laser beam, ensuring better drilling and reducing drilling problems. Going forward, we are planning to develop an in-house solution, which could be automated and rolled out across our entire fleet of self-propelled drilling rigs regardless of their manufacturer.

The system's tests confirmed that machinery tracking is highly accurate. Equipment scale models were later built, a self-propelled drilling rig was inspected to connect the equipment for correct operation, and terms of reference were prepared to develop a software and hardware suite prototype.

The development of the prototype and two equipment sets is expected to be completed before April 2024, with pilot tests slated for April–May. The decision on commercial operation will be taken based on the performance during the test period.

Modelling underground blasting

In 2023, the Company launched a project to model underground drilling, aimed at reducing the share of rock dilution with waste rock and concrete during drilling and cleaning as well as cutting drilling and blasting costs.

Computer modelling, with rock parameters factored in, enables highly accurate predictions of

blasting outcomes while optimising target drilling and blasting patterns. At the time of writing this Report, the Company selected the optimal software solution, assessed the technical and economic benefits from its adoption, and collected data for modelling and conducting full-scale pilot tests, slated for the first half of 2024.

The Company plans to validate that the model's performance meets the technical and economic targets and roll it out across all mines of the Polar Division before the end of the year.

Modelling open-pit blasting

In 2022, the Company launched a project that models rock displacement during open-pit blasting. This solution will enable more accurate ore displacement predictions while reducing metal losses when recovering the rock.

Currently, the model enables ore displacement predictions using both actual data on drilled wells and explosives used, as well as target values, to select the optimal design of the block to be blasted. Six blasts were carried out based on model data in 2023, and the technical impact was verified.

The Company has already launched the process of procuring software for a full-scale rollout of the solution at Bystrinsky GOK. During 2024, Nornickel is planning to train staff on the new functionality.

Concentration optimisation

Research was conducted and preparations are underway for deploying wet magnetic separation for enhanced recovery of magnetic pyrrhotite from tailings of the Company's concentrators. At the time of writing this Report, the initiative's economic feasibility was confirmed, with the expected impacts of an increase in nickel output by 1.5 kt and PGMs by 602 kg over three years.

Norilsk Concentrator piloted a flotation plant to further deploy ejector flotation machines and boost throughput roughly by 100–150 ktpa of ore.

Research was conducted on ionometric mapping and optimisation of pulp ionic content during flotation of copper-nickel ores at the Company's concentrators. It was established that reagent consumption can be effectively regulated by using ion-selective electrodes. Tests will be continued to validate the result on winter pulps; in case of success, the Company expects a 0.5% increase in the recovery of nickel, copper, and PGMs into bulk concentrate at Talnakh Concentrator.

A smart assistant for flotation machine operators went on stream at Norilsk Concentrator's copper circuit. The system uses modelling algorithms leveraging intelligent analysis methods and makes recommendations based on statistics and the expertise of flotation machine operators, leaving specialists on the ground to make the final decision. The system's deployment was launched in 2020. Experts from Norilsk Concentrator and developers of the system worked through all possible scenarios to rule out almost all errors in the assistant's operation. After pilot tests, the system is expected to work fully automatically. The Company is considering adding a video analytics module to the solution going forward.

In 2023, the Company launched a charge blending optimisation project to stabilise concentrator processes. Tests have shown that predictions based on actual feedstock data, the current process status, and the concentrator's performance with different types of ore reduce productivity and recovery losses. A preliminary predictive model has been developed so far, with a comprehensive diagnostic of the concentration stage and development of a full-scale predictive model slated for the first half of 2024 to support pilot tests in a live environment.

Additive manufacturing

The Company is making great strides in developing 3D-based additive solutions.

In 2023, Nornickel used 3D printing to create and install a large, wear-resistant cast iron spiral chamber on a pump at Nadezhda Metallurgical Plant. This part is a critical device for lifting concentrate from the ore-settling tank. Typically, replacing this chamber would take around a year, including the time it takes to create its detailed drawings. However, additive technologies have eliminated this first step through scanning the part and creating its 3D model.

Additive manufacturing reduces the lead times to manufacture and deliver equipment and components by 50%. Additionally, it enables quick changes and the creation of objects of any shape. Three-dimensional printing can also prevent unscheduled downtime in production and facilitate partial import substitution.

Turbidity monitoring system

Nornickel has introduced a new proprietary technology at Copper Plant – a video analytics system to monitor turbidity of water after ore processing.

The ore mixed with water into slurry is sent from the concentrator to the smelter's drying shop, where water is separated from the copper concentrate in thickeners. The water discharged from the thickeners must be clear, with no traces of concentrate. The turbidity monitoring system helps to control this.

The process is monitored by video cameras. The data from the cameras are processed by AI-enabled video analytics software. If the drains are too turbid, the system notifies the operator and records the violation. This reduces the loss of copper concentrate.

Powder metallurgy

Powder metallurgy is an economically beneficial alternative to mechanical processing of various metal parts. It allows for the creation of items with unique properties, significantly increasing metal use efficiency and enhancing the competitiveness of end products.

Demand for powder materials is growing on the back of rapid advances in 3D printing, die casting, hot isostatic pressing, and coating application. Powders can also be used in other innovative developments, from new nickel- and cobalt-based heat-resistant alloys to catalytic materials.

The first prototypes of powders from nickel alloys for use in 3D printing and hot pressing were obtained by Nornickel back in 2022. In 2023, the Company conducted benchmarking studies and is currently piloting their commercial operation using a 3D printer.

Expected impact from deploying wet magnetic separation technology: incremental production of nickel

at **1.5 KT**

and PGMs

at **602 KG**

Additive manufacturing reduces the lead times to manufacture and deliver equipment and components

by **50%**

Digital projects

Deployment of innovative tools is a critical lever to improve Nornickel's business processes and workplace safety. Nornickel has been continuously working towards securing technological sovereignty and developing IT initiatives to support its key business segments.

In 2023, the Company updated its IT strategy. Its key strategic ambitions include reliability and availability, agility and technological sovereignty, while the strategic objectives encompass driving faster decision making, building the necessary capabilities, and ensuring the smooth operation of the Company's IT landscape during the transformation.

Spending on digital projects totalled RUB 7.6 billion in 2023.

IT infrastructure monitoring

By continuously monitoring key performance metrics, help desks can timely locate issues, prevent information system downtime, and identify opportunities to boost IT landscape performance.

In 2023, the Company continued to develop its corporate IT monitoring function. Over the last year, the number of monitored IT facilities increased by 20% to more than 20 thousand. Today, over 3 million behavioural metrics are collected and analysed on a 24/7 basis, enabling the Company to be more proactive and promptly make informed decisions on IT service management.

Data Lake ecosystem

One of the core elements in the corporate digital landscape is the Data Lake, a scalable platform to digitise operating and business processes, which, in the longer run, will enable storing and analysing data for the entire Group while driving synergies by enriching data in external systems with new data. Integration data flows from Nornickel's core production sites have already been incorporated into the ecosystem.

A proprietary framework has been developed for the ecosystem for smoother connection and processing of data from equipment sensors based on advanced open source solutions. Existing solutions allow integrating machine-learning models, generating analytical reports, customising calculations, and running basic quality checks of metrics without developing additional standalone components.

In 2023, Nornickel successfully rolled out the Data Platform PROD landscape based on Russian Arenadata software, which supports a multi-landscape ecosystem. A geo-distributed Data Lake infrastructure is slated to be rolled out across production sites in 2024.

20%
Increase in the number of monitored IT facilities over the year

>3 MLN
behavioural metrics are collected and analysed 24/7

Enhancing corporate business processes

A total 38 Group enterprises have adopted electronic document management. Introduction of algorithms and robotic process automation of accounting function tasks have boosted the effectiveness of certain processes by as much as 13 times. As part of implementing electronic document management for the HR function, the system was redesigned to be hosted on the domestic Directum RX platform.

A pilot project to digitise contracts has reduced document signing times, with a record turnaround of just 30 minutes achieved in one of the tests.

Further development of digital treasury Dynamic discounting tools launched in 2023 were used to run 14 tenders for a total of over RUB 300 million during the year. Nornickel has been actively developing its monitoring and analytics landscape to increase process maturity. The necessary enablers have been put in place for the deployment and rollout of a full-cycle management digital platform, including monitoring and forecasting tools.

Towards the end of 2023, as part of expanding the functionality offered by the supplier online account, the Company introduced dynamic discounting feature to support contract negotiation and execution processes, with the coverage of key suppliers expanded by more than 1 thousand companies operating across the country, or over 30% of the total number of Nornickel suppliers.

In 2023, the Company migrated to a systematic tax monitoring platform to facilitate dispute resolution between the Company and tax authorities. At the time of writing this Report, over 97% of the Group's sales were monitored by tax authorities in real time. The Company is further increasing the platform's coverage of Group enterprises, improving its interface, enhancing data quality, and accelerating data sharing while driving integration with information systems of various government authorities.

Nornickel is a top innovation-driven counterparty demonstrating the maximum level of disclosure and cooperation with the Federal Tax Service of Russia, which already results in preferences granted to it by regulatory authorities.

38 GROUP ENTERPRISES
have adopted electronic document management

14 TENDERS
run using digital treasury tools launched in 2023

>97%
of the Group's sales monitored by tax authorities in real time using a systematic tax monitoring platform

Financial performance (MD&A)

FY2023 HIGHLIGHTS

- Consolidated revenue decreased 15% y-o-y amounting to USD 14.4 billion following the decline of prices for nickel, copper, palladium and rhodium. The Company sold all metal volumes produced in 2023 as well as a part of stock accumulated in 2022;
- EBITDA decreased 21% y-o-y to USD 6.9 billion owing to lower revenue while EBITDA margin remained at healthy 48%;
- Cash operating costs decreased 19% y-o-y to USD 5.3 billion mostly driven by the weakening of Russian rouble, the termination of metal purchases from third parties as well as the execution on operating efficiencies that allowed to mitigate inflationary pressure on expenditures in spite of introduction of export duties in October 2023;
- CAPEX decreased 29% y-o-y to USD 3 billion driven by softening of rouble exchange rate, optimization of payments to contractors as well as rescheduling of investment projects owing to voluntary self-sanctions imposed by foreign suppliers of equipment and technologies;
- Net working capital decreased 23% year-to-date to USD 3.1 billion driven mostly by devaluation of rouble, partial sale of metal stock accumulated in 2022 and application of different payment terms in certain major procurement and construction contracts;
- Net debt decreased 18% y-o-y to USD 8.1 billion with net debt/EBITDA ratio as of December 31, 2023 remained at 1.2x;
- The Company continued the optimization of its debt portfolio to adapt to changing debt market reality while servicing all its outstanding debt portfolio and maintaining comfortable liquidity level on its balance sheet and reserve credit lines;
- On December 7, General Shareholders Meeting approved the split of ordinary shares with a ratio of 100 to 1 to improve their attractiveness to retail investors.

USD 14.4 BN
Consolidated revenue for 2023

48%
EBITDA margin for 2023

19%
Reduction in cash operating costs

18%
Decrease in net debt as at 31 December 2023

Key corporate highlights, USD MILLION, UNLESS STATED OTHERWISE

Indicators	2022	2023	Change
Revenue	16,876	**14,409**	–15%
EBITDA[1]	8,697	**6,884**	–21%
EBITDA margin, %	52%	**48%**	–4 p.p.
Net profit	5,854	**2,870**	–51%
Capital expenditures	4,298	**3,038**	–29%
Net working capital[2]	4,003	**3,092**	–23%
Net debt[2]	9,835	**8,093**	–18%
Net debt/12M EBITDA	1.1x	**1.2x**	0.1x
Dividends paid per share (USD)[3]	40.5	**–**	–100%
Free cash flow[2]	437	**2,686**	6x
Проценты уплаченные[4]	599	**791**	32%
Dividends paid to non-controlling interest[4]	73	**503**	7x

[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 perio.
[4] Regular outflows, financed from free cash flow.

Recent developments

- In January 2024, the Company paid dividend for 9 months of 2023 in the amount of RUR 915.33 per one ordinary share.

Key segmental highlights[1], USD MILLION

Indicators	2022	2023	Change
Revenue	**16,876**	**14,409**	**–15%**
GMK Group	12,242	**10,488**	–14%
South cluster	972	**1,066**	10%
Kola division	10,889	**8,396**	–23%
GRK Bystrinskoye	1,325	**1,340**	1%
Other mining	1	**–**	–100%
Other non-metallurgical	1,556	**1,064**	–32%
Eliminations	–10,109	**–7,945**	–21%
EBITDA	**8,697**	**6,884**	**–21%**
GMK Group	4,316	**3,641**	–16%
South cluster	450	**484**	8%
Kola division	4,071	**2,254**	–45%
GRK Bystrinskoye	934	**963**	3%
Other mining	–11	**–12**	9%
Other non-metallurgical	8	**–13**	n.a
Eliminations	–7	**343**	n.a
Unallocated	–1,064	**–776**	–27%
EBITDA margin	**52%**	**48%**	**–4 p.p.**
GMK Group	35%	**35%**	0 p.p.
South cluster	46%	**45%**	–1 p.p.
Kola division	37%	**27%**	–10 p.p.
GRK Bystrinskoye	70%	**72%**	2 p.p.
Other mining	n.a.	**n.a.**	n.a.
Other non-metallurgical	1%	n.a.	n.a.

[1] Segments are defined in the consolidated financial statements.

RUB 915.33
per ordinary share – dividend paid in January 2024

USD 1,066 MLN
Revenue from the South Cluster segment

8%
EBITDA growth in the South Cluster segment

USD 1,340 MLN
Revenue from the GRK Bystrinskoye segment

3%
EBITDA growth in the GRK Bystrinskoye segment

In 2023, revenue of GMK Group segment decreased 14% to USD 10,488 million primarily due to lower metal prices and decrease in matte sales delivered to Kola Division partly offset by increase in sales volume of refined metals.

Revenue of South cluster segment increased 10% to USD 1,066 million primarily driven by higher volume of semi-products realized to GMK Group partly offset by decrease in semi-products realized prices.

Revenue of Kola division segment decreased 23% to USD 8,396 million primarily owing to lower metal prices partly offset by increase in sales volume of refined metals.

Revenue of GRK Bystrinskoye segment increased 1% to USD 1,340 million.

Revenue of Other non-metallurgical segment decreased 32% to USD 1,064 million primarily due to cease of metals resale.

In 2023, EBITDA of GMK Group segment decreased 16% to USD 3,641 million owing to lower revenue, partly positively offset by decrease in cash operating costs, primarily due to lower mineral extraction tax and other levies, lower labour and repair and maintenance costs, and comparative impact of environmental provisions accrual.

EBITDA of South cluster segment increased 8% to USD 484 million primarily owing to higher revenue that was partly negatively offset by increase in cash operating costs primarily due to higher mineral extraction tax and ore mining services.

EBITDA of Kola division segment decreased 45% to USD 2,254 million primarily owing to lower revenue.

EBITDA of GRK Bystrinskoye segment increased 3% to USD 963 million primarily due to decrease in cash operating costs driven by Russian rouble depreciation against US Dollar.

EBITDA of Other mining segment decreased by USD 1 million and amounted to negative USD 12 million.

EBITDA of Other non-metallurgical segment decreased by USD 21 million and amounted to negative USD 13 million.

EBITDA unallocated to segments increased by USD 288 million and amounted to a negative USD 776 million mainly due to lower social expenses and effect of the Russian rouble depreciation against US Dollar.

Metal sales

In 2023, revenue from metal sales was down 15% (or -USD 2,371 million) y-o-y to USD 13,702 million primarily driven by lower selling prices (-USD 3,378 million) mainly for palladium, nickel, rhodium and copper, as well decrease in the resale of metals purchased from third parties (-USD 385 million). The increase in the volume of metal sales (+USD 1,392 million) primarily due to the partial sale of metal stock accumulated in 2022 was partly offset by decrease in production volume in 2023.

Other sales

In 2023, other sales decreased 12% (or -USD 96 million) to USD 707 million primarily due to Russian rouble depreciation, which was partially offset by the increase of revenue from resale of icebreaking and sea transportation services.

Cost of sales

Cost of metal sales

In 2022, the cost of metal sales increased 21% (or +USD 1,051 million) to USD 6,108 million, In 2023, the cost of metal sales increased 4% (or +USD 232 million) to USD 6,322 million, driven by the following factors:

- decrease in cash operating costs by 19% (or -USD 1,234 million);
- decrease in depreciation and amortization by 7% (or -USD 76 million);
- comparative effect of change in metal inventories y-o-y leading to the cost of metal sales increase by USD 1,542 million.

Cash operating costs

In 2023, total cash operating costs decreased 19% (or -USD 1,234 million) to USD 5,289 million mainly due to decrease in purchases of refined metals for resale (-USD 432 million), decrease in mineral extraction tax and other levies (-USD 319 million), decrease in materials and supplies (-USD 98 million), decrease in labour costs (-USD 266 million) partly offset by introduction of export customs duties from October 1, 2023 (+USD 121 million).

Inflationary growth of cash operating costs amounted to +USD 428 million while Russian rouble depreciation against US Dollar amounted to cash operating costs decrease of -USD 889 million.

Cost of metal sales, USD MILLION

Indicators	2022	2023	Change
Labour	2,123	**1,857**	–13%
Materials and supplies	1,069	**971**	–9%
Mineral extraction tax and other levies	1,192	**873**	–27%
Third party services	784	**659**	–16%
Transportation expenses	257	**216**	–16%
Fuel	166	**157**	–5%
Export customs duties	–	**121**	100%
Electricity and heat energy	136	**115**	–15%
Purchases of raw materials and semi-products	33	**33**	0%
Purchases of refined metals for resale	437	**5**	–99%
Other costs	326	**282**	–13%
Total cash operating costs	**6,523**	**5,289**	**–19%**
Depreciation and amortisation	1,015	**939**	–7%
Decrease/ increase (-) in metal inventories	–1,448	**94**	n.a.
TOTAL	**6,090**	**6,322**	**4%**

Labour

In 2023, labour costs decreased 13% (or -USD 266 million) to USD 1,857 million amounting to 35% of the Group's total cash operating costs driven by the following factors:

- -USD 409 million – Russian rouble depreciation against US Dollar;
- +USD 86 million – increase in headcount in Norilsk industrial region;
- -USD 77 million – one-off incentive payment to personnel in 1H2022:
- +USD 45 million – payments to personnel within the programme "Digital investor";
- +USD 89 million – other increase in labour costs mainly due to indexation of salaries and wages.

Materials and supplies

In 2023, expenses for materials and supplies decreased 9% (or -USD 98 million) to USD 971 million driven by the following factors:
- +USD 219 million – inflationary growth of materials and supplies;
- -USD 133 million – lower material and supplies expenses primarily due to decreased repairs as part of production efficiency measures;
- -USD 184 million – effect of the Russian rouble depreciation against US Dollar.

Mineral extraction tax and other levies

In 2023, mineral extraction tax and other levies decreased 27% (or -USD 319 million) to USD 873 million primarily due to lower metal prices and lower ore mined.

Third-party services

In 2023, cost of third-party services decreased 16% (or -USD 125 million) to USD 659 million mainly driven by:
- -USD 61 million – primarily due to decrease in repairs as part of production efficiency measures;
- +USD 79 million – inflationary growth of third-party services;
- -USD 143 million – effect of the Russian rouble depreciation against US Dollar.

Transportation expenses

In 2023, transportation expenses decreased 16% (or -USD 41 million) to USD 216 million driven by the following factors:
- -USD 23 million – primarily decrease in transportation volume of metal products;
- +USD 20 million – inflationary growth of expenses;
- -USD 38 million – effect of the Russian rouble depreciation against US Dollar.

Fuel

In 2023, fuel expenses decreased 5% (or -USD 9 million) to USD 157 million mainly due to Russian rouble depreciation against US Dollar partly offset by inflationary growth of fuel expenses in Norilsk industrial region.

Electricity and heat energy

In 2023, electricity and heat energy expenses decreased 15% (or –USD 21 million) to USD 115 million primarily due to Russian rouble depreciation against US Dollar.

Purchases of raw materials and semi-products

In 2023, purchases of raw materials and semi-products remained unchanged y-o-y and amounted to USD 33 million.

Purchases of refined metals for resale

In 2023, purchases of refined metals for resale decreased 99% (or -USD 432 million) to USD 5 million, primarily due to cease of refined metals purchases.

Other costs

In 2023, other costs decreased 13% (or -USD 44 million) to USD 282 million primarily due to Russian rouble depreciation against US Dollar partly offset by price inflation.

Depreciation and amortisation

In 2023, depreciation and amortisation expenses decreased 7% (or -USD 76 million) to USD 939 million mainly due to Russian rouble depreciation against US Dollar partly offset by increase in property, plant and equipment.

Decrease / Increase (with minus) in metal inventories

Comparative effect of change in metal inventory amounted to +USD 1,542 million resulting in a respective increase in cost of metal sales mainly due to increase in metal inventories in 2022 driven by the extension of logistics and refocusing sales to new markets.

Cost of other sales

In 2023, cost of other sales decreased by USD 108 million to USD 721 million due to Russian rouble depreciation against US Dollar, which was partially compensated by increase in the cost of resale of icebreaking and sea transportation services.

Selling and distribution expenses

Selling and distribution expenses, USD MILLION

Indicators	2022	2023	Change
Transportation expenses	118	**132**	12%
Export customs duties	–	**43**	100%
Marketing expenses	52	**29**	–44%
Staff costs	29	**27**	–7%
Other	56	**54**	–4%
TOTAL	**255**	**285**	**12%**

In 2023, selling and distribution expenses increased 12% (or USD 30 million) to USD 285 million driven by:
- +USD 43 million – export customs duties introduced from October 1, 2023;
- +USD 14 million – increase in transportation expenses primarily due to extension of logistics chains;
- -USD 23 million – decrease in marketing expenses.

General and administrative expenses

General and administrative expenses, USD MILLION

Indicators	2022	2023	Change
Staff costs	833	**684**	–18%
Third party services	230	**147**	–36%
Depreciation and amortisation	107	**110**	3%
Property tax and other miscellaneous taxes	94	**75**	–20%
Transportation expenses	9	**6**	–33%
Other	80	**71**	–11%
TOTAL	**1,353**	**1,093**	**–19%**

In 2023, general and administrative expenses decreased 19% (or -USD 260 million) to USD 1,093 million. Positive effect of the Russian rouble depreciation against US Dollar amounted to USD 242 million. Changes of the general and administrative expenses in real terms were primarily driven by the following factors:
- -USD 42 million – decrease in third-party services primarily driven by consulting services expenses;
- +USD 22 million – increase in depreciation due to growth of fixed assets.

Other operating expenses

Other operating expenses, NET, USD MILLION

Indicators	2022	2023	Change
Social expenses	407	**205**	–50%
Change in decommissioning obligations	12	**53**	4x
Change in other allowances	43	**40**	–7%
Loss on disposal of property, plant and equipment	70	**36**	–49%
Expenses on industrial incidents response	35	**10**	–71%
Change in provision on production and mining facilities shut down	14	**–1**	n.a.
Change in environmental provisions	93	**–32**	n.a.
Other, net	4	**–42**	n.a.
TOTAL	**678**	**269**	**–60%**

In 2023, other operating expenses, net decreased by USD 409 million to USD 269 million driven by the following factors:

- -USD 202 million – decrease in social expenses;
- -USD 125 million – lower environmental provisions related to compensation for environmental damages;
- +USD 26 million – comparative effect of changes in provision on production and mining facilities shut down and in decommissioning obligations;
- -USD 34 million – decrease in loss on disposal of property, plant and equipment;
- -USD 25 million – decrease in industrial incidents response expenses.

Finance costs

Finance costs, NET, USD MILLION

Indicators	2022	2023	Change
Interest expense, net of amounts capitalised	330	**337**	2%
Unwinding of discount on provisions	185	**147**	–21%
Fair value loss / gain (-) on the cross-currency interest rate swap contracts	18	**60**	3x
Interest expense on lease liabilities	16	**35**	2x
Income received as a result of early debt repayment	–172	**–**	100%
Gain (-) / loss from currency conversion operations	111	**–5**	n.a.
Other, net	5	**–7**	n.a.
TOTAL	**493**	**567**	**15%**

In 2023, finance costs, net increased 15% to USD 567 million. Finance costs, net decreased by USD 98 million in 2023 without taking into consideration profit from the early repayment of debt with a discount in 2022. The primary drivers of the change were:

- -USD 116 million – decrease in foreign currency conversion costs due to lower intraday volatility in the foreign exchange market;
- -USD 38 million – decrease in expenses related to unwinding of discount on provisions and due to significant volatility of discount rates during 2023, as well as changes in provisions;
- +USD 42 million – increase in expenses driven by fair value revaluation of cross-currency interest rate swaps primarily related to Russian rouble depreciation against US Dollar in 2023.

In 2022, negative result of revaluation of financial instruments during a period of high exchange rate volatility was partially compensated by the appreciation of Russian rouble against US Dollar.

Income tax expense

The breakdown of the income tax expense, USD MILLION

Indicators	2022	2023	Change
Current income tax expense	1,306	**966**	–26%
Deferred tax /benefit (-) /expense	219	**–302**	n.a.
TOTAL INCOME TAX EXPENSE	**1,525**	**664**	**–56%**

In 2023, income tax expense decreased by USD 861 million driven mostly by lower profit before tax.

EBITDA

EBITDA, USD MILLION

Indicators	2022	2023	Изменение
Operating profit	7,581	**5,540**	–27%
Depreciation and amortisation	1,026	**1,165**	14%
Impairment of non-financial assets, net	90	**179**	99%
EBITDA	**8,697**	**6,884**	**–21%**
EBITDA margin	**52%**	**48%**	**–4 p.p.**

In 2023, EBITDA decreased 21% (or -USD 1,813 million) to USD 6,884 million primarily driven by lower revenue, which was partially offset by Russian rouble depreciation against US Dollar in 2023.

Statement of cash flows

Statement of cash flows, USD MILLION

Indicators	2022	2023	Change
Cash generated from operations before changes in working capital and income tax	**8,897**	**7,121**	**–20%**
Movements in working capital	–3,184	**–229**	–93%
Income tax paid	–1,127	**–1,164**	3%
Net cash generated from operating activities	**4,586**	**5,728**	**25%**
Capital expenditure	–4,298	**–3,038**	–29%
Other investing activities	149	**–4**	n.a.
Net cash used in investing activities	**–4,149**	**–3,042**	**–27%**
Free cash flow	**437**	**2,686**	**6x**
Interest paid	–599	**–791**	32%
Payments of lease liabilities	–50	**–45**	–10%
Dividends paid to non-controlling interest	–73	**–503**	7x
Other financing activities	–4,342	**–1,065**	–75%
Net cash used in financing activities	**–5,064**	**–2,404**	**–53%**
Effects of foreign exchange differences on balances of cash and cash equivalents	962	**–25**	n.a.
Net change in cash and cash equivalents	**–3,665**	**257**	**n.a.**

In 2023, net cash used in investing activities decreased 27% to USD 3,042 million primarily driven by decrease in capital expenditures.

In 2023, free cash flow increased 6 times to USD 2,686 million following the increase in net cash generated from operating activities and the decrease in cash used in investing activities.

In 2023, free cash flow less regular financing outflows (interest paid, payments of lease liabilities, dividends paid to non-controlling interest of GRK Bystrinsky) increased by USD 1,632 million and amounted to USD 1,347 million following the increase in free cash flow.

Net working capital changes between the balance sheet and cash flow statement , USD MILLION

Indicators	2022	2023
Change of the net working capital in the balance sheet	**–2,734**	**911**
Foreign exchange differences	–218	**–780**
Change in income tax balance	–165	**208**
Change of provisions, reserves and long term components of working capital included in cash flow	–225	**–412**
Other changes	158	**–156**
CHANGE OF WORKING CAPITAL PER CASH FLOW	**–3,184**	**-229**

Capital investments breakdown by project, USD MILLION

Indicators	2022	2023	Change
Polar Division, including:	1,543	**1,223**	–21%
• Skalisty mine	90	**90**	0%
• Taymirsky mine	83	**73**	–12%
• Komsomolsky mine	40	**41**	3%
• Oktyabrsky mine	14	**5**	–64%
• Talnakh Enrichment Plant (TOF-3)	194	**123**	–37%
• Capitalised repairs	222	**93**	–58%
• Purchase of equipment	322	**219**	–32%
• Other Polar Division projects	578	**579**	0%
Kola MMC	350	**233**	–33%
Environmental program (Sulfur Program at the Nadezhda Smelter)	893	**454**	–49%
South cluster	298	**248**	–17%
Energy and gas infrastructure modernization	465	**408**	–12%
Bystrinsky project (Chita)	72	**65**	–10%
Other production projects	607	**355**	–42%
Other non-production assets	70	**52**	–6%
TOTAL	**4,298**	**3,038**	**–29%**

In 2023, CAPEX decreased 29% (or -USD 1,260 million) to USD 3,038 million driven by the effect of the Russian rouble depreciation against US Dollar, optimization of settlements with contractors as well as the rescheduling of investment projects as voluntary self-sanctions imposed by foreign suppliers of equipment and technologies resulted in redesign of investment projects.

Debt and liquidity management

Debt and liquidity, USD MILLION

Indicators	As of 31 December 2022	As of 31 December 2023	Change USD million	%
Non-current loans and borrowings	7,189	**5,377**	–1,812	–25%
Current loans and borrowings	4,295	**4,335**	40	1%
Lease liabilities	233	**520**	287	2x
Total debt	**11,717**	**10,232**	**–1,485**	**–13%**
Cash and cash equivalents	1,882	**2,139**	257	14%
Net debt	**9,835**	**8,093**	**–1,742**	**–18%**
Net debt /12M EBITDA	1.1x	**1.2x**	0,1x	n.a

As of December 31, 2023, the Company's total debt decreased by 13% to USD 10,232 million compared to December 31, 2022 partly following the depreciation of Russian rouble against US Dollar in 2023.

As of December 31, 2023, the Company's net debt decreased by USD 1,742 million due to decrease in total debt.

The Company fully honors its financial obligations in line with transactional documentation and fully complies with existing regulations.

In November 2023, Russian rating agency "Expert RA" confirmed the Company's credit rating at the highest investment level "ruAAA".

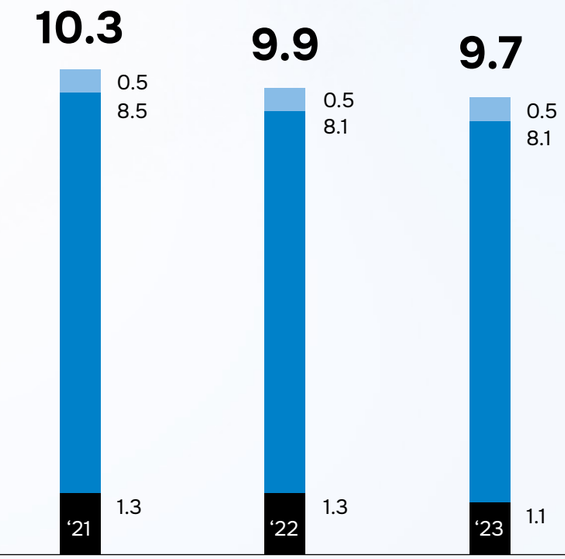
FOCUSSED ON RESULT

The Company consistently reduces direct and indirect GHG emissions (Scope 1 + 2)

MLN T OF CO_2 EQUIVALENT

GHG emissions, Scope 1 + 2,
MLN T OF CO_2 EQUIVALENT

- Scope 2 emissions from production assets
- Scope 1 emissions from production assets
- Scope 1 emissions from households and infrastructure facilities



SUSTAINABLE DEVELOPMENT

96 Strategic approach
102 Employees
119 Health and safety
127 Environment and climate
139 Social policy

Strategic approach

Since 2022, the Company has been publishing reports on its progress towards 10 United Nations Global Compact (UNGC) Sustainable Development Goals (SDGs).

Sustainability governance

The Company's sustainability management is based on a matrix structure, with responsibility for specific ESG aspects split among all Nornickel functions. At the same time, most matters are overseen by the Management Board, Board of Directors, and respective committees.

Sustainability-related processes are coordinated by the Sustainable Development Department, headed by the Vice President for Investor Relations and Sustainable Development. At the Board level, the Sustainable Development and Climate Change Committee is responsible for overseeing the evolution of ESG practices.

Contribution to the UN SDGs

For more details on the projects, see Nornickel's 2023 Sustainability Report.

ESG projects that received the most funding in 2023:

- Sulphur Project;
- Clean Norilsk programme;
- Norilsk renovation plan;
- Investments in tourism projects;
- Range of health and safety initiatives;
- Corporate Healthcare programme;
- Digital Investor programme;
- Range of measures around water management, wastewater collection, treatment, and discharge, and waste management.

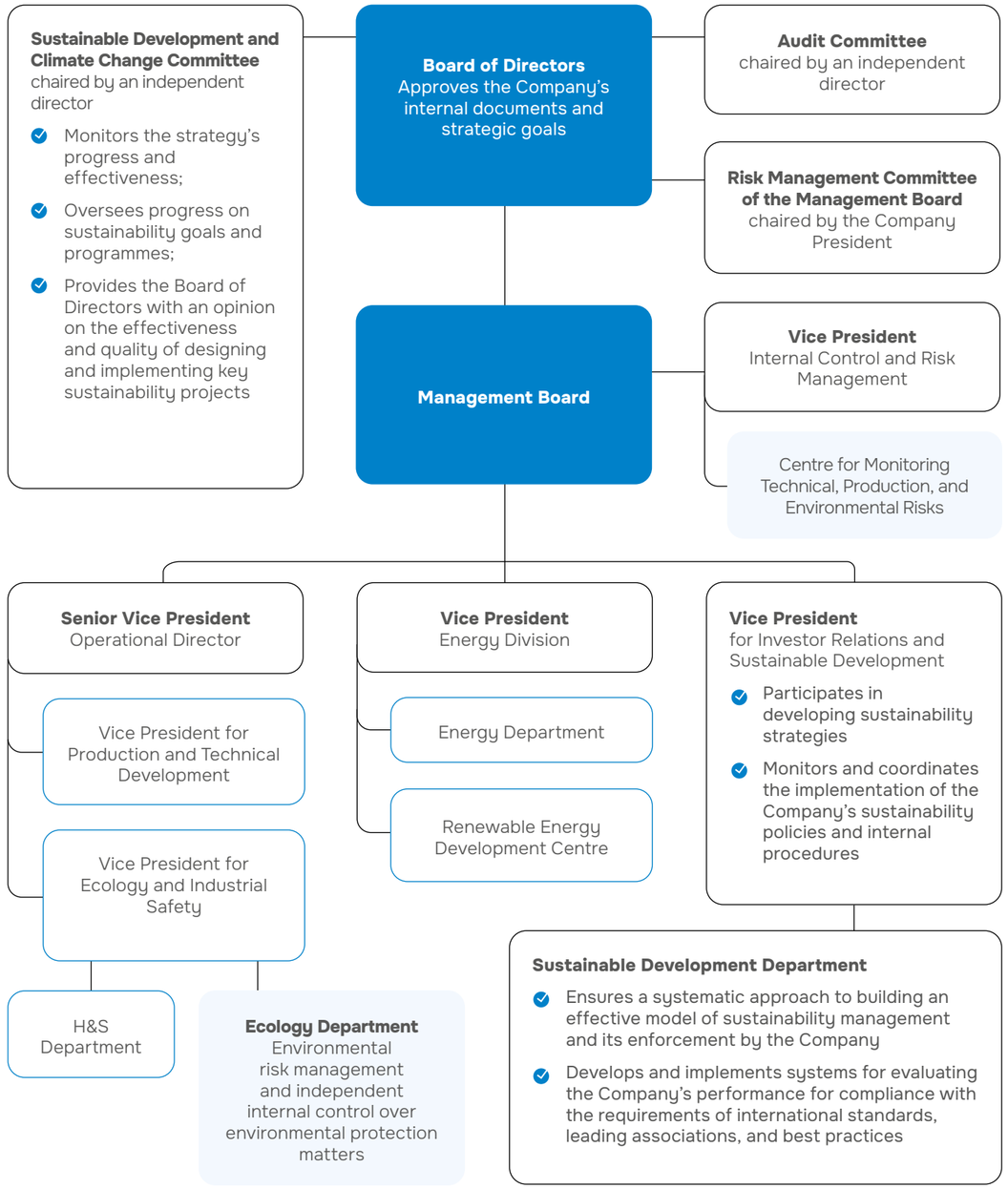
Faced with challenges such as managing a workforce of over 70 thousand in the Arctic, a variety of environmental impacts, and commitments to the state and society to build large-scale infrastructure projects, Nornickel consistently pursues sustainability-related initiatives. The Company provides safe living conditions in the Arctic zone, invests in the socio-economic development of its operating regions and community well-being, takes steps to prevent environmental and climate risks as well as climate-related losses while building open and trust-based relationships with stakeholders and transparent corporate governance.

Sustainability principles underpin the Company's operations and strategic business development and are outlined in Nornickel's internal documents.

In 2023, the Board of Directors adopted the Socially Sustainable Development Strategy to drive technological and social progress through technology and product innovation. These innovations, in particular, will ensure safe, just, and supportive work environment and preserve and restore the environment. The Company is committed to providing decent pay, comfortable living conditions, and self-fulfilment opportunities, seeing these factors among the most important drivers of its sustainable development. Nornickel maintains partner relations with the indigenous peoples of the Taimyr and Kola Peninsulas and takes its responsibility for preserving the culture and traditions of the Russian North communities very seriously.

In early 2024, the Board of Directors approved the updated Environmental and Climate Change Strategy.

Sustainability management flowchart



Achievements and priorities

Key achievements

E environmental protection and climate change

- Reduction of SO_2 emissions on the Kola Peninsula following the shutdown of the Company's smelting operations (down 90% from 2015)
- The lowest CO_2 emission level (Scopes 1, 2, and 3) among global metals and mining peers
- Conducting a pilot climate-related risk assessment and publishing first Climate Change Report

S social responsibility

- Reputation of a socially responsible business
- Comprehensive support for local communities and national projects
- Long track record of supporting indigenous peoples; pioneering the process to obtain their free, prior, and informed consent to projects
- Publishing first Human Rights Report

G governance

- Sustainable corporate governance and risk management
- Integrating ESG targets into short-term and long-term KPIs
- Balanced and effective Board of Directors
- Publishing first Responsible Supply Chain Report

Strategic priorities

- Achieving the key SO_2 reduction milestones for the Norilsk Industrial District
- Clean-up of legacy waste and remediation following environmental incidents in Norilsk
- Assessing biodiversity impact and preparing a scientific rationale for a biodiversity conservation programme
- Further developing the physical risk management system across the Company's footprint
- Supporting environmental initiatives across the Company's footprint

- Zero work-related fatalities
- Employee health and safety
- Preventing social risks for the Company's operations
- Attracting young talent and experienced professionals and reducing the turnover rate to 8% by 2026
- Matching living and working conditions to employees' demands
- Building supply chain transparency on social metrics
- Reducing the impact of operations on indigenous peoples in the regions of operation
- Refurbishment of housing and social infrastructure in Norilsk

- Further integrating sustainability principles into the Company's corporate culture
- Compliance with key international sustainability initiatives
- Developing a framework for managing climate-related risks and opportunities

The Company actively integrates sustainability principles into its corporate culture.

For example, in 2023, Nornickel:

- delineated the areas exposed to the environmental impact of its operations and studied the plant and animal species inhabiting the Taimyr and Kola Peninsulas and Zabaykalsky Territory, the regions where it operates
- held trainings on responsible supply chains at its divisions, including on enhancing internal audits in line with ISO 19011:2018 and on conducting supplier audits in line with international standards and ESG principles.

The Company maintains its status as an active participant in Russian and international events on the sustainable development agenda. In 2023, Nornickel speakers took part in the 28th UN Climate Change Conference (COP28), the forum of the UN Economic Commission for Europe in Geneva on sustainable development, human rights, and climate change; the Company also participated in the International Forum on Sustainable Mineral Supply Chains (Chengdu, China).

In the reporting year, Krasnoyarsk hosted the third Siberian Perspective summit organised by Nornickel and supported by the National Council on Corporate Volunteering, the Russian Managers Association, and the Protected Areas Embassy charity foundation. The summit was centred around responsible consumption and supply chains and gathered together more than 200 representatives of businesses and government, experts, and volunteers, including the Company's suppliers, to discuss the challenges in these areas, as well as the relevant roles and relationships between businesses and consumers.

In 2023, the Company published its 2022 Sustainability Report and specialised reports on human rights, responsible supply chain, and climate change.

2022 Sustainability Report

Human Rights Report

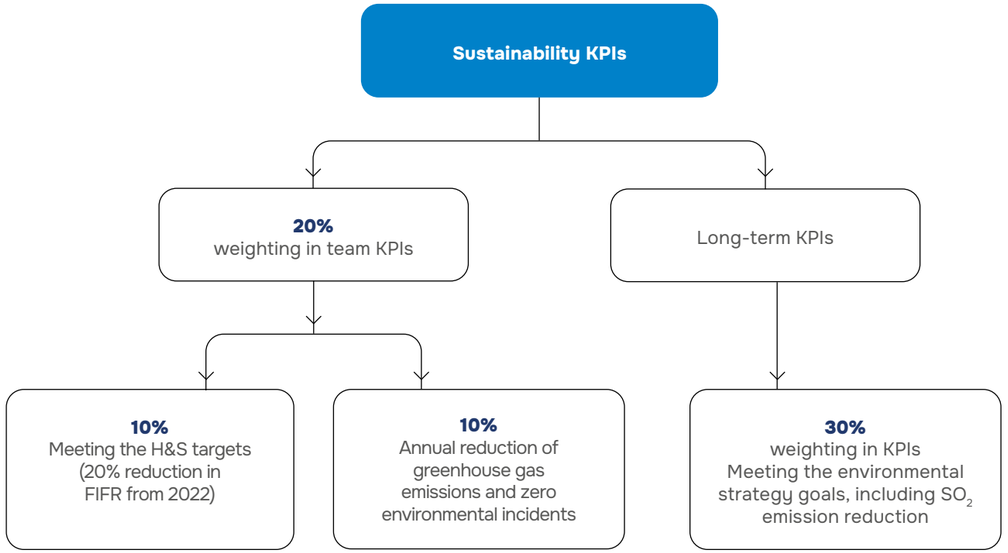
Responsible Supply Chain Report

Climate Change Report

In 2024, Nornickel will continue measures to harmonize activities based on leading international standards and guidelines, including:

- further integrating ESG principles into strategic planning, risk management, and reporting procedures
- working towards closer alignment with the IRMA Standard for Responsible Mining
- completing the self-evaluation process in line with the Global Industry Standard on Tailings Management (GISTM)
- cascading adopted policies to subsidiaries for implementation
- setting additional ESG-related KPIs and evaluating performance
- establishing a human rights due diligence system
- expanding the scope of ESG supplier assessment.

Sustainability KPIs for management



International sustainability standards

● Standard ○ Certified assets ● Status

ISO 14001-2015 **ISO 9001:2015** **ISO 45001:2018**	• MMC Norilsk Nickel • Kola MMC	**Bureau Veritas Certification** Surveillance audits – annually Recertification audits – every three years
	• Norilsk Nickel Harjavalta	**Bureau Veritas Certification** Norilsk Nickel Harjavalta maintains certifications
Meets the requirements **ISO 45001:2018** **ISO 14001:2015** **ISO 9001:2015**	• Pechengastroy	**LLC Quality Management in Accordance with International Standards** A certification audit was conducted in 2023
ISO 14001:2015 **ISO 45001:2018**	• GRK Bystrinskoye	**IRCLASS IRQS (India).** The EMS was certified in 2023 A pre-certification audit was completed in 2023. A certification process is planned for 2024
ISO/IEC 27001:2013	• Kola MMC • Murmansk Transport Division • Nadezhda Metallurgical Plant • Copper Plant • Talnakh Concentrator	**TÜV Austria** Surveillance audits – annually Recertification audits – every three years

Global ESG initiatives

Together for Sustainability (TfS) initiative

The Company's compliance with the requirements of the initiative was confirmed by the 2022 follow-up audit

Nickel Institute

Member since 2005

International Platinum Group Metals Association (IPA)

Member since 1999

UN Global Compact

Member since 2016

Initiative for Responsible Mining Assurance (IRMA)

In 2022, IRMA suspended cooperation with Russian companies. In the same year, Nornickel independently assessed its mining assets for compliance and readiness for the certification and prepared a roadmap

ICMM's Mining Principles

In 2022, ICMM suspended cooperation with Russian companies. The Company is pursuing a compliance roadmap (60% of measures implemented as of 2023-end)

Responsible Minerals Initiative (RMI)

In 2022, RMI suspended cooperation with the Company's Russian assets

Global Battery Alliance (GBA)

Member since 2021

London Metal Exchange (LME)

In 2023, the London Metal Exchange accepted the Company's 2022 RFAs. The Company decided to continue confirming its compliance with LME requirements by submitting annual Track C RFAs

ESG ratings

EcoVadis	ESG score – **58**
MSCI[1]	ESG-rating – **«B»**, score – **3.1** (out of 10)
Corporate Human Rights Benchmark	Score – **21.0** (out of 100.0)
ACRA	ESG-rating – **«B», ESG-2**, a very high ESG score
ESG Index by RBC and NCR	ESG level **I (high)**
RAEX	ESG-rating – **«A»**, high level
Da-Strategy Group	ESG-rating – **«A»**, Russia's Best Corporate ESG Practice
Sustainalytics	ESG risk score – **44.0** (out of 100), on a scale from 1 (low risk) to 100 (high risk)
Expert RA	ESG-rating – **III (a),** a high level of compliance with sustainability goals when making key decisions. Outlook – **stable**

[1] In August 2023, MSCI suspended ratings on Russian companies.

Employees

HR policy

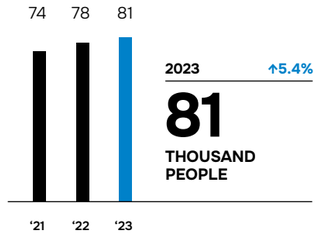
People are Nornickel's main value. The Company views its employees as its core asset and invests in their professional and personal development, provides them with safe and comfortable working conditions as well as decent pay and benefits package, and seeks to boost their performance and ownership of work-related tasks.

HR policy: investing in human capital

Nornickel retains leadership in key Russian and international rankings of the best employers

Contribution to the UN SDGs

Increase in headcount as capacity expands and environmental and production projects are implemented,
THOUSAND PEOPLE



2023 ↑5.4%

81 THOUSAND PEOPLE

RUB
184.1 THOUSAND
Average monthly salary of Nornickel employees in 2023

6%
Proportion of the benefits package in the compensation package

Business Ethics Code

The Company has in place the Business Ethics Code, a fundamental document that plays a major role in ensuring compliance with professional standards and commitment to Nornickel's core values.

Every employee is fully aware of the content and significance of the Business Ethics Code. To encourage commitment to the principles set out in the Code, the Company operates a system of rewards and incentives.

To address potential breaches of the Code, procedures are in place for employees to safely and confidentially report relevant situations. All reports are subject to subsequent investigation. The Company guarantees that no disciplinary action or sanctions, including dismissal, demotion, or bonus forfeiture, will be applied to employees who report breaches of the Code.

Human rights and working conditions

The Company respects the rights and freedoms of its employees as well as those of its stakeholders – partners, investors, contractors, local communities, customers, and consumers.

Nornickel upholds the principles of international standards such as the UN Global Compact, the Universal Declaration of Human Rights, and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. Nornickel complies with the laws of the countries in which it operates.

The Company implements programmes for the development and social support of its employees, upholding their rights in respect of social security, education, family welfare, housing, freedom of artistic expression, and participation in cultural life.

The Company is committed to fostering an inclusive work environment free from any form of discrimination. We work towards ensuring equal opportunities in hiring, promotion, training, and remuneration for all employees, regardless of ethnicity, nationality, religion, gender, age, sexual orientation, marital status, special needs, or any other protected characteristic under applicable law.

The Company hires employees, including those with disabilities. According to the employment quotas, the share of such employees is 2% of the average headcount, excluding employees involved in hazardous or dangerous work. We provide necessary working conditions for this category of people with regard to the work and rest schedule, duration of the annual paid leave, extra days off, additional financial assistance, and other parameters.

The Company strictly adheres to the following principles with respect to its employees:

- Zero tolerance for the use of child labour, forced or slave labour
- Zero tolerance for the employment of persons aged under 18 for hazardous and/or dangerous work
- Zero tolerance for violence or discrimination
- The Company does not engage female employees in extreme or dangerous working conditions
- The Company ensures its employees' right to safe working conditions
- The Company makes sure all employees enjoy equal rights and opportunities regardless of gender, age, race, nationality, and origin
- The Company provides all employees with equal opportunities for unlocking their potential. Employee performance is evaluated on a fair and impartial basis, and recruitment and promotion decisions are tied exclusively to professional abilities, knowledge, and skills
- The Company respects the right to form trade unions and does not prevent employees from joining them

The Company has adopted internal labour regulations, which are approved in consultation with the trade union organisation and establish employees' working hours. The Company has a standard working week of 40 hours as determined by applicable Russian laws and regulations. Employees involved in hazardous or dangerous work enjoy a reduced working week of not more than 36 hours. Women employed in the Far North and equivalent areas work 36 hours per week unless a shorter working week is stipulated by Russian laws and regulations. The Company arranges for accurate work time control for each employee.

Work on weekends and overtime is paid as per the Labour Code of the Russian Federation.

Awards and industry recognition

In 2023, Nornickel entered a number of best employer lists:

- Top 30 best employers in HeadHunter's ranking
- Gold in the Forbes Employer Rating with the highest scores in the Employees and Society and Corporate Governance categories
- No. 1 among metals companies in Changellenge's Best Company Award ranking of the best employers according to young respondents
- No. 8 in Future Today's ranking of top employers selected by students
- Grand Prix of HeadHunter's HR Brand of the Year award in the Grand Federation category for the Present for the Future: Developing Engineering Potential project
- Project of the Year Grand Prix of AKMR's People Are Key award for the Present for the Future: Developing the Engineering Potential of the Industry and the Company project
- Three EMBRAS international awards in the Employer Image, Good Deeds, and Business Results categories
- Crystal Pyramid award for the best employer brand in metallurgy
- Two top awards of the WOW!HR International Business Awards in the HR Hero and Workplace categories

Staff composition

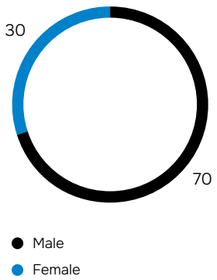
In 2023, the Group's average headcount was 80.6 thousand employees, of which 99.5% were employed by its Russian companies. In 2023, the Company's turnover rate stood at 11.4%. Nornickel is among the largest employers in the Norilsk Industrial District and Kola Peninsula, employing 67% and 15% of the regional workforce, respectively. Local population accounts for 99.7% of the headcount. The average headcount increase in 2023 was driven by the Company's investment strategy as well as organisational and technical changes.

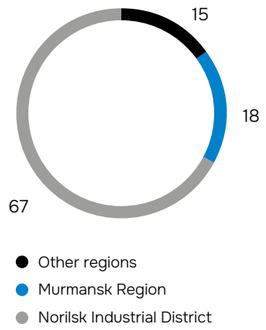
Employees under permanent employment contracts account for 94% of the workforce.

Since Nornickel is a production company, the proportion of men in its workforce is significantly higher than that of women.

80.6 THOUSAND
EMPLOYEES
The average headcount of Nornickel employees in 2023

99.7%
The share of new hires from among local population



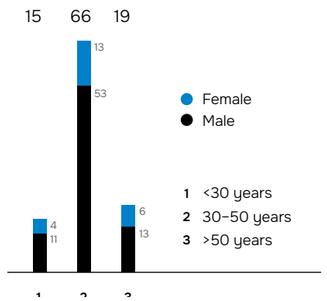


Average headcount

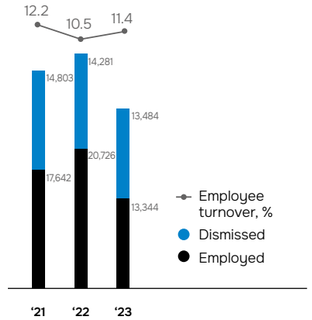
Location	2021	2022	2023
Russia	73,061	77,980	**80,166**
Africa	151	38	**47**
Europe	317	331	**322**
Asia	15	15	**22**
USA	10	10	**5**
Australia	3	0	**0**
TOTAL	**73,557**	**78,374**	**80,562**

Headcount by category and gender[1], %

Headcount by age and gender[1],%



Employee turnover, PEOPLE[2]



Recruitment

The Company's headcount grows every year. Nornickel aims to provide equal hiring opportunities for employees while attracting talent from across Russia and training them to match its production needs. The Norilsk Nickel Corporate University offers numerous upskilling and retraining programmes. Internal candidates have a priority when filling vacant positions. In 2023 alone, more than 4 thousand employees were promoted within the Group.

All vacancies in the Company are posted on public resources and on the intranet portal. Candidates can send their CVs by e-mail, telephone a 24/7 call centre, or visit HR support centres. In addition, recruitment centres were opened in shopping malls in Norilsk, Ufa, Orsk, and Irkutsk. Feedback is given to each candidate.

The call centre received 3,155 phone calls from job applicants in 2023.

In addition, a branded HR Support Centre featuring a comfortable waiting area, queue management system, and career advice service was opened in Norilsk to welcome candidates in person.

A programme was launched to hire back employees who had previously left the Company. In 2023, 3.5 thousand former employees were contacted by phone as part of the programme. Over 3.3 thousand of them showed interest in vacancies, and 880 were re-employed.

Eight units of the Norilsk Division operate on a shift basis. In 2023, 1,919 employees worked on rotational shifts, primarily crane operators, electricians, drivers, and technicians.

Career guidance

The Company pays special attention to career guidance for school students and young people both in the cities where it operates and throughout Russia.

A unique encyclopaedia platform, Nornickel's City of Occupations, was created for school students: an interactive map incorporating game mechanics such as quizzes, quests, and a conversational bot. The map includes descriptions of 147 occupations and offers a career guidance test to identify a "candidate's" strengths and

3,155
phone calls from job applicants handled by the call centre in 2023

>4 THOUSAND
employees promoted within the Group

880
people employed under the programme to hire back employees who had previously left the Company

1,919
employees worked on rotational shifts

[1] Based on the average annual RUB/USD exchange rate given at the end of the Report.
[2] The ratio of resignations, dismissals for breach of labour discipline, and negotiated terminations to the average headcount as at the year-end.

weaknesses. The platform also features guidelines for parents to help their child choose a career.

The Conquerors of the North four-week online educational programme is available for students across Russia majoring in professions that are in-demand at the Company. In 2023, 2,090 students applied for the programme, with 336 people completing it and recommended for further employment and internships at Nornickel.

The third stream of the First Arctic programme aimed at building the leadership potential of university graduates was launched, with 323 applicants evaluated and 20 winners employed as a result.

The Company also runs the Career Start-up programme to attract young talent to internship programmes. In 2023, 516 students from 20 Russian higher education institutions and 200 students from five vocational training institutions completed their internships under the Polar College programme.

626 students were accepted for on-the-job and pre-graduation internships, including 360 students employed for temporary jobs as part of student construction brigades. Corporate scholarships were awarded to 454 students.

In addition, Nornickel supports federal programmes aimed at engaging young people, such as the Your Move championship and the I Am a Professional Olympiad.

Recruitment for the Sulphur Project

In October 2023, Nornickel inaugurated the Sulphur Project at Nadezhda Metallurgical Plant, marking the launch of Russia's most ambitious environmental project to date. The sulphuric acid production and neutralisation shop will need to fill over 500 jobs, including over 70 jobs for specialists and managers and over 400 blue-collar jobs. As at end-2023, 418 people were already employed, including 64 managers and specialists and 354 blue-collar employees.

In addition to general jobs and jobs that can be covered by related enterprises, such as repair technician, electrical equipment repair and maintenance electrician, electric and gas welder, bunkerman, crusher operator, and many others, the enterprise needs specialists in new jobs, specifically neutralisation and oxidation unit operators. Such specialists were trained in Omsk under training programmes developed by the Omsk Polytechnic College; students studied theory independently while practical studies took place at Omsk Rubber Plant.

Staff for the new shop at Nadezhda Metallurgical Plant was trained by seasoned mentors across three sites of the Norilsk Division: Copper Plant, Nadezhda Metallurgical Plant, and Talnakh Concentrator.

Project staff was recruited both on the local labour market and outside Norilsk in a 50/50 split, with employees from other Polar Division entities and invited specialists from other Russian regions across a wide geography, including Vladikavkaz, Bashkortostan, Chelyabinsk Region, Zabaykalsky Territory, Krasnoyarsk Territory, etc.

2,090
students applied for participation in the Conquerors of the North online programme

323
applicants evaluated as part of the First Arctic programme for university graduates

516
university students completed their internships under the Career Start-up programme»

200
students from vocational training institutions completed their internships under the Polar College programme

454
students awarded corporate scholarships

Outplacement following an asset closure

At the end of 2023, the Company began the conservation of the Kaula-Kotselvaara mine on the Kola Peninsula. The Company developed a set of measures for redundant miners – those who decided to terminate their employment with the Company as well as those who opted for moving to other Company units. The former received support payments, while the latter benefited from a whole package of measures, from finding vacancies within the Company and training in new jobs while retaining their salaries to reimbursement of relocation expenses and housing rent if their new place of work was in another city. The programme was agreed with the social and labour council and primary trade union organisations.

The Succession programme implies that a redundant employee is trained by another Company employee of retirement age with a severance pay paid to the mentor upon completion of training.

Nornickel has fully delivered on its programme of social guarantees to redundant employees: beneficial terms for moving to other production facilities within the Company, a retraining programme, and a pension plan. Nornickel launched a dedicated Employment Centre to provide all-round support to employees affected by the mine shutdown (including by providing information, advice, and career guidance) and to partner with other Group entities 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.

190 employees of the Kaula-Kotselvaara mine and 36 employees of other Company units chose to terminate their employment as part of the Social Support Programme, while 299 employees were employed within the Group.

When an employee is employed by other Group companies, Nornickel provides:

- reimbursement of rental expenses when relocating to another city
- retention of the same salary during one calendar year
- reimbursement of relocation expenses for the employee and their family members
- reimbursement of baggage fees
- priority right to participate in corporate subsidised loan programmes to purchase housing at the new place of employment
- training/retraining/certification in a new job/position at the Company's expense.

In case of termination, an employee is entitled to:

- a severance pay of six or more average monthly salaries (as well as additional payments to pensioners, socially vulnerable employee groups, and participants in the Succession programme)
- early payment of corporate pensions to participants in corporate pension plans who receive old-age or disability pension or pension for length of service
- reimbursement of relocation expenses for the employee and their family members
- reimbursement of baggage fees
- the right to early termination of participation in housing programs in favor of an employee
- retention of the VHI policy for one calendar year from the date of employment termination.

Training and career

Nornickel offers ample opportunities for employee development, guided by the principles of accessibility, innovation, and relevance.

In 2023, the Company continued to foster a culture of continuous learning and expand an accelerated training ecosystem to boost professional excellence and enhance and build managerial, corporate, and critical competencies.

2023 saw a continued trend towards higher share of employees completing training – now at 6% of the workforce, or a 94% increase, while the share of in-person training decreased. 42% of Nornickel's total training was focussed on building critical skills and 50% – on building professional competencies.

In addition, a career marathon was held for the first time, involving over 1.8 thousand employees, with over 30% of them already promoted in 2023.

Professional competency development

In 2023, the Company changed the format of developing professional competencies by introducing distance learning and a module-based approach which accelerated timelines and improved the quality of training. A successful pilot project triggered a change to the entire approach to organising professional training.

In 2023, ten group training programmes covering the Company's core jobs were developed and approved by the customer. Along with distance-learning modules, these programmes comprised modules devoted to operating various types of equipment. In particular, the most complicated programmes involving simulator training and sessions at the underground training base (to train LHD operators, operators of self-propelled underground vehicles, and hole drillers) were redesigned accordingly.

360-Degree management programme

Along with level-specific manager development programmes, the Company offers extensive opportunities to develop management and corporate skills to employees who have passed a 360-degree assessment. In 2023, the 360-Degree Management programme offered in-person training that included training sessions, business games, and real-world management case studies. Participants independently chose their training topics based on the assessment results, a dialogue with their manager, and their individual development plan.

In-person trainings within the programme are grouped into three themed development areas: operational discipline, systems thinking, and people skills.

In 2023, the programme comprised 59 in-person training sessions involving over 1 thousand employees, and nine online workshops that had 3.5 thousand views.

School of leadership

In 2023, the School of Leadership training programme was launched for middle managers to build team management skills. This crash course comprises four online modules and one three-day in-person module, Leadership Workshop, where participants practice their newly acquired knowledge. The programme focuses on transforming routine approaches to thinking, acting, and interacting with colleagues.

In 2023, 356 managers were trained under the programme.

One of the pressing tasks in the reporting year was designing a development programme for line managers aimed primarily at improving understanding of their management role and developing their management skills. The need for extensive coverage (Nornickel employs over 6 thousand line managers and supervisors) prompted an innovative solution: an AI-powered chatbot integrated into the Supernika corporate app, which enables training anytime and anywhere. Besides, interaction with artificial intelligence helps employees get a grasp of modern digital technologies.

Training young managers

As part of the In a Good Company project, young managers aged under 35 were invited to compete for the opportunity to study at one of the most prominent business schools in Russia, the Graduate School of Management at Saint Petersburg University. More than 65 young managers completed the studies in 2023. The top graduates mastered best practices in people management, becoming role models to Company employees.

Building practical skills

Employee training infrastructure is becoming increasingly focussed on learning practical skills with every year. In 2023, Nornickel set up two lean production laboratories, in Norilsk and Monchegorsk, and launched the most advanced work-at-height simulator at Talnakh. The simulator was custom-designed for Nornickel to match the Company's production profile and requirements. It allows practicing more than 25 basic skills for working at height, with over 2 thousand employees trained on the simulator over four months.

In 2023, the Norilsk Nickel Corporate University's underground training base at the Anhydrite shaft of the Kayerkansky mine was ranked among the top 15 industrial tourism facilities. The base is used for training professionals in complex mining operations.

The Company is also strongly focussed on creating a comfortable learning environment. Specifically, the renovated building of the corporate university in Monchegorsk has become a key venue for training and professional skills competitions as well as for corporate events. The next step is a large-scale renovation project for the corporate university building in Norilsk.

Digital training tools, such as the Nornickel Academy platform, have become commonplace for 80% of Nornickel employees. The platform offers training courses to develop professional and management skills and provides insights into modern trends and tools as well as expert advice. We collaborate with the Alpina Publisher publishing house to develop an electronic reading room currently offering over 10 thousand books free of charge. In 2023, Company employees completed more than 221 thousand courses.

Assistance programme

Since the Company's production sites are located in remote areas, Nornickel actively sources staff from other regions of Russia. To help them better adapt to new environment, Nornickel launched the Assistance programme targeting not only skilled talent and managers but also young employees and talent with hard-to-find skills. All employees coming to Taimyr are provided with comfortable living conditions and reimbursed for relocation and resettlement costs.

Training in figures:

- Reduced duration of one training activity
- Unchanged split between in-person (30%) and online (70%) learning
- Increased coverage of in-house training (86% of the average headcount) at Nornickel Academy

Increased training volumes

UP BY 45% Y-O-Y

Number of person-events per person:

4.1 EVENTS

>1.8 THOUSAND

Company employees participated in a career marathon

>1 THOUSAND

employees participated in face-to-face trainings within the 360-Degree Management programme

356

managers trained under the School of Leadership programme in 2023

>65

young managers (under 35) trained at the Graduate School of Management at Saint Petersburg University

>2 THOUSAND

employees trained on a work-at-height simulator

>221 THOUSAND

courses completed by Company employees on the Nornickel Academy platform in 2023

>10 THOUSAND

books are available in the electronic reading room of Nornickel Academy

Today, the programme covers more than 4.5 thousand Nornickel employees, including 1.6 thousand who joined the Company in 2023.

Relocation programme

The employee relocation programme has been in place since early 2022. The programme supports all employees relocating to another region, whether they remain with their current employer or are transferred to other units within the Group. Along with the standard reimbursement of travel, baggage, accommodation, and subsistence cost and an additional leave for settling in, relocated employees receive a supplementary relocation allowance amounting to up to 40% of the salary, depending on the destination.

Relocation to a new place of work unlocks opportunities for employees' personal and professional growth, while the Company is able to fill vacancies even if there are no sufficiently qualified candidates in the talent pool and on the labour market of the relevant operating regions.

Currently, 61 Nornickel employees are covered by the programme, including 27 who joined in 2023.

Corporate culture

Nornickel nurtures its corporate culture to bring together activist employees, enhance their engagement in achieving the Company's strategic objectives and involvement in the corporate and social activities of its facilities and regions of operation.

In the second half of 2023, the Company ran a large-scale corporate culture diagnostic covering the Head Office and 16 production facilities. Analysis of the current state and changes in corporate culture since 2016 yields the following key findings:

- Nornickel's corporate culture is becoming stronger and more homogeneous. 64% of respondents believe that employees live corporate values
- The Company has become more united and has successfully adapted to the current environment. Employee communication channels were enhanced, and understanding and acceptance of corporate values deepened. Today, Nornickel is focussed on workplace safety, environmental awareness, social development, cooperation, and innovation
- Corporate culture development drove a significant improvement in employee engagement while enhancing mutual understanding and vertical communication within the team. The significance of these achievements is confirmed by a clear correlation between corporate culture assessment and employees' confidence in the Company's management
- An important element of corporate culture development is systematic communication of the Company's values and their integration into the hiring, assessment, and career planning processes
- The objectives of corporate culture development may need to be revised in view of generational change as well as changes in the external environment and business priorities. Going forward, this may drive the need to update the value model. Currently, increasing priority is given to people, cooperation, effectiveness, safety, progress, and initiative

Mentoring

In 2023, the Company introduced a mentoring system. Top 100 managers holding CCE ICF international certificates acted as mentors to high-potential employees. 40 mentoring meetings were held in the reporting year.

In a Good Company programme

Nornickel's youth programme, In a Good Company, was created to unite employees aged under 35 and encourage their professional and creative growth in various areas and spheres. Programme participants are invited to implement projects within four tracks: professional practice, growth, social practice, and creativity.

The programme's additional objective is to identify talented students and young talents outside the Company, attract them to work at Nornickel, and make their onboarding as fast and successful as possible.

Programme participants can communicate via an internal online app that had 6,725 registered users (Company employees) as at end-2023, which accounted for 20.3% of the target audience.

Corporate volunteering

Corporate volunteering is an important tool for human capital development. Volunteering has become an integral part of Nornickel's corporate culture and social mission, as evidenced by almost 4 thousand employees in the community of volunteers in the Plant of Goodness program, who annually attract about 40 partners and conduct more than 410 volunteer events.

In 2023, Plant of Goodness was named the winner of the Employer Brand Award & Summit in the Good Deeds category which featured social projects.

The program carries out a wide range of volunteer and charity projects in which everyone can choose what suits them: the Icebreaker educational programme, the Poneslos ("Let's Roll") environmental initiative, and the Your Habitat regional ecological shifts. More details are available on the Company website and in the Sustainability Report.

Dialogue with employees

Nornickel's management is strongly focussed on employee engagement and continues to promote vertical dialogue. In 2023, the following events were organised:

- The main Nornickel Live Q&A session involving the Company's Vice Presidents
- Divisional Nornickel Live Q&A sessions involving division heads and enterprise senior managers
- Corporate dialogues involving enterprise heads and key managers

Employees actively engage in dialogues with management and submit a large number of questions, more than 7 thousand per year. In 2023, more than 25 thousand employees participated in Q&A sessions, and about 3 thousand employees took part in corporate dialogues.

The most significant topics of discussion included the remuneration and bonus system, social support, and safety culture. In 2023, Nornickel ran seven major information campaigns covering changes in these areas: salary increase from 1 July; bonuses for the Company Day, annual performance, and H&S achievements; progress of the Support from Nornickel programme, etc.

Efficient communication is enabled by applying a multichannel approach and training a large number of in-house speakers. Specifically, in 2023, more than 1 thousand in-house speakers maintained live contact and engaged with employees, and the total audience of our information campaigns exceeded 250 thousand people, i.e. each employee was contacted on average more than three times over the year.

Open dialogue with management helps build employees' confidence, reduces stress, and increases employee engagement.

6,725
employees registered in the online application of the In a Good Company programme

In 2023, Plant of Goodness, a corporate volunteering programme, attracted

~ 4 THOUSAND EMPLOYEES

40 PARTNERS

and enabled

> 410 ACTIVITIES

In 2023, more than

25 THOUSAND
employees participated in Q&A sessions

70% ↑5%
employee satisfaction in 2023

> 250 THOUSAND
people reached by information campaigns in 2023

Engagement

Nornickel conducts regular targeted polls and surveys to measure employee engagement and assess social programmes.

In 2023, the engagement survey covered 57,145 Company employees, 6,563 more than in 2022. Employee engagement increased by 5 p.p. y-o-y and currently exceeds the industry benchmark by 6 p.p.

In 2023, efforts to improve engagement focussed primarily on increasing the amount and quality of internal communications, boosting the bonus component and developing remuneration programmes, targeting the most sensitive audiences (young talent and active employees), and promoting social partnership. In addition, the Company improved working conditions and business processes, ensured the supply of necessary equipment and resources, and improved the accessibility of information about vacancies and internal promotions.

The Company's business objectives were also integrated into the engagement management cycle. In 2023, more than 500 activities were delivered to increase engagement, of which 53% directly supported enterprises' current goals: implementing the production programme, ensuring uninterrupted equipment operation, attracting talent to remote areas, etc.

5 P. P.
Year-on-year increase in employee engagement

>500
activities delivered to increase engagement in 2023

Remuneration

Key performance indicators

The bonus system for Nornickel's managers and specialists is based on the achievement of KPIs, including financial performance, social responsibility, occupational safety, environmental safety, operational efficiency, and capital management metrics. In 2023, a total of 18,390 employees of the Group were assessed against their KPIs.

KPI setting is driven by the principles of balance, regularity, validation, decomposition, and ambition as well as the SMART criteria. Cascading is used in KPI setting: a manager breaks down their KPIs into components which become their subordinates' KPIs. Therefore, when employees meet their KPI targets, their superiors' KPIs are also achieved.

The performance of Head Office employees and Group managers is evaluated separately. In 2020, a new incentive system was introduced for all employees of project management offices (PMOs): project bonuses and traditional annual bonus were replaced with project completion bonuses to motivate key project staff and retain them until the project is completed. In 2023, the performance of the project bonus system was evaluated by 1,328 Group employees.

In addition, an automated 360-degree assessment procedure was run at 30 Group enterprises. Following the assessment, employees receive feedback from their superiors, discuss areas for improvement, and build their individual development plans for the year. In 2023, the assessment covered more than 5 thousand managers at all levels, including top management, and 7 thousand specialists, of whom 85% filled in their individual development plans.

18,390
Group employees assessed against their KPIs in 2023

>5 THOUSAND MANAGERS

7 THOUSAND SPECIALISTS

covered by an automated 360-degree assessment

Salary and benefits package

Nornickel has in place a comprehensive employee incentive system aimed at improving operational efficiency and labour productivity, delivering robust performance, and retaining highly skilled employees.

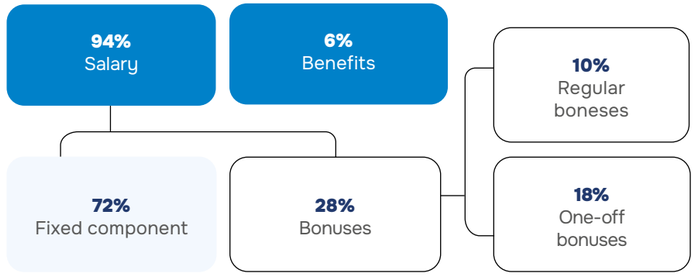
Financial rewards are governed by the Company's remuneration policy and include salary and a benefits package. In its turn, salary includes fixed and variable components.

The variable component is linked to the Company's performance and KPI achievement as well as progress on capital construction investment projects. The variable component of remuneration includes one-off bonuses paid for the fulfilment of one-off tasks that deliver an economic benefit.

6.1%
Increase in Company employees' salaries from 1 July 2023

Nornickel employees' salaries do not depend on their gender, age, race, nationality, origin, and religion.

Employee compensation package breakdown



Nornickel has in place a grading system, which is a key tool to develop and implement various HR-related programmes. Positions are graded using the point rating method, which takes into account the required knowledge and skills, the complexity of tasks involved, and the responsibility level in each job.

A position's grade determines the amount of fixed salary and annual bonus, the category of the VHI programme, and other components of the compensation package.

The Company has developed and implemented policies to determine salary levels and annual bonus rates.

A uniform approach to performance-based bonuses is used along with project-based bonuses and uniform rules for paying one-off bonuses. In 2023, the automation of the year-end performance bonus process was completed for all employee categories.

The Company regularly reviews pay levels and trends and makes sure that salaries exceed the subsistence minimum, while also considering the cost of living – both the nation-wide averages and the average figures for each of its operating regions. Wage indexation is done annually based on the review results Specifically, the Company increased employees' salaries by 6.1% from 1 July 2023.

Average monthly salaries of Nornickel employees[1]

[1] Based on the average annual RUB/USD exchange rate given at the end of the Report.

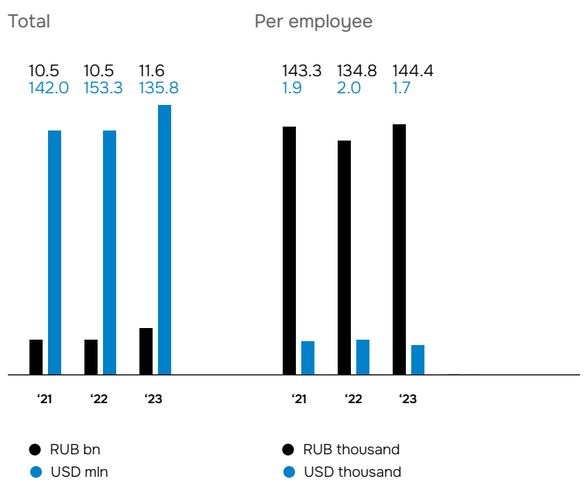
Minimum wage rate and employee remuneration by region

Region	Established minimum wage rate		Average monthly salaries of Nornickel employees	
	RUB	USD	RUB	USD
Norilsk Industrial District	42,230	495	184,936	2,169
Murmansk Region	37,357	438	127,778	1,499
Krasnoyarsk Territory (excluding NID)	25,987	305	95,596	1,121
Zabaykalsky Territory	24,363	286	154,470	1,812
Moscow and other regions of Russia	17,054	200	316,722	3,715

The benefits package includes the following benefits and compensations:

- VHI and major accident insurance coverage
- Discounted tours for health resort treatment and recreation of employees and their families
- Reimbursements of holiday travel expenses for a round trip and baggage fees for employees and their families living in the Far North and territories equated thereto
- One-off financial assistance in difficult circumstances
- Complementary corporate pension plan
- Other types of social benefits under the existing collective bargaining agreements and local regulations

Benefits package costs at Nornickel's Russian entities



VHI policy

Voluntary health insurance covers 100% of Group employees. In addition, employees can take out a policy at the corporate rate for one close relative.

Employees residing in the Far North are entitled to medical assistance under a VHI policy in these regions and beyond. All insurance programmes offer the same range of services with only the level of clinics and covered regions differing depending on employee category.

100%

of Group employees covered by voluntary health insurance

Additional employee incentives

Digital Investor

In 2023, Nornickel launched the Digital Investor programme, unique in the Russian market. It aims to build a new model of the employer-employee relationship. The Company covers 100% of employees' expenses on purchasing digital financial assets (DFAs), a new investment instrument based on the blockchain technology. DFAs entitle their holders to cash payments and securities; they are issued and circulated on dedicated platforms under the supervision of the Bank of Russia.

Nornickel's DFAs are called minetokens. The price of one minetoken equals the value of one Company share at issuance and at redemption. The number of DFAs granted to an employee is determined by their length of service with the Group as at 1 January 2023.

In 2023, the project was implemented in the Norilsk Industrial District, Moscow, Saint Petersburg, Sochi, Saratov, Arkhangelsk, and the Krasnoyarsk Territory, and in the first quarter of 2024, it was rolled out to the Murmansk Region and the Zabaykalsky Territory. At the time of writing this Report, more than 60 thousand Company employees already became DFA holders.

Under the programme, one year after the receipt of minetokens, holders are entitled to sell them to investors registered on the special platform. After five years, the DFAs will be automatically redeemed and their holders will receive an amount equivalent to the value of the respective number of Nornickel shares at redemption.

Thus, the remuneration of Nornickel DFA holders is linked directly to the Company's capitalisation, which ensures additional motivation for strong performance and success of the team.

Simultaneously with the start of the project, the Company launched an information campaign to explain all features of the new instrument to employees. A dedicated training programme and an online educational module were developed, and a series of webinars was held with leading experts on financial literacy and investment. In particular, over 200 HR specialists were trained and became ambassadors for the programme across all Company enterprises. In addition, employees can get an answer to any question about digital assets by calling the hotline, visiting the website, or examining other informational materials.

Award policy

Nornickel's Award Policy is closely linked to its values and strategic priorities. Employees are rewarded for outstanding professional achievements and contribution, innovations that drive growth and add value, efforts going beyond formal agreements with employees, and contribution to overall performance of the business. Resolutions on corporate incentives are passed by the President of the Company.

Employees may also be rewarded at the initiative of relevant enterprises.

Nornickel welcomes recognition of its employees' accomplishments by the government and regional and municipal authorities and nominates those who achieved outstanding results in operations and management and made a significant contribution to production development.

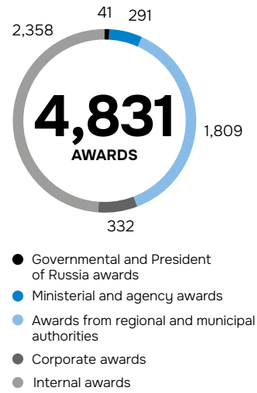
Number of DFAs granted to an employee depending on length of service

Length of service, years	Number of DFAs
Up to 1	0
1–4	2
5–9	4
10–14	6
15–19	8
Over 20	10

> 60 THOUSAND

Company employees already holding DFAs at the time of writing this Report

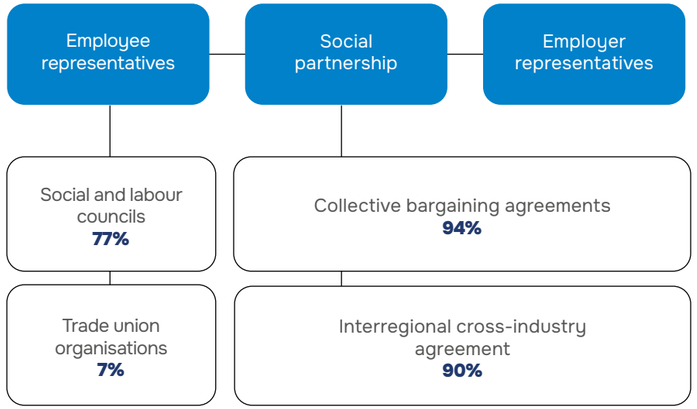
Employee awards in 2023



Social partnership

The social partnership framework regulates labour relations within the Company and is a key tool to engage with employees. Other engagement mechanisms include offices for social and labour relations, a response centre, and task forces at branches.

Social partnership framework at Nornickel



Trade union organisations

The Company has 58 trade union organisations that are united into territorial trade unions and are part of the Trade Union of MMC Norilsk Nickel Employees, an interregional public organisation.

The trade unions of transport and logistics divisions of the Krasnoyarsk region are members of the Yenisey Basin Trade Union of Russia's Water Transport Workers, headquartered in Krasnoyarsk.

In 2023, trade unions participated in negotiations to extend collective bargaining agreements at eight Group companies for three years, in quality audits of catering facilities and healthy meals suppliers, and in special assessments of employees' working conditions.

Social and labour councils

Social and labour councils have been in place since 2006 to represent the interests of all employees at the local level. They can raise matters relating to health resort treatment, recreation, and leisure programmes for employees, disease prevention, provision of personal protective equipment, workplace and catering arrangements, etc.

Offices for operational, social, and labour matters

In addition to the Corporate Trust Line speak-up programme, the Group set up offices for operational, social, and labour matters back in 2003. Their key functions are to respond to queries and requests, oversee their review, regularly monitor team climate, and promptly resolve conflict situations.

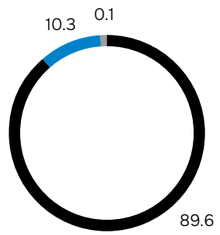
Relevant specialists review incoming queries and requests or redirect them to functions or production units and monitor response times and quality. Complaints are never forwarded to the managers whose actions are challenged.

In 2023, Group enterprises in the Norilsk Industrial District operated 26 offices, which received a total of over 49 thousand queries and requests from employees (82.5%), former employees (17%), and other individuals (0.5%).

>49 THOUSAND

queries and requests received by offices for operational, social, and labour matters operated by Group enterprises in the Norilsk Industrial District

Main topics of queries and requests, %



Collective bargaining agreements

Collective bargaining agreements at the Group's Russian enterprises comply with applicable laws and adequately reflect employee expectations.

In 2023, Group enterprises extended for three years eight collective bargaining agreements, which have historically provided one of the industry's best benefits packages. Today, all collective bargaining agreements of the Group's Russian entities stipulate a uniform approach to regulating social and labour relations.

No breaches of collective bargaining agreements and no strikes or mass layoffs took place across Group enterprises in 2023.

Interregional cross-industry agreement

The interregional cross-industry agreement, along with collective bargaining agreements, regulates social and labour relations at Group enterprises. Participants in the agreement establish uniform corporate approaches to compensation, work and rest hours, provision of guarantees, allowances, and benefits to employees, occupational health, and other matters. This allows Group enterprises active in various industries to pursue a uniform social policy.

In December 2021, the agreement was amended and extended for 2022–2025. Currently, it covers 21 enterprises.

Social programmes for employees

Health improvement programmes

Health resort treatment and health improvement programmes for employees and their families are among the most popular programmes offered by Nornickel as part of its social policy in the Far North.

In 2023, 17.5 thousand employees and their family members improved their health at the corporate Zapolyarye Health Resort in Sochi; 7.1 thousand employees spent their holidays at other health resorts, with 1.6 thousand employees' children visiting children's health resorts. The Company compensates its employees an average of about 86% of the trip voucher cost.

Sports programmes

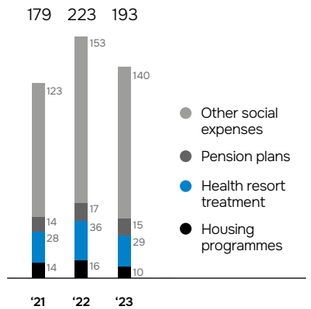
Another important social support programme run by Nornickel promotes corporate sports and supports healthy lifestyle. It aims to improve the quality of life, build a more attractive employer brand, and make sports more accessible to employees and local people in the Company's regions of operation.

The Company regularly holds sporting events with a particular focus on corporate competitions, including annual Spartakiads. Hockey, futsal, volleyball, basketball, alpine skiing, snowboarding, swimming, and family sports contests are particularly popular with employees. The Night Hockey League was established to encourage involvement in amateur hockey.

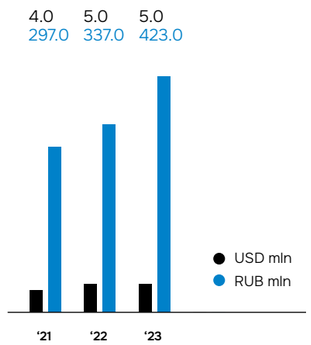
In 2023, a large-scale project, Nornickel: Hooked on Sport, was launched to help each employee stay physically active, eat healthy, effectively cope with stress, and feel satisfied with life and work. A mobile app was developed for project participants. The Company collaborated with Hero Race to organise the Nornickel Run Race at the Norilsk and Kola Divisions, which attracted a vast number of participants.

During the year, sporting and recreational events covered 27 thousand Company employees, live broadcasts of corporate competitions gathered over 55 thousand views.

Spending on social programmes for employees,
USD MLN



Sports expenses



Housing programmes

In 2023, Nornickel continued its housing programmes, Our Home / My Home and Your Home, which enabled employees to purchase ready-to-move-in apartments on preferential terms across Russia.

Nornickel purchases housing at its expense and transfers it to employees under co-financing agreements: the employer pays up to 50% of the cost, but in any case no more than RUB 3 million (USD 35 thousand), with the rest paid by the employee within a certain period of employment with the Company (from 5 to 10 years). The cost of housing remains unchanged throughout the employee's participation in the programmes.

The Our Home / My Home programme entitles an employee to use the housing from the time they receive it, but the property title is registered in their name at the end of their participation in the programme. Under the Your Home programme, the property title is registered in the name of the employee immediately (with the title encumbered by a mortgage and encumbrance removed from the property once the employee fully repays the debt to the seller).

In 2014–2023, apartments for employees were purchased in the Moscow and Tver Regions, Krasnodar Territory, and Yaroslavl. To develop additional infrastructure, create a more comfortable living environment for employees, and optimise maintenance for the property management company, Nornickel purchased closely located properties. A total of 6,118 apartments have been provided to employees.

On top of this, Nornickel operates a subsidised loan social programme offering 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. More than 1.6 thousand employees have already benefited from these preferential loans.

Corporate 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. This provides incentives for pre-retirement employees with a long service record at Nornickel enterprises and considerable job achievements.

Support to former employees

As part of Nornickel's corporate social policy, the Company's Veterans programme aimed at supporting former employees targets unemployed pensioners who permanently reside in Norilsk. The main eligibility criterion is the employee's length of service at the Company.

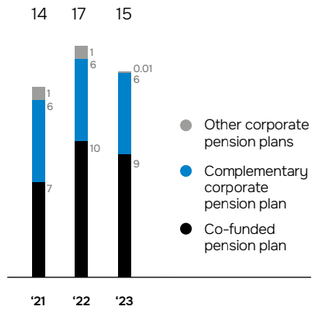
The Pensioner Financial Aid Fund supports former employees who retired prior to 10 July 2001 provided they had been employed by the Company for 25 years or more and permanently reside outside of the Norilsk Industrial District. The Fund relies on voluntary monthly contributions from employees and charitable contributions from the Company's budget.

The Company also provides targeted assistance to its former employees and their families in difficult circumstances, pays for health improvement, medicines, or funeral services.

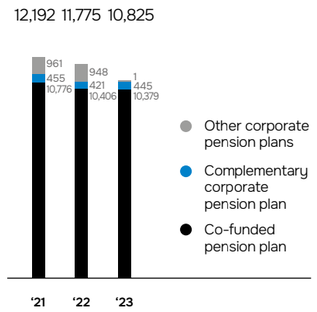
>1.6 THOUSAND
employees benefitted from preferential mortgage loans

Contributions to, and participation in, corporate pension plans

Contribution, USD mln



Number of participants, people



Health and safety

Management system

Strategic goals

Zero work-related fatalities	The Company has a zero tolerance policy for work-related fatalities
No major accidents at production sites	Measures to prevent accidents at the Company's facilities and the associated negative impact on local communities in rating regions or operational performance
Steady reduction of health and safety risks to a tolerable level	Safe working conditions for employees and mitigation of ore mining and processing risks

Key performance indicators

10%-25% weighting in team KPIs of all Group employees

Goal:
Deliver on the action plan in health and safety and reduce FIFR **by 20% or more** year-on-year

10%-35% weighting in individual KPIs of production site managers

Goal:
Deliver on the injury prevention plan and achieve zero work-related fatalities

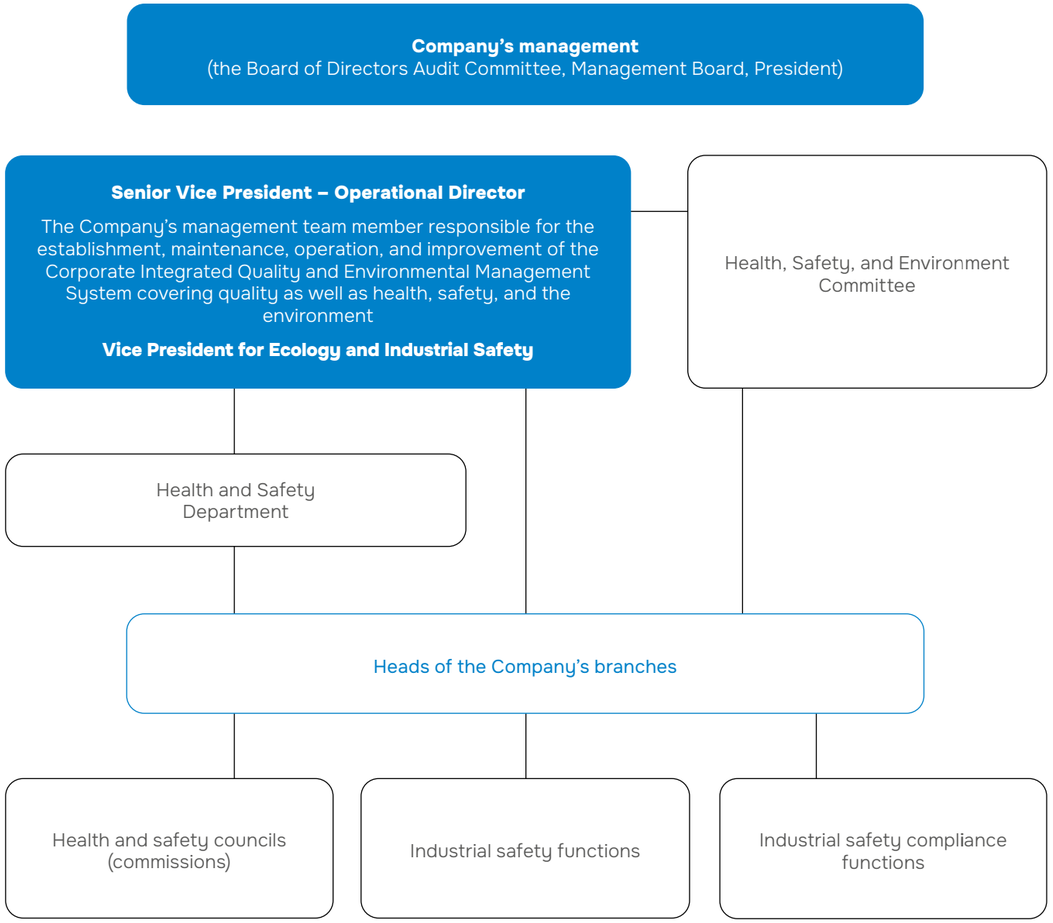
Contribution to the UN SDGs

In 2022, the Company updated its key strategic objectives in health and safety for 2023–2025. Efforts in this area are primarily focussed on achieving an industry average injury rate and zero-rate fatalities.

Heads of production sites are personally responsible for the life and health of each of their subordinates. Injury and industrial safety metrics weigh between 10% and 35% in their individual KPIs. Failure to prevent a fatality blocks performance bonuses. In addition, team KPIs for all employees include injury rate and FIFR1 reduction by 20% or more, with 10%–25% weighting.

[1] Fatal Injury Frequency Rate, the number of fatalities per million hours worked.

Control structure



The Audit Committee at the Board of Directors deals with industrial safety matters. The Committee reviews management reports on industrial safety performance every quarter, hears reports on causes of accidents, measures taken to prevent similar accidents in the future, and disciplinary actions taken against the employees at fault.

The Company's Health, Safety, and Environment Committee, led by the Senior Vice President – Operational Director, is focussed on improving performance and accountability in health and safety. The Committee meets quarterly at various production sites of the Group.

Certifications and audits

In 2023, Nornickel's health and safety management system updated its certificate of conformity through a successful audit.

Bureau Veritas Certification, the certification body, described the Company's OHS management system as mature and well-established and found that the corporate systems of Nornickel's audited companies met the relevant requirements of the standard. The Company's strengths cited by the auditor include the ongoing safety culture development project; use of IT solutions and risk-based approach tools; contractor management; and focus on continuous improvement of the health and safety management system.

As at the end of 2023, 49%[1] of Group companies maintained health and safety certification ISO 45001

A total of 53 audits involving the Group's production site heads and their deputies took place in 2023. The audits included a comprehensive inspection of safe practices as well as equipment condition, maintenance, and operation.

49%
of Group companies maintained health and safety certification ISO 45001

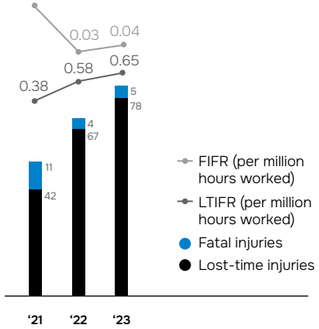
53 AUDITS
took place in 2023

Work-related injuries

In 2023, the Company continued implementing its Building Risk-Based Thinking Skills project aimed at revising the health and safety incident reporting process to improve transparency and quality of incident classification. These efforts resulted in faster response times and unlocked more opportunities for further analysis of workplace incidents. Root cause investigation and identification were also overhauled, which contributed to more effective incident prevention in the future.

In 2023, the Company's lost time injury frequency rate (LTIFR) slightly rose from 0.58 to 0.65 but remains below the industry average. Nornickel continued to improve mine safety by deploying its Anti-collision proprietary solution and enhancing its machinery and personnel tracking systems.

Work-related injuries across the Group, PEOPLE



[1] By average headcount.

Causes of fatalities

Item	2021	2022	2023
Fall from height	1	1	**0**
Falling objects	0	0	**0**
Moving objects/parts	3	0	**0**
Rock fall	2	2	**0**
Underground transport	0	0	**3**
Electrocution	1	0	**0**
Collapse of structures	0	0	**2**
Explosion	0	0	**0**
Other	4	1	**0**
TOTAL	**11**	**4**	**5**

Tragically, five fatal accidents were recorded at the Company in 2023. All accidents were thoroughly investigated, with the resulting reports submitted to the Board of Directors and action plans developed to eliminate their root causes. The Company continues to improve the quality of its incident investigations while also reinventing its occupational safety communications with employees. The Group sees fatality-free operations as its strategic priority.

Following the investigations of structure collapse incidents in the Kola and Norilsk Divisions, the Company has structured a procedure for performing maintenance and repair of ore conveyors subject to the results of sensor-based non-destructive testing, set up a technical council to assess the quality of repair, and decided to replace wooden roofing of vertical mine workings with concrete roofing.

To prevent collision of employees with self-propelled diesel equipment, the Company fits its mining machinery with the Anti-collision system that stops the vehicle if a pedestrian is detected in a hazardous area. Nornickel also installs walkways, traffic lights, and spherical mirrors. Common requirements have been developed for vehicle and pedestrian traffic plans in underground workings, and safety zones set up for remote control load-haul dumper (LHD) operators.

Following the investigation into a self-propelled drilling rig fall from height, Nornickel has developed a standard fence for vertical mine workings with change in elevation; visualised hazardous areas; provided operators of underground machinery with up-to-date traffic plans; and piloted underground navigation solutions.

Contractor safety

Contractors' work-related injuries

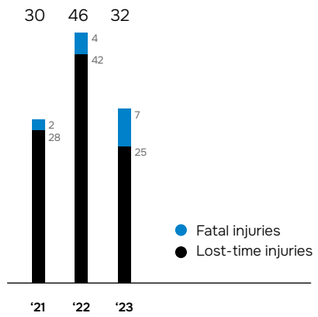
The Company's procedural documents on industrial safety – regulations, policies, corporate standards, Golden Rules of Safety – also apply to our contractors.

In 2022, Nornickel reviewed the general terms and conditions related to occupational health in its contracts with contractors to emphasise the achievement of zero fatalities and zero breaches of industrial safety rules.

All tasks performed by contractors in highly hazardous conditions are carried out in line with corporate standards. Work permits must contain safety requirements to be met when organising and performing work. The Company checks compliance with these requirements during each shift. Prior to the commencement of any work, contractor employees are required to receive induction and targeted briefings on occupational health, including safety measures.

At its sites, Nornickel holds regular joint inspections for compliance with safety requirements and H&S committee meetings involving contractor representatives. In the event that contractors fail to comply with safety requirements, they are fined.

Contractors' work-related injuries



Safety culture

The Company continuously improves its H&S system elements. These changes cover all production units of the Company – from mining ore to making metals.

To keep employees well-informed about safety measures, the Company regularly develops and updates its guides, videos, presentations, and other visuals highlighting the most important guidance to protect life and health in various situations or when performing certain types of work.

A culture of safety begins with mindful behaviour and leadership demonstrated by each employee. Nornickel continues to run the Developing Risk-Based Thinking project across all of its mines while also growing its train-the-trainer programme. Since 2023, 20 Group enterprises run an initiative that encourages employees to take ownership of workplace safety. This initiative has served as a basis for a bonus programme that encourages employees to adopt safer ways of working and offers additional rewards for showing initiative and taking responsibility. Bonuses are also awarded to employees who complete training in safe working practices offered by internal coaches and later successfully identify new risks and suggest mitigants. The bonus size depends on the extent of employee's involvement in risk mitigation and is between RUB 5 thousand and RUB 10 thousand. Once these bonuses were introduced, most identified risks were eliminated as employees adopted a more responsible and mindful approach to health and safety requirements, thereby improving the overall manufacturing culture and employee engagement. In 2023, 449 employees earned bonuses to a total of RUB 3.5 million for identifying workplace risks.

The Company has in place a formal procedure for refusing a task if exposed to a risk. Such refusal does not entail any sanctions against the employee. Complaints or suggestions can be anonymously submitted by each employee via the Corporate Trust Line speak-up programme. On top of this, employees can ask questions and get feedback from managers of different levels at working meetings, huddles, etc.

Emergency preparedness

In line with Russian laws, Nornickel's facilities remain prepared at all times for any emergencies, including emergency containment and response. This is vital, as the Company operates more than 300 hazardous production facilities that rely on hazardous substances for their operational processes.

Emergency preparedness system

- Every enterprise has in place on-site emergency response plans
- Contracts with professional emergency rescue services and organisations are maintained across the Company's footprint
- Auxiliary mine rescue teams are set up and take regular training in near-real-world settings
- Our employees take emergency response training, with drills conducted on a regular basis
- Provisions are made for emergency response at hazardous production facilities
- Emergency surveillance, warning, communication, and response support systems operate across facilities

Monitoring of violations

Nornickel has developed and operates a multi-tiered H&S monitoring system, with ad hoc, targeted, and comprehensive H&S inspections.

Monitoring tiers

Tier I

Monitoring by a line manager, involving H&S officers
Workplace inspection

Tier II and onwards

Monitoring by H&S commissions aided by management and employees

In 2022, the incident reporting procedure was changed to accelerate responses, and the incident classification system was improved to enhance further analysis. The investigation and root cause identification process was significantly transformed to prevent future incidents.

In addition, the Company conducts regular behavioural safety audits. The prevention and control team has identified and disciplined close to 8 thousand non-compliant employees, including by partially or completely stripping them of their bonuses.

Employee training

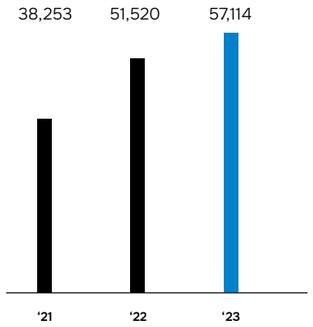
The Company is committed to ensuring its people have all the necessary knowledge, skills, and competencies to perform their duties in a safe and responsible manner.

Training starts right after a new employee is hired, with a health and safety induction and subsequent on-the-job briefings. Briefings are then repeated regularly in accordance with the existing corporate programmes. All Group employees also regularly take online industrial safety trainings followed by tests. There are also interactive training courses for employees in main occupations.

In 2023, over 57 thousand Group employees were covered by these trainings and briefings.

A project to establish a train-the-trainer programme for safety culture moved into an active phase during the year. In 2023, a total of 3,111 Dynamic Risk Assessment trainings were held involving about 45 thousand employees as well as 1,151 Behavioural Safety Audit trainings involving over 13 thousand employees.

Employees trained



>57 THOUSAND

Group employees took online industrial safety trainings followed by tests

Prevention of occupational diseases

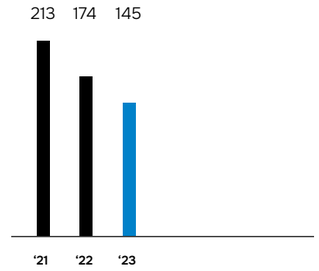
To minimise the risk of occupational diseases, Nornickel operates the Sulphur Project aimed at reducing sulphur dioxide emissions, takes effective healthcare measures considering both workplace and personal risk factors, and encourages healthy lifestyle.

Regular health monitoring of employees is key to preventing occupational diseases. Employees undergo mandatory pre-employment, regular, and ad-hoc medical examinations at the Company's expense during their employment at the Company. Production enterprises have dedicated medical aid posts to perform pre-shift health checks and provide medical assistance on request.

The Company protects employees from negative workplace factors by providing collective and personal protective equipment while also offering more effective work and rest schedules and better workplace amenities. All employees have a mandatory meal break during their shifts.

Special examinations at occupational pathology centres are provided to employees exposed to hazardous substances. Employees working in contaminated conditions are provided with free-of-charge wash-off and decontaminating agents. Employees exposed to hazardous or highly hazardous conditions are provided with free preventive nutrition, milk, or equivalent food products.

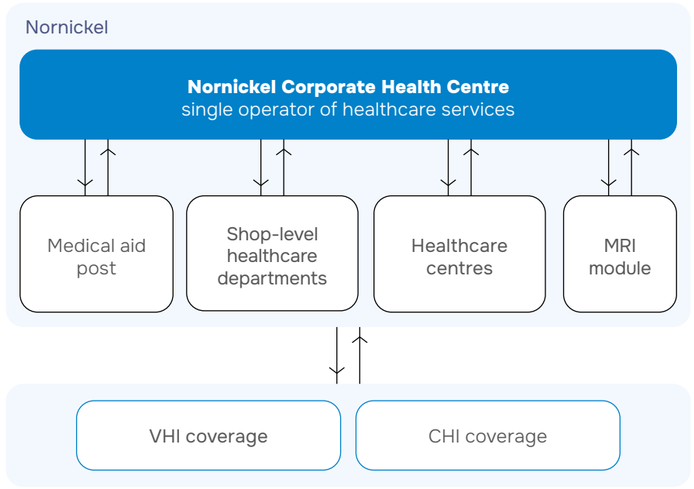
Newly identified occupational diseases



Corporate healthcare

The Company is focussed on the availability of medical care for its employees and their families. To provide them with quality and timely healthcare services both at medical centres and enterprises, the Company set up Nornickel Corporate Health Centre.

Nornickel's medical care framework



30

medical facilities put into operation since 2021

A total of

>2.2 MILLION

medical examinations delivered

Nornickel's first corporate medical centre opened in Norilsk in 2021 to service patients under the voluntary health insurance (VHI) programme. Today, it provides 249 types of medical services across 13 primary care specialties. The average appointment wait time ranges from seven days to one month, which confirms the high local demand for quality medical care.

In 2023, the Company continued to roll out its healthcare network to the production sites in the Norilsk Industrial District and on the Kola Peninsula. Shop-level healthcare departments were set up to prevent diseases and provide quality medical care to employees directly on-site.

An MRI department was commissioned at the Kolsky Health and Spa Centre in Monchegorsk, which provides 86 types of medical services across five specialties. In Dudinka, the Dudinka Medical Centre was opened. It currently offers 174 types of medical services across nine specialties, with a therapist, physical therapist, massage nurse, and nursing staff available on a permanent basis. Specialist doctors come to the centre weekly from central outpatient facilities.

Since 2021, 30 medical facilities have been put into operation, with a total of more than 2.2 million medical examinations and over 34 thousand procedures delivered. At the moment, medical centres in the Talnakhsky and Kayerkansky Districts of Norilsk and in Monchegorsk are being prepared for launch.

The Company also rolled out its Digital Healthcare programme to deploy innovative IT solutions in medical technology. The programme was introduced at Zapolyarye Health Resort in 2021 and in Norilsk in 2022. A mobile app was developed and launched, enabling employees to access their medical records, make an appointment with a doctor, and get all the information they need about the clinics' services. Nornickel continues to digitise key medical documents and set up self-diagnostic systems and a disease risk assessment system.

249
types of medical services across 13 primary care specialties are provided by Nornickel's healthcare centre

86
types of medical services across five specialties are provided by an MRI department in Monchegorsk

174
types of medical services across nine specialties are provided by the Dudinka Medical Centre

Environment and climate

Environmental strategy

In 2020, Nornickel developed its Holistic Environmental Strategy which sets clear goals across key focus areas: climate change, air, water, soil, waste, and biodiversity. The Strategy was further detailed and approved by the Board of Directors in 2021 and updated in the first quarter of 2024.

For more details on the Environmental Strategy, see the Company website.

The updated Strategy is divided into mandatory and voluntary sections. The mandatory part focuses on legal compliance and includes targets across seven key pillars: number of emergencies, air, water, tailings and waste, soil, biodiversity, and stock exchange requirements.

To meet the set targets, the Company developed programmes containing more than 150 specific initiatives.

Key measures include reduction of sulphur dioxide emissions in Norilsk and Monchegorsk; water recycling and reuse; commissioning and retrofit of wastewater treatment at discharge sites; land remediation, clean-up, and reforestation; monitoring of environmental media and the deployment of an automated pollutant emission control system; and biodiversity impact assessment in all areas affected by the Company's operations.

The voluntary section of the Strategy includes optional pillars, such as waste (increasing recycling rates), soil, some international initiatives and standards, and climate change – a total of 187 initiatives.

Contribution to the UN SDGs

To meet the set targets, the Company developed programmes containing
>150
ACTIVITIES

The voluntary section of the Strategy includes
187
ACTIVITIES

Environmental management

In place since 2005, Nornickel's Environmental Management System (EMS) is part of the Corporate Integrated Quality and Environmental Management System. This ensures coordination between all environmental matters and other areas, enhancing the Company's overall performance on environmental safety.

System audit

The Company confirms the EMS compliance with ISO 14001:2015 by engaging Bureau Veritas Certification Rus (BVC), a leading international certification body, to conduct surveillance audits once a year and recertification audits every three years.

Bureau Veritas Certification Rus operates in Russia under the accreditation of the Egyptian EGAC, which is a full signatory and participant of the IAF MLA (the Multilateral Recognition Arrangement of the International Accreditation Forum).

In 2023, the seventh recertification audit of the system confirmed the Company's compliance with the standard and extended the certification until 12 January 2027.

At the end of 2023, 53% of Group companies[1] were certified to this international environmental standard ISO 14001:2015

53%

of Group companies[1] certified to the international environmental standard at the end of 2023

Сертификат ISO 14001:2015

● Certificate ○ Certified assets ● Audit

ISO 14001:2015

MMC Norilsk Nickel	Certification body: Bureau Veritas Certification Rus In 2023, a recertification audit was conducted for the seventh certification period
Kola MMC	Certification body: Bureau Veritas Certification Rus In 2023, a surveillance audit was conducted
Pechengastroy	Certification body: LLC Quality Management in Accordance with International Standards In 2023, a certification audit was conducted
Norilsk Nickel Harjavalta	Certification body: Bureau Veritas Certification Rus Norilsk Nickel Harjavalta maintains certification to ISO 14001:2015
GRK Bystrinskoye	Certification body: IRCLASS IRQS (India) The EMS was certified in 2023

[1] By average headcount.

Climate

Our approach

The Company continues integrating its climate risk and risk factor management system into its business processes in accordance with TCFD and COSO recommendations.

To assess risks and opportunities arising from the global energy transition, Nornickel has developed three own scenarios for global economy and climate change until 2050.

For more details on climate-related risks and opportunities, see the Risk Management section of this Report.

The Company has chosen the Sustainable Palladium as its baseline scenario, according to which traditional industries are expected to remain centre stage along with the growing green economy. In particular, internal combustion engine vehicles are expected to retain a large market share, resulting in a steady long-term demand for palladium. The other two scenarios are used by the Company to stress-test climate-related risks.

Rapid Transition **Probability: 25%**	Low-carbon development scenario **+1.7 °C**[1]
Sustainable Palladium **Probability: 70%**	Continuation of current socio-economic and technological trends **+2.0 °C**[1]
Global Growth **Probability: 5%**	Abandoning efforts to curb climate change with further economic growth fuelled by hydrocarbons **+2.5 °C**[1]

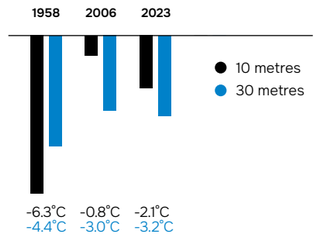
Permafrost monitoring

Climate change in the Arctic drives global-scale challenges and poses a significant threat to the security of polar infrastructure.

In 2022, Nornickel focused on building a science-based, practical framework for asset operation management. Deep monitoring wells were drilled in populated areas of the Norilsk Industrial District to study the permafrost soil temperature range and assess the impact of global climate change. A well in the centre of Norilsk, where temperature measurements have been taken since as early as 1958, was restored and fitted with a thermistor string. Data from the well are sent twice a day to the Company's Facilities Monitoring Centre. Observations showed that in 1958 the base of permafrost was at a 150 m depth, while now it is at 147.7 m. The pace of permafrost thawing at the depth of 10 m was also established: the temperature there has increased by 4.2 °C since record keeping began, which confirms the steady trend of global warming.

The system developed by Nornickel to monitor permafrost and the facilities built on it enables assessments of the impact permafrost degradation on the Taimyr Peninsula has on the stability of engineering structures while managing related risks.

Temperature changes in the well



[1] Temperature change by 2050.

In 2023, the Company started to develop a scientific approach to monitoring permafrost and using these data to build mathematical models to assess the impact of natural and anthropogenic factors on permafrost. Cooperation was established with the Research Centre for Construction Technologies and Monitoring of Buildings and Structures in the Northern Arctic of the Fedorovsky Polar State University.

The technical condition of facilities built on permafrost in the Norilsk Industrial District is monitored to reduce the risk of emergencies. To date, more than 1.8 thousand automated sensors have been installed across 218 facilities to gauge soil temperature and displacement of individual elements, carry out an ongoing control of temperature and humidity in crawl spaces, respond to possible failures of heat and water supply systems, monitor for relative deformation of structures, etc.

Sensor readings are sent to the control unit in real time. Along with analysing automated monitoring data, the Centre's experts run a range of geotechnical surveys, including visual inspections, geodetic monitoring, and measurement of groundwater level and foundation soil temperature.

A new approach based on the methods of mathematical modelling of thermal and mechanical interaction was developed to assess the impact of climate change on the stability of facilities in the Norilsk Industrial District. It relies on the climate change forecast across the Company's footprint, prepared by leading research institutions. Buildings with foundation on soils that remained frozen throughout construction and operation will be most affected by climate change. That said, one of the key challenges is the lack of information about the properties of soils, which have changed significantly during the operation of structures. To address this issue, geotechnical surveys and laboratory studies of frozen soils have been carried out to collect the necessary data.

Background monitoring

Nornickel was the first Russian organisation to set up its own regional system of background permafrost monitoring. The data obtained can be used to supplement the database on the condition and changes of permafrost in the natural environment, quantitatively predict changes in permafrost conditions, and assess natural and anthropogenic impacts on the soil temperature.

To date, studies have covered an area stretching about 147 km from the Norilsk Industrial District to Dudinka and measuring about 8 thousand sq km, and identified 11 testing grounds that best reflect the diversity of landscape and geocryological conditions. In 2023, the Company awarded contracts to drill 24 wells with a depth of 10 to 20 m and two wells with a depth of 200 m on the allocated testing grounds to assess permafrost characteristics and determine the parameters of terrestrial heat flow. The project was awarded the National Environmental Prize named after V.I. Vernadsky.

Thus, the Company now has geotechnical and background monitoring data that support informed and economically sound decisions regarding further operation of assets.

Greenhouse gases

In 2023, direct and energy indirect GHG emissions from operations (Scope 1 + 2) that could not be potentially removed by the Company amounted to 8.6 mln t, without the possibility of the process of absorbing greenhouse gas emissions in the Company.[1]
The year-on-year decrease in GHG emissions (Scope 1 + 2) was due to:

- lower per unit fuel consumption for electricity generation as a result of optimising equipment operation modes at combined heat and power (CHP) plants
- higher share of HPPs in the power generation mix due to the overall optimisation of the energy system's operation
- less diesel fuel burnt at CHP plants in 2023 year-on-year.

Energy indirect GHG emissions (Scope 2) were calculated using the location-based method, including regional emission factors. Notably, the Trans-Baikal Division and RusHydro signed a bilateral agreement to purchase 212.1 mln kWh of electricity generated by RusHydro hydropower plants, up 20% y-o-y. This reduced Scope 2 GHG emissions by more than 200 kt of CO_2 equivalent in 2023.

Nornickel is exploring opportunities for climate projects to reduce the impact of its operations on climate. To this end, the Company signed an agreement with Siberian Federal University to conceptualise approaches to implementing a comprehensive environmental and climate project.

The Company has also developed an innovative solution to utilise waste from its core operations to remove GHG carbon dioxide (CO_2). By extracting materials from mines and bringing them to the surface, the Company already creates conditions for mineralisation, which is a natural carbon dioxide absorption process.

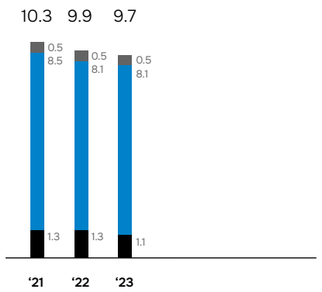
Concentrators fine grind ores and separate useful elements from gangue – tailings. The tailings then undergo special treatment and are transported to tailings storage facilities to be distributed over the entire surface, which enables their reaction with atmospheric carbon dioxide. During mineralisation, minerals contained in Nornickel's ores react with carbon dioxide to form stable secondary carbonates, which remain in the tailings storage facility.

The tailings from ore concentration can chemically capture from 4.5 to 17.9 kg of CO_2 per tonne of tailings in the natural environment, depending on the mineral composition of gangue.

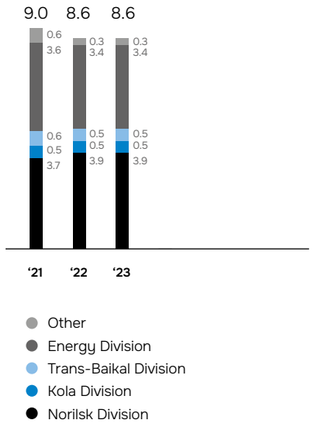
Calculations based on natural mineralisation studies conducted in 2022 and 2023 showed that about 300 kt of CO_2 per year has been removed. The Company is currently developing a methodology to estimate and account for this absorption capacity of tailings, which, once audited and verified by an external auditor, will be incorporated in the Company's statements on GHG emissions and removals.

The Company's further research is focused on developing a technology for accelerated and artificial mineralisation. Such a technology will significantly increase the absorption capacity of tailings as compared to natural mineralisation and, when implemented at all Company sites, reduce the carbon footprint of products in the long term.

GHG emissions, Scope 1 + 2, MLN T OF CO_2 EQUIVALENT[1]



GHG emissions from operations by division, Scope 1 + 2, MLN T OF CO_2 EQUIVALENT



In 2023, Nornickel submitted a Report on GHG Emissions to the Russian Ministry of Economic Development to include its data in the GHG emissions registry.[2] The calculations only include direct GHG emissions and are made as per Order No. 371 On Approval of Methods for Quantitative Determination of Greenhouse Gas Emissions and Greenhouse Gas Removals, dated 27 May 2022.

In addition, the Board of Directors approved Nornickel's Key Focus Areas of Carbon Neutrality, outlining key steps to reduce gross GHG emissions and carbon footprint of products over short-, medium-, and long-term horizons. The document emphasises development of low-carbon energy sources and climate projects, the use of energy-efficient technologies and equipment, artificial intelligence, and conversion of vehicles to alternative fuels. The Company also continues looking into opportunities for CO_2 capture and utilisation projects and unregulated bilateral power purchase agreements.

Nornickel's key production facilities are located in the Norilsk Industrial District, in the Arctic Circle, and operate in sub-zero temperatures for about eight months of the year. The district is isolated from the federal energy infrastructure, so 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. As Nornickel is the only producer of electricity and heat in the Norilsk Industrial District, the Company also fully meets the demand for energy 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 12% of total Scope 1 + 2 GHG emissions.

[1] The emissions were calculated using the location-based method, including the emissions allowance for the Sulphur Project and excluding emissions from heat and electricity supplies to household consumers.

[1] GHG emissions were calculated as per the GHG Protocol Guidelines. Estimates of greenhouse gas emissions for the Group included the following greenhouse gases: direct emissions of carbon dioxide (CO2) – 9.5 mln t, nitrogen oxide (N2O) – 0.051 kt, and methane (CH4) – 5.2 kt, mostly from gas transportation, including the Sulphur Project, and heat and electricity supplies to household consumers.
[2] According to Federal Law No. FZ-296 On Limiting Greenhouse Gas Emissions, dated 2 July 2021, starting from 2023, emitters generating 150 kt of carbon dioxide per year or more must submit annual reports on their GHG emissions by 1 July of the year following the reporting year.

Scope 3

The Company annually quantifies its other indirect (Scope 3) GHG emissions, which originate outside the Group and are beyond the Group's control or influence. The Company distinguishes between upstream and downstream Scope 3 emissions.

The bulk of upstream Scope 3 emissions is related to the purchase of raw materials and equipment from suppliers as well as energy and fuel consumption (to the extent not included in Scope 1 + 2). Upstream Scope 3 emissions have been primarily impacted by lower diesel fuel consumption for power generation in the Norilsk Industrial District and by the sale of NordStar Airlines in 2022.

Downstream Scope 3 emissions come mostly from transportation and processing of intermediates sold outside the Group – iron ore and copper concentrates produced by the Trans-Baikal Division and nickel intermediate products. Downstream Scope 3 emissions are influenced by changes in sales volumes, the Group's product and customer portfolio, and the geographic mix of product sales. In 2023, these emissions increased year-on-year mostly due to higher sales of intermediates.

Scope 3 emissions are quantified in line with the GHG Protocol guidance for all categories relevant to the Group and the IPCC Guidelines for National Greenhouse Gas Inventories.

GHG emissions, Scope 3, MLN T OF CO_2 EQUIVALENT

Emissions by category	2021	2022[1]	2023
Scope 3 (other indirect GHG emissions)	5.4	5.3	**6.4**
UPSTREAM[1], INCLUDING:	1.4	1.4	**1.3**
raw and other materials	0.8	0.9	**0.8**
equipment	0.1	0.1	**0.1**
energy and fuel	0.4	0.3	**0.3**
other	0.1	0.1	**0.1**
DOWNSTREAM, INCLUDING:	4.0	3.9	**5.1**
from processing of sold products	3.8	3.7	**4.9**
from transportation	0.2	0.2	**0.2**

Energy sources and energy efficiency

The Company's key renewable energy source is hydropower generated by the Group's Ust-Khantayskaya and Kureyskaya HPPs. In 2023, the share of renewables in total electricity generation stood at 55% for the Group and 58% for the Norilsk Industrial District. The share of renewables in the Group's total electricity and fuel mix was 12%.

Nornickel has its own energy assets located in the Norilsk Industrial District. Natural gas and renewables (hydropower) are the core low-carbon sources for energy generation. Diesel fuel, fuel oil, petrol, and jet fuel are used by Nornickel's transport assets. Use of coal by energy assets is minimised to only small amounts in certain production processes.

55%

Share of renewables in total electricity generation for the Group in 2023

58%

Share of renewables in total electricity generation for the Norilsk Industrial District in 2023

[1] As part of its effort to standardise the approach to identifying GHG emission sources, the Company reduced the uncertainty of calculating upstream Scope 3 emissions by excluding insignificant sources in the Purchased Goods and Services and Capital Investment categories from the calculation. The 2021 and 2022 data have been recalculated using the new approach.

The use of other renewables, such as solar and geothermal energy, is impracticable as Nornickel's core operating assets are located in a region with harsh climatic conditions.

The Group's own energy assets produce about 54% of total energy and 90% of electricity consumed by the Group. The Company also supplies electricity and heat to external consumers, primarily local social infrastructure and local communities in the Norilsk Industrial District.

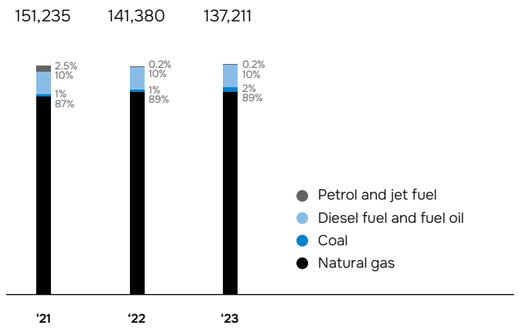
Due to harsh climates, not all renewables are available in the Arctic Circle

- Solar Power
  - ~8 months a year - air temperatures below freezing point
  - ~100 days - duration of polar nights and twilights
  - ~70 days per year - sunny days
- Geothermal Energy
  - Permafrost: 300 to 500 m deep

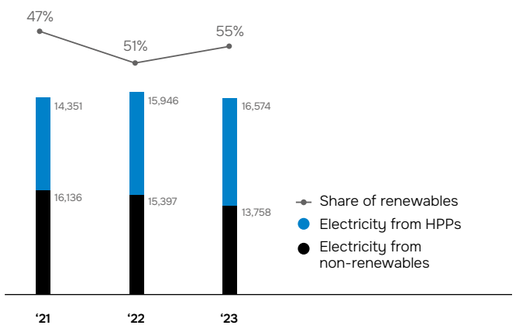
Energy generation and consumption by the Group[1], TJ

Item	2021	2022	2023
Fuel consumption by the Company[2]	151,235	141,380	**137,211**
• Natural gas	130,867	125,933	**121,643**
• Diesel fuel and fuel oil	15,097	13,581	**13,080**
• Petrol and jet fuel	3,715	311	**308**
• Coal[3]	1,557	1,555	**2,180**
Electricity and heat from own renewable sources (HPPs)	14,586	16,152	**16,800**
Electricity and heat purchased from third parties	10,891	11,005	**8,700**
Sales of electricity and heat to third parties	19,974	18,968	**19,216**
TOTAL CONSUMPTION OF ELECTRICITY AND FUEL[4]	**156,383**	**149,274**	**143,146**
Share of renewables in total electricity and fuel consumption	9%	11%	**12%**

Fuel consumption by the Group, TJ



Electricity consumption by the Group, TJ



[1] For a detailed breakdown of the Group's energy consumption by enterprise, see Nornickel's Sustainability Report 2023.
[2] Including the fuel used to generate electricity for Norilsk.
[3] Coal is only used in production processes, with the Kola Division accounting for 60% of total consumption, the Trans-Baikal Division 20%, and the Norilsk Division 20%.
[4] Including losses.

The Group attaches great importance to improving the energy efficiency of its existing and future production sites, focusing on keeping GHG emissions within the targets announced in its comprehensive environmental programme. In 2023, the Company invested more than USD 400 million in upgrading its energy infrastructure. The investments cover multiple projects related to equipment replacement at thermal and hydropower plants and upgrades to fuel tank storage facilities, power grids, and gas pipelines. In 2023, 45 energy-saving initiatives were implemented.

>USD 400 MLN
invested in upgrading energy infrastructure in 2023

Air

High sulphur dioxide emissions from the smelting of sulphide concentrates with high sulphur content are a key environmental issue for the Company.

Our targets

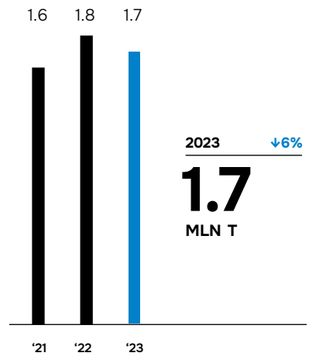
Nornickel's strategic plan is to transform the Company into an environmentally clean and safe business by implementing Sulphur Project 2.0 across the Norilsk and Kola Divisions and thus cutting its sulphur dioxide emissions.

In 2023, the Group's pollutant emissions totalled 1.7 mln t, down 6.1% y-o-y. The decline was due to lower sulphur content in metal-bearing feed.

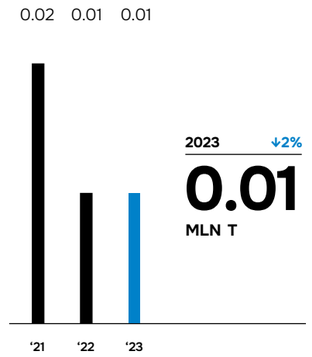
Air pollutant emissions across the Group, KT

Item	2021	2022	2023
Sulphur dioxide (SO_2)	1,601	1,778	**1,671**
Nitrogen oxide (NO_x)	11	10	**6**
Particulate matter	9	11	**11**
Other pollutants	25	21	**20**
TOTAL	**1,647**	**1,819**	**1,708**

SO_2 emissions from the Norilsk Division, MLN T



SO_2 emissions from the Kola Division, MLN T



Water

The Company's assets are located in regions with sufficient water resources. In 2023, as in previous years, no shortage of water was reported as enterprises and households were supplied with sufficient amounts of water.

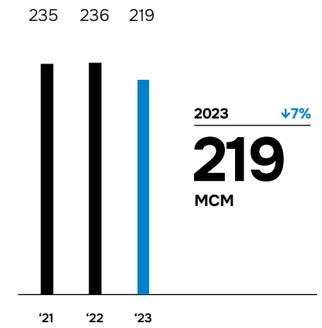
Nornickel is committed to responsible and sustainable use of water resources and prevention of water body pollution. To this end, the Company regularly monitors groundwater at production facilities and designs water collection and treatment systems.

The Company is extremely careful about its use of fresh water and strictly complies with restrictions applicable to industrial water withdrawal.

Nornickel's key production facilities use closed water circuits to keep clean water withdrawal on a relatively low level. Furthermore, the Company never withdraws water from protected natural areas. The water we use is mostly withdrawn from surface and underground water bodies, in addition to third-party wastewater and natural water inflow. Water withdrawal in 2023 decreased by 38 Mcm y-o-y, including a 17 Mcm decrease in fresh water. This was due to the launch of automated systems for energy metering, savings in water consumption, and variable water withdrawal for cooling CHPP equipment. Natural water inflow accounted for 16.3% of total water withdrawal in 2023. All facilities using water have programmes in place to monitor water bodies and water protection areas.

In 2023, 83% of all water used was recycled or reused, in line with the Company's strategic goals.

Total fresh water withdrawn for production activities with the exception of mine waters, MCM[3]



In 2023, water withdrawal decreased
BY 38 MCM

Water consumption and wastewater discharge in 2023

Water withdrawal

315 MCM:
- Surface sources — **207 mcm**
- Underground sources — **26 mcm**
- Wastewater — **20 mcm**
- Natural water inflow — **52 mcm**
- Other — **10 mcm**

Consumption

1,292 MCM:
= 224 Mcm (fresh water) + 1,068 Mcm (reused and recycled water)
- **52 mcm** — water reused in other production processes (4%)
- **1,016 mcm** — recycled water (79%)

Wastewater discharge

147 MCM:
- Clean — **67 mcm**
- Treated — **7 mcm**
- Insufficiently treated — **32 mcm**
- Contaminated — **41 mcm**

Wastewater discharge into water bodies primarily stays within the approved limits and has no material impact on biodiversity of water bodies and related habitats. In 2023, the Company decreased its total wastewater discharge by 12.5% y-o-y, with untreated wastewater discharge unchanged year-on-year. In 2023, the mass of pollutant discharges decreased by 25% y-o-y to 157 kt.

The Company routinely partially reuses its produced and mine waters in production, particularly at concentrators, and in sulphuric acid neutralisation under the Sulphur Project.

Nornickel strives to comply with legal requirements for pollutant concentrations in wastewater. All domestic sewage discharges are treated at biological or mechanical and chemical treatment facilities to ensure that water quality meets accepted standards. All programmes at the Company contain measures to this end.

The Company's regular measures to assess its impact on water resources include:

- wastewater inventory
- assessment of wastewater quality at accredited laboratories as often as required by laws
- 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
- monitoring of wastewater treatment processes at treatment facilities and implementation of organisational and technical measures to improve treatment effectiveness.

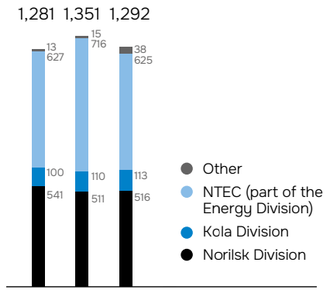
Waste

Over 99% of the Company's generated waste is mineral and non-hazardous. Such waste includes rock and overburden, tailings, metallurgical slags, and ferrous cake.

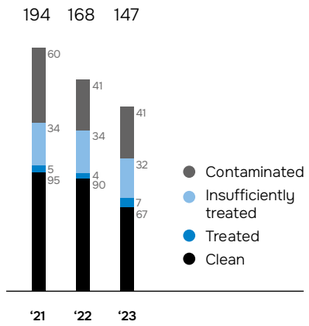
Ore extraction waste is placed in tailings and used as backfill for underground workings and open pits, road fill, or for tailings dam reinforcement. In total waste generated, gangue accounts for 80%, tailings 17%, and recycled/reused waste 19%.

Total waste generation increased in 2023 due to the development of the Mokulayevskoye limestone deposit.

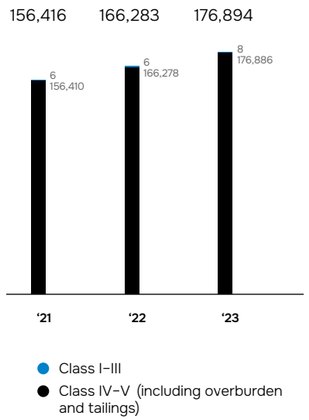
Water consumption by the Group , MCM



Wastewater discharge, MCM



Waste generation by hazard class, KT



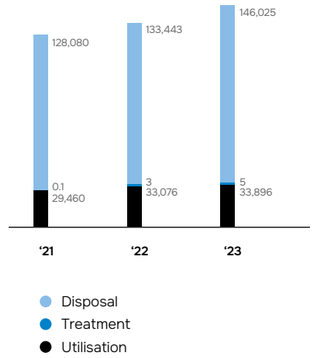
Tailings

Today, Nornickel operates six tailings storage facilities: four in the Norilsk Division, one in the Kola Division, and one in the Trans-Baikal Division.

While all tailings storage facilities operated by the Company are located at a significant distance from production facilities and local communities, Nornickel recognises these facilities as higher-risk assets with significant potential environmental and social impacts. This is why the Company has in place the Tailings Management Policy, regularly monitors the condition of hydraulic structures, and inspects discharge sites as well as adjacent areas.

Tailings Management Policy

Waste management, KT



Biodiversity

Although Nornickel has been focused on supporting protected areas in its regions of operation for years, it was not until 2022 that the Company decided to establish a dedicated biodiversity impact management system. This led to first baseline surveys, which became another milestone in Nornickel's history of partnering with research institutions for biodiversity conservation.

The baseline survey project, known as the Big Scientific Expedition, is a comprehensive study of the ecosystems near the Company's mining, production, and energy facilities. Phase 2 of the Expedition covered three regions: the Zabaykalsky Territory, the Murmansk Region, and the Taimyr Peninsula. This biodiversity survey became the most extensive ecosystem study since the Soviet era.

For more details on the survey findings and Nornickel's biodiversity conservation measures, see life.nornickel.com, the dedicated website with data by division,

and the Biodiversity section on the Company website.

Nornickel created the life.nornickel.com website to tell about its biodiversity conservation projects and individual measures taken in clear and simple language.

Phase 2 of the Big Scientific Expedition brought more detailed delineation of the areas where ecosystem biodiversity is exposed to impact from our operations. New data were also used to update the methodology for calculating the integrated ecosystem health indicator (IEHI), which will be used in assessing progress towards the goal of net-zero biodiversity loss. Changes in the IEHI can also confirm biodiversity net gain where it is achieved. In addition to refining the boundaries and methodology for calculating the IEHI, the 2023 surveys established which negative impacts from operations affect the surrounding ecosystems.

The scientists used the latest research methods, molecular genetic and phytochemical, and seamlessly integrated the results into the existing methodology for calculating the IEHI. The molecular genetic studies also discovered a new weevil species near Norilsk, which Norilsk residents called "putoranchik" after the Putorana Plateau, and a lot of new Myxogastria species in the Zabaykalsky Territory.

The team also studied how heavy metals migrate from rock dumps and proved that such migration does not affect plant diversity: the dumps were initially set up in areas with increased natural content of heavy metals in soils, so their leaching does not have a negative impact on plant and soil ecosystems as they are adapted to increased heavy metal concentrations in soils. Such adaptability is characteristic of places where ore bodies lie very close to fertile soil layers.

The next step in developing a biodiversity impact management system is to use the baseline study results to finalise the draft corporate Standard for Ecosystem Biodiversity Conservation and Monitoring and divisional biodiversity conservation and monitoring programmes and incorporate them into short-term biodiversity conservation action plans (measures). The draft standard describes how impacts on biodiversity are managed, while conservation and monitoring programmes

contain information on division-specific biodiversity aspects. All this information feeds into action plans (measures) for biodiversity conservation. The documents are expected to be finalised and approved within a year of the end of the last, third, phase of the Big Scientific Expedition.

Studies to improve the productivity of Lake Pyasino through guanotrophication were another separate project, now in its second year.

Nornickel also signed an agreement with the Russian Ministry of Natural Resources and Environment to preserve the gyrfalcon population in Russia, starting this effort in 2023.

Cooperation with nature reserves

There are no nature reserves in the proximity of Nornickel's operations. In the Murmansk Region, the Pasvik and the Lapland Nature Reserves are 10 to 15 km away from the Kola Division production facilities. In the Krasnoyarsk Territory, the boundaries of the Putoransky Nature Reserve buffer zone are at a distance of 80 to 100 km from the Norilsk Division production sites.

In 2023, Nornickel environmentalists, expedition participants from the Siberian Branch of the Russian Academy of Sciences, and representatives of the nature reserves wrapped up the second year of the Big Scientific Expedition. The expedition covered the areas around Nornickel's mining and processing operations. Its key feature was collaboration between researchers and scientists from the nature reserves who have the most complete statistical data on biodiversity within their respective areas over the past decades.

In line with its long-term strategy to maintain biodiversity in its regions of operation and preserve the unique Arctic nature, the Company also organises regular volunteer campaigns, supports nature reserves, and finances studies on Red Data Book animals.

Social policy

Nornickel is playing an important role in the Russian economy and has a strong impact on the social and economic life in its operating regions. With its enterprises located mostly in single-industry towns, Nornickel seeks to foster a favourable social climate and create a comfortable urban environment, providing its employees and their family members with ample opportunities for creative pursuits and self-fulfilment.

To this end, Nornickel maintains partnerships with its operating regions, whereby all stakeholders collaborate on the development and implementation of social programmes.

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.

Contribution to the UN SDGs

Support for indigenous peoples

Nornickel uses a comprehensive approach to engagements with indigenous peoples, consistently scaling related support programmes. They cover Nenets, Dolgans, Nganasans, Evenks, and Enets on the Taimyr Peninsula, and Sámi, Nenets, and Komi in the Murmansk Region.

The Company contributes to preserving ethnic communities, their traditional lifestyles, and indigenous trades. Engagement with indigenous peoples living within the Company's footprint is driven by respect for their rights, indigenous culture, and historical heritage. Nornickel maintains a mutually beneficial dialogue with indigenous peoples, recognises its responsibility for ensuring their well-being, and encourages careful attitudes towards indigenous habitats.

The Company's commitments and key principles of engaging with indigenous peoples are set out in its Indigenous Rights Policy, which reiterates, inter alia, its commitment to implement free, prior and informed consent (FPIC) for indigenous peoples where applicable, according to the standards and recommendations of the International Council on Mining and Metals (ICMM).

~ RUB 1 BN

spent by the Company on projects to support indigenous peoples in 2023

Nornickel's metals and mining assets are located outside ancestral lands of indigenous peoples. The Company's voluntary commitments towards the indigenous peoples of Taimyr are formalised by agreements and minutes of meetings with representatives of indigenous family communities.

For instance, Nornickel, Wowhaus architectural bureau, and the Norilsk Development Agency have teamed up to hold a public consultation with Tukhard residents (Taimyr) focussed on the new settlement's master plan and house plans. The consultation was part of a process to obtain FPIC for any changes from affected indigenous peoples, held in line with the UN principles. During the discussion, comments and suggestions of Tukhard residents were taken into account.

Nornickel operates a programme to support and develop the indigenous peoples of Taimyr. The programme's terms are detailed in the quadripartite agreement on engagement and cooperation for 2020–2024, with allocated funds exceeding RUB 2 billion.

The Company supports the sustainable development of indigenous peoples, involving them in the efforts to enhance their quality of life, preserve indigenous habitats, improve infrastructure, facilitate traditional economic activities, and increase access to healthcare, education, culture, sports, and tourism services.

In 2023, a key programme highlight was the World of Taimyr contest aimed at addressing local challenges and fostering the sustainable development of indigenous territories. Only indigenous participants and non-profit organisations acting in the interests of indigenous peoples were eligible for participation in the contest. The winners started implementing their projects in June 2023 and are expected to complete them in November 2024. A total of 18 social-impact projects received the grants totalling RUB 52.8 million.

The Indigenous Communities Coordination Council, created at the initiative of indigenous peoples, operates in the Norilsk Division to monitor the programme's implementation. A total of 58 indigenous family communities are represented in the Council to provide public oversight for the programme as well as to ensure, through voting, fair allocation of extra funds for strengthening the communities' infrastructure, helping them prepare for autumn and winter hunting and fishing seasons, and fostering indigenous culture and traditional economic activities (RUB 100 million on an annual basis).

To handle routine matters and coordinate engagement with indigenous peoples, a department was set up within the Norilsk Division, responsible for engagement with indigenous peoples of Taymyr and staffed with the right level of indigenous talent.

In 2021–2023, local educational institutions organised community service activities for high school students across local communities; the Five Hunters game was published; and offline translators into indigenous languages, unique in Russia, were developed. Façades of 75 homes were heat-insulated at the villages of Popigay and Zhdanikha; 30 thousand refractory bricks were delivered for the repair of heating stoves at eight settlements within the Khatanga rural municipality; premises were repaired in the Community Centre at the Khantayskoe Ozero; and repair materials were acquired for the Volochanka and Ust-Avam settlements.

Nornickel supported the International Decade of Indigenous Languages started in 2022. Initiatives run by the Company on the Taimyr Peninsula in 2023 aimed at preserving and promoting indigenous culture. They included the Nomad Camp festival, youth forums, a folklore festival, and a project to create language nests. The first ever literary competition in indigenous languages of Taimyr, Voice of the North, was held during the year.

In 2023, the Company spent close to RUB 1 billion on projects to support the indigenous peoples of the North.

Nornickel's strength in engaging with indigenous peoples is driven by its ongoing contacts with indigenous communities and families and regular discussion of issues as they arise, contributing to better understanding and inclusive engagement.

Youth programmes

Add Colours to Your Town project

For ten years running, Nornickel has been holding its annual Add Colours to Your Town art contest for children and young people living in Norilsk and Monchegorsk. The main idea behind the project is to engage the younger generation in transforming these places through art, foster place attachment, and build a vision of their future intertwined with where they live. Apart from providing a springboard for art projects, the contest encourages responsible attitudes towards the environment and sustainable use of resources.

Career guidance for children

On 1 September each year, the Company provides all first-graders in its host cities with A Book on How Metals Helped Build Cities, showcasing metals and mining jobs. Consistent career guidance efforts foster a feeling of pride for Nornickel among children and helps them relate to what Nornickel does as well as introduce them to local cultural heritage while promoting scientific knowledge and making science more attractive through exposure to the Company's production processes.

Green Brush online camp

Every year during vacations, Nornickel supports the Green Brush online children's camp to offer career guidance and foster green behaviours and a safety culture. The project lays a foundation for training future environmental engineers and H&S professionals by teaching school students to be environmentally responsible and considerate as well as conscious of their own safety and the safety of those around them.

In 2023, over 600 schoolchildren aged between 8 and 14 participated in webinars, creative workshops, and online quizzes hosted by practicing environmental engineers, geologists, occupational safety specialists, and education experts. Around 80 people took part in webinars for teachers.

City of Endless Inspiration art festival

The second City of Endless Inspiration public art festival was held in Norilsk in 2023 supported by Nornickel. The festival's key message is that we can and should improve the environment we live in, and public art, such as street art, singing, playing music, and dancing are excellent tools to do just that. The festival helps rally Norilsk residents around the idea of improving the city and its environment by creating art together.

Reflection was the keynote idea behind the most recent festival. People, urban space, and art are all reflections of the city. Throughout the event, local residents could take part in interactive immersive activities that put a spotlight on the beauty of the city and its people. During the festival, more than 3 thousand local residents attended creative laboratories, masterclasses and workshops, with the most active participants recognised with prizes. In the run-up to the event, a campaign was held to collect scrap metal and plastic bottle caps, which the festival participants turned into unique art projects during the festival.

Charity programmes

World of New Opportunities

To foster sustainable development across its operating regions, Nornickel has launched the World of New Opportunities charity programme focussed on building social skills among local communities, demonstrating and incorporating new social technology as well as supporting and encouraging community initiatives and intersectoral partnerships.

The programme's key focus areas in 2023:

Focus area	Programmes and projects
Develop!	We Are the City! social technologies forum
	Socially Responsible Initiatives Competition
	World of Taimyr project contest
	Social Engineering Bureau
	Peremena: Change Starts with You education project
	SVET ON youth forum
Invent!	IMAKE engineering marathon
Act!	An accelerator for regional entrepreneurs and an investment round
Create!	Norilsk Development Agency
	Second School centre for community initiatives in the Pechengsky District
	Monchegorsk Development Agency

The programme's goals include developing the service economy across Russian regions, improving the business climate, and facilitating the development of small- and medium-sized businesses, including social entrepreneurship. Since 2014, training programmes have been annually delivered for business communities, with support from trainers and mentors. On top of this, in 2023, Nornickel provided access to entrepreneurship trainings and financial aid for launching a business to high-school and university students based in Norilsk.

During the year, over 80 participants were trained under entrepreneur support programmes, with 35 projects selected for post-training investment rounds. A total RUB 49 million in interest-free loans (for nine projects) was raised in Norilsk and RUB 20 million (for eight projects) in the Murmansk Region.

For more details on the World of New Opportunities programme, see Nornickel's 2023 Sustainability Report.

In 2023,

>32 THOUSAND PEOPLE

attended the World of New Opportunities events

>80 PARTICIPANTS

trained under entrepreneur support programmes

35 PROJECTS

selected for post-training investment rounds

The Socially Responsible Initiatives Competition, held by Nornickel since 2014 to support community initiatives, is a crucial element of the World of New Opportunities programme. Over 3.6 thousand applications have been submitted to the competition over the past decade, with support granted to more than 950 projects for a total of RUB 1.1 billion.

Socially Responsible Initiatives Competition

In 2023, 106 social-impact initiatives were implemented in Nornickel's regions of operation. In 2022 and 2023, Nornickel primarily focussed on intersectoral partnerships and integration projects. In September 2023, the Company announced the new phase of the Socially Responsible Initiatives Competition. The competition's geography was expanded, with a total of 371 applications received.

The competition's sponsors observe some positive trends: the quality and definition of applications have improved; the number of partnership projects has increased; and the range of social services provided by participants is expanding. 2023 also saw an increase in the number of partnership projects and situations where resources were pooled to boost the social impact.

Systematic work with participants, educational programmes, and travel grants are starting to bear fruit. Employee volunteers team up with school students and teachers to create projects; makers innovate for non-profit organisations and children with special needs; and entrepreneurs offer their resources to monetise and scale social-impact projects – such partnerships generate synergies and promote sustainability.

Peremena: Change Starts with You education project

During the year, the Company continued its Peremena: Change Starts with You project, which brings together all stakeholders of the educational process: children, parents, and teachers. Over 2 thousand people from six localities took part in the project. In early 2023, project experts delivered a series of in-person trainings modules such as Strong Skills of a Modern Educator, Motivation and Methods for Engaging School Students in Game Activities, and others.

In June, the Peremena: Urban summer academy was organised in Saint Petersburg for 50 school students from the Company's operating regions. During the ten busy days of the event, the participants were immersed in the world of urbanism and social design. They also visited the site of Gipronickel Institute and met with employee volunteers.

In March 2023, over 700 teenagers aged 14 to 18 from three of Nornickel's operating regions took part in the SVET ON youth forum to try their hand at entrepreneurship, engineering, and technologies. Over 30 Nornickel partners joined their efforts to support the forum.

IMAKE League project

The project brings together aspiring makers and future engineers and scientists. The Company leverages this venue to build a system of educational activities that promote science projects among children and teenagers.

The project's key activities in 2023 were IMAKE Science Camp in Skolkovo, Skill Camp in Vladivostok, and IMAKE engineering marathon, which included crash courses and workshops across a number of cities, consultations with makers, and reviews of inventions and prototypes. In 2023, more than 5 thousand school students from the Company's regions of operation took part in the project. For the first time, the project's events – a family invention festival, a maker cleanup day, and a crash course for children – were held in the settlement of Snezhnogorsk.

IMPROVING GOVERNANCE

The proportion of independent directors on the Board is in line with the Listing Rules of PJSC Moscow Exchange and ensures that the Board incorporates the views of all stakeholders and its decisions are unbiased

46.2%

Proportion of independent directors in 2023

CORPORATE GOVERNANCE

146 Chairman's letter

148 Corporate governance system

157 General Meeting of Shareholders

160 Board of Directors and Board committees

178 Executive bodies

185 Control system

199 Remuneration report

202 Risk management

Chairman's letter

Strengthening corporate governance has always been top of mind for Nornickel.

Our Board of Directors believes compliance with the key principles and recommendations of the Bank of Russia's Corporate Governance Code to be a prerequisite for better governance at the Company, unlocking long-term and sustainable growth.

In 2023, Nornickel maintained its focus on maximum transparency by disclosing financial and non-financial information as a matter of course.

In particular, Nornickel released its public climate report in the run-up to the UN Climate Change Conference. Although this is our first specialised report, this type of work is nothing new to us, having disclosed our climate efforts in annual sustainability reports since 2016. In 2023, we also published our first-ever standalone reports on human rights and responsible mineral supply chain.

Nornickel further expanded its engagements with all stakeholders. For instance, our already traditional open online dialogues between Company employees and management have once again proven themselves invaluable. Employees received exhaustive replies to their questions from Nornickel management, while the Company received employee feedback via online surveys on a wide range of pressing topics.

Nornickel has considerably stepped up its engagements with Russian retail investors. In 2023, the number of individual Nornickel shareholders topped 400 thousand for the first time ever. In 2019, this figure only sat around 62 thousand. The Company runs road shows and educational events for retail investors, and organises on-site visits to its production assets for investors and analysts. Finally, to accommodate our shareholders, we have decided to do a share split to boost our stock's liquidity and make our shares more accessible to a wider range of retail investors. We believe that this move will contribute to further expansion of Nornickel's shareholder base and the growth of the Russian stock market more broadly.

>400 THOUSAND
individuals own Nornickel shares

46.2%
Proportion of independent directors

AAA+++
Nornickel's score in the Anti-corruption Ranking of Russian Business

Nornickel has further strengthened its long-standing partnerships with the indigenous peoples of the North by setting up a specialised department within the Norilsk Division responsible for liaising with them. We also continue delivering on our RUB 2 billion, five-year support programme for the indigenous peoples of Taimyr.

Last year, Nornickel entered into a number of partnership agreements – including with the Federal Environmental, Industrial, and Nuclear Supervision Service of Russia (Rostechnadzor); IT companies; and leading research institutions and universities – to reinforce its competences in industrial safety and information security; develop big data management tools and AI solutions; implement research projects, including on nature and climate change in the Arctic; deploy production innovations; drive digitalisation; train qualified talents for the Company; and so on.

In 2023, two General Meetings of Shareholders were held via an easy-to-use and reliable e-voting service. This service enables shareholders to vote regardless of their location, with more and more shareholders taking part in the meetings as a result.

The composition of Nornickel's Board of Directors meets Russian and global best practices in corporate governance. All 13 Board members enjoy an impeccable business reputation and recognition. In 2023, the Board was 46.2% independent, which is in line with the Listing Rules of Moscow Exchange and ensures that the Board factors in the views of all stakeholders and its decisions are unbiased.

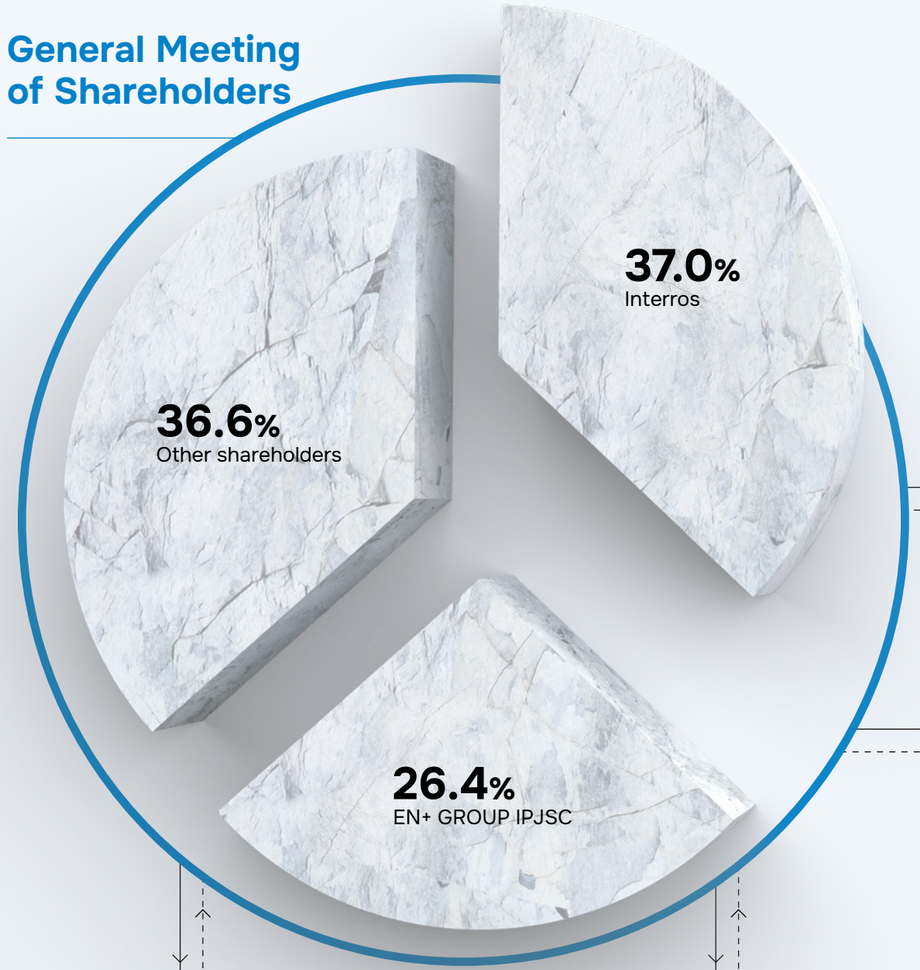
A 2023 audit of Nornickel's corporate practices shows that the majority of them are compliant with the principles and recommendations of the Bank of Russia's Corporate Governance Code. Last year, Nornickel focused on improving the quality of counterparty due diligence for corruption risks. Along with training and educating staff on our anti-corruption efforts, we strive to get feedback from our employees on whether these efforts are effective. In 2023, Nornickel's leadership in corporate governance was confirmed after it received an AAA+++ in the anti-corruption rating of Russian Business, which is assigned to companies that have in place the most stringent anti-corruption safeguards.

Nornickel successfully hit its goals for 2023, while changes made and measures taken during the year have helped us maintain our leadership in the Russian and global markets and retain our appeal to investors. Understanding the importance of the work that stands before us, Nornickel will continue making every effort to deliver results while the experience and expertise of Company employees, management, and shareholders will drive our strong performance, steadily strengthen our corporate culture, and boost our competitive growth.

Andrey Bougrov
Chairman
of the Board of Directors
MMC Norilsk Nickel

Corporate governance system

Corporate governance structure



Reporting
Election/appointment

President, Chairman of the Management Board

Internal Control and Risk Management

Internal Audit Department

Board of Directors

Corporate Secretary

Management Board
Budget Committee

Corporate Governance, Nominations and Remuneration Committee

Audit Committee

Strategy Committee

Budget Committee

Sustainability and Climate Change Committee

Transaction Committee

Audit Commission

Independent external auditor

Key principles

In its corporate governance practice, Nornickel is governed by applicable Russian laws, the Listing Rules of Moscow Exchange, and the Corporate Governance Code recommended by the Bank of Russia.[1]

1 Nornickel's corporate governance system is designed to balance the interests of its shareholders, the Board of Directors, management, and employees as well as other stakeholders.

Key corporate governance principles

1. Equitable and fair treatment of every shareholder
2. Enabling shareholders to exercise their rights and legitimate interests in the most reasonable and convenient manner
3. Professionalism and leadership of the Board of Directors, and involvement of independent directors in govemance
4. Strategic management by the Board of Oirectors, its efficient control over oncutive bodies, and oversight of the risk management and internal control framework
5. Sound, diligent, and efficient management of the Compary's day-to-day operatons by excecutive bodies accountable to the soard of Directors and the General Meeting of Shareholders
6. Strong business ethics
7. Zero tolerance for corrupt behaviour
8. Full, transparent, reliable, and timely disclosure of information by the Company
9. Robust internal control and risk management framework
10. Adherence to sustainability principles

Corporate governance performance

During 2023, the Company approved a number of internal documents in corporate governance.

Following an amendment to the Bank of Russia's Regulations No. 714-P dated 27 March 2020,[2] the Company updated its internal document defining the procedure for interaction between its units when disclosing information.

In the reporting year, a number of documents were developed and approved to enhance the anti-corruption compliance system by setting out approaches to the implementation of anti-corruption measures at the Company. Specifically, in March 2023, the Company approved the procedure for activities aimed at surveying employees on corruption and the effectiveness of current anti-corruption measures at the Company. In October 2023, the Procedure for Informing Employees about Anti-corruption Measures in Place at the Company was approved, setting out the types, forms, and frequency of training and awareness activities. To boost the performance of counterparty due diligence, the Procedure for Interaction between the Company's Relevant Units Involved in Counterparty Due Diligence and the Assessment of Corruption Risks was approved in March 2023, setting out the timelines, principles, and focus areas for collaboration as well as mechanisms for identifying corruption.

In addition, the Regulations on Business Gifts at the Head Office were updated, and a brief memo for Company employees on the requirements for giving and receiving business gifts was developed.

Following an amendment to the Bank of Russia's Ordinance No. 5946-U[3] dated 27 September 2021,2 a new list of the Company's insider information was approved. The list was supplemented with new types of insider information. Besides, amendments were made to the procedure for determining the size of a transaction where information about the consent to or subsequent approval of such transaction by the issuer's Board of Directors is deemed insider information.

1 The Bank of Russia's Letter No. 06-52/2463 On the Corporate Governance Code, dated 10 April 2014.
2 The Bank of Russia's Regulations No. 714-P On Information Disclosure by Issuers of Issue-Grade Securities, dated 27 March 2020.
3 The Bank of Russia's Ordinance No. 5946-U dated 27 September 2021 On the List of Insider Information of Legal Entities Specified in Clauses 1, 3, 4, 11, and 12, Article 4 of Federal Law No. 224-FZ dated 27 July 2010 On Countering the Misuse of Insider Information and Market Manipulation and Amendments to Certain Legislative Acts of the Russian Federation, as well as on the Procedure and Timelines for Its Disclosure.

In 2024, the Company intends to continue its efforts to improve the quality of its corporate governance system and take further steps to implement and test the approach to corruption risk management, in particular, to approve an internal document on corruption risk assessment.

Compliance with the Corporate Governance Code

Nornickel's corporate governance standards embedded in its activities are based on the principles and recommendations of the Bank of Russia's Corporate Governance Code (the "Code"), and the Company continues to consistently incorporate and implement them.

The Company's compliance with the Code's principles and recommendations in 2023 was evaluated using a format recommended by the Bank of Russia's Letter No. IN-06-28/102 dated 27 December 2021.

Nornickel's corporate practices cover most of the Code's principles and recommendations. In case of partial non-compliance, the Company provides an appropriate explanation and description of the corporate governance mechanisms and tools used by it instead of those recommended by the Code.

For the full 2023 Code Compliance Report, including comments, please see an Appendix to this Annual Report.

Compliance with the Corporate Governance Code recommendations in 2023

Corporate governance principles	Full compliance			Partial compliance			Non-compliance		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
Rights and equal opportunities for shareholders in exercising their rights	9	10	10	4	3	3	–	–	–
Board of Directors	28	25	27	8	11	9	–	–	–
Corporate Secretary	2	2	2	–	–	–	–	–	–
Remuneration system for members of the Board of Directors and senior management	6	7	7	4	3	3	–	–	–
Risk management and internal control framework	5	5	5	1	1	1	–	–	–
Company disclosures	4	4	4	3	3	3	–	–	–
Material corporate actions	3	3	3	2	2	2	–	–	–
TOTAL	**57**	**56**	**58**	**22**	**23**	**21**	**0**	**0**	**0**

Stakeholder engagement

To achieve operational excellence and further improve corporate governance, Nornickel is strongly focussed on engaging its stakeholders in corporate governance, taking their needs into account when making important decisions.

At the end of the reporting year, Nornickel published its first climate change report. The Company disclosed its initiatives around climate action and climate change adaptation from 2021 to date, the development of its risk management system, and the resilience of the Company's strategy in three climate scenarios. The report was prepared in line with the TCFD[1] recommendations and was verified by Kept, a professional audit firm. The report allows the Company to be as transparent as possible with all its stakeholders about the way it adapts to climate change and the measures it takes to reduce its contribution to climate change. In addition, the report discloses the way changes in the global economy in three climate scenarios will affect demand for the Company's products and its financial performance until 2050.

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 the Company securities.

Dialogue with investors

The Company is committed to making mandatory disclosures in line with global best practice. To make its disclosures more meaningful and comprehensive, Nornickel uses an array of disclosure tools, including press releases, presentations, annual and sustainability reports, issuer reports, corporate action notices, and interactive tools. Nornickel ensures parallel disclosure of all material information both in Russian and English.

Nornickel's quarterly disclosures made via its official website include its operating results and RAS financial statements. IFRS financial statements are released on a semi-annual basis. To maintain strong investor relations, the Company makes extensive use of various communication tools, including conference presentations, road shows, site visits for investors and analysts, etc.[2]

For more details on investor relations, please see the Shareholders relations section of this Annual Report.

Dialogue with employees

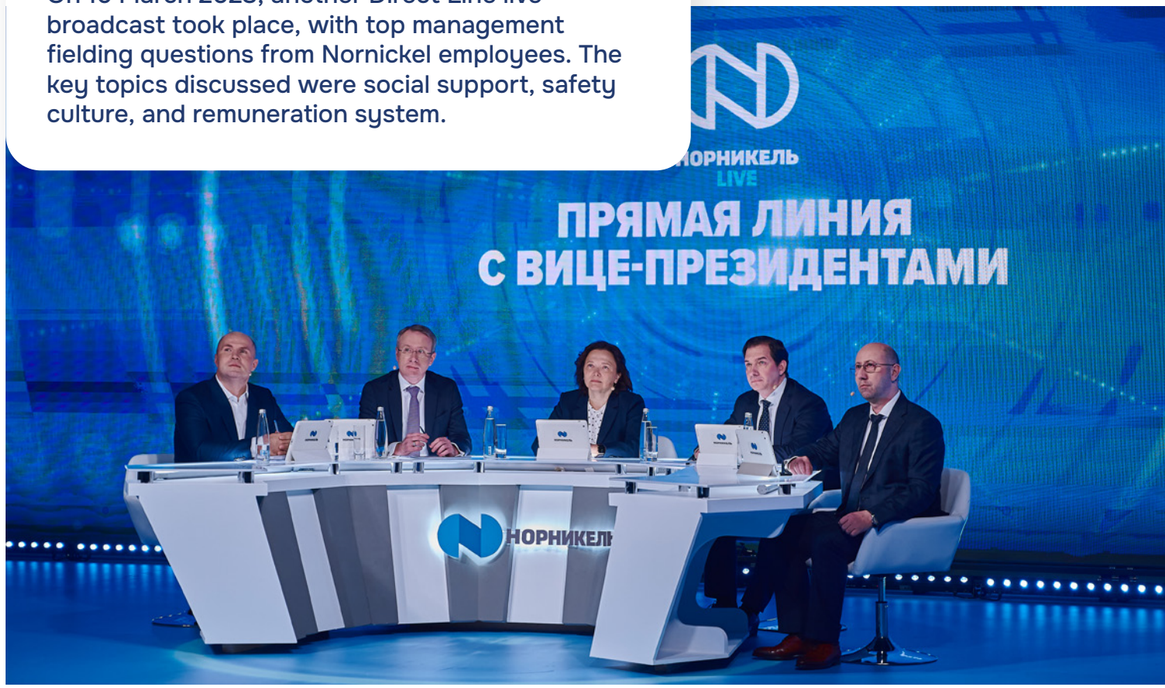
The Company regularly runs already traditional open online conferences between employees and senior management to identify strengths and weaknesses in communication and improve corporate governance.

Production upgrades and ambitious investment projects all transform the approaches to work, routines, sustainability, safety, and environmental protection. To retain its leadership in the market, the Company needs to address newly emerging challenges, which is impossible without employee involvement. During the Nornickel Live annual broadcast, Nornickel's vice presidents answered employee questions and discussed the Company's news and future plans. Specifically, 16 March 2023 saw another Direct Line live broadcast, with top management fielding questions from Nornickel employees. The key topics discussed were social support, safety culture, and remuneration system.

Effective communication channels between management and employees and an open information environment help build trust, reduce stress, and increase employee engagement.

[1] Task Force on Climate-related Financial Disclosures.
[2] Information on upcoming events is posted in the IR Calendar on the Company website.

On 16 March 2023, another Direct Line live broadcast took place, with top management fielding questions from Nornickel employees. The key topics discussed were social support, safety culture, and remuneration system.



Partnerships and cooperation

In February 2023, Polar Lithium, a joint venture between Nornickel and ROSATOM, obtained a subsoil licence for the Kolmozerskoye lithium deposit, the largest in Russia. The Kolmozerskoye deposit development project located in the Murmansk Region.

Partners plan to set up a 45 ktpa lithium carbonate and hydroxide production facility which will create new jobs and ensure the substitution of imported lithium raw materials. The facility's products will be used, among other things, in the production of batteries, an industry now booming both in Russia and globally.

In July 2023, **the Company and VK signed a cooperation agreement to jointly develop IT solutions** for the metals industry, providing for collaboration around cloud computing, virtualisation of IT infrastructure, and the development of multipurpose platforms and portals, big data management tools, and artificial intelligence (AI) technologies. Services around employee collaboration at a metals company, secure corporate communications, and career development are a separate focus

45 KTPA

Output of lithium carbonate and hydroxide targeted by the Kolmozerskoye deposit development project

[1] Information on upcoming events is posted in the IR Calendar on the Company website.

for the partnership. The two partners look to develop Internet of Things technologies and industry-specific geographic information services.

In September 2023, **Nornickel and Kaspersky signed a cooperation agreement**, which will enable Nornickel to improve its information security and protect its corporate and industrial infrastructure.

Besides, in November 2023, **Nornickel signed a cooperation agreement with Security Vision, one of Russia's largest providers of information security solutions.** The partnership aims to strengthen the protection of industrial information systems and data to ensure the integrity and continuity of metal production processes.

In November 2023, Nornickel, Siberian Federal University, and Fedorovsky Polar State University signed a cooperation agreement with a view to fostering innovation and advancing the educational landscape. The agreement aims to combine scientific and educational efforts for mutually beneficial results. The main areas of cooperation include the advancement of R&D projects, especially on permafrost and climate change in the Arctic, the introduction of innovative production technologies, as well as research in biotechnology and artificial intelligence. An important aspect of cooperation is the development of Nornickel's R&D[1] centre which will focus on digitalising and optimising processes in the mining industry. The agreement also covers educational support, encompassing joint events, field schools, and internships for undergraduate and postgraduate students of Siberian Federal University and Fedorovsky Polar State University. A heightened emphasis is laid on building a talent pool for the Company, which involves updating specialist's, bachelor's, and master's degree programmes while implementing continuing professional education programmes tailored to Nornickel's current talent needs.

At the end of the reporting year, **Nornickel and Astra, a leading Russian IT developer, signed a memorandum of cooperation** to develop software for Nornickel's needs, identify approaches to integrating solutions and services, test innovations, promote the transition to Russian technologies, and hold industry forums and conferences.

To reaffirm its commitment to the long-term strategy of exiting international assets, that do not met of first-class criteria, as well as its stronger strategic focus on developing and driving the reliability of its unique mineral resource base and processing capacities in the Russian Federation, **Nornickel signed, through Norilsk Nickel Africa Proprietary Limited (NNAf) (a Nornickel Group company), an agreement to transfer its 50% interest in Nkomati Joint Venture to its South African partner, African Rainbow Minerals Limited (ARM).**

In another strategic move, in 2023, **Nornickel signed a partnership with R-Vision, a leader in the Russian information security market, focussed primarily on contributing to the development of the information security market for the industrial sector.** The two parties plan to jointly develop proposals to improve, test, and implement information security solutions for industrial systems, including those ensuring an uninterrupted production cycle and business process integrity at Nornickel. Sharing experience and expertise while contributing to the promotion of solutions to build a platform for interaction between the public and business sectors are the essential aspects of this partnership.

[1] Research and Development.

Dialogue with indigenous minorities

Nornickel's engagement with indigenous peoples living in Taimyr and in the Murmansk Region is based on recognising the right of indigenous peoples to independently determine their development priorities and on respecting the customs, traditions, and culture of indigenous communities. Regular dialogue covers all areas of mutual interest and relies on a holistic approach.

Although Nornickel is not a resident of the Arctic zone, the Company adheres to the provisions of the Standard of Responsibility for the Residents of Russia's Arctic Zone.

Nornickel compiles with all applicable international standards and regulations regarding the support for indigenous peoples of the North and recognises the rights of local communities to maintain their traditional lifestyle and indigenous trades. To maintain a consistent dialogue with indigenous peoples of Taimyr:

- a department was set up within the Norilsk Division, responsible for engagement with indigenous peoples of Taymyr and staffed with the right level of indigenous talent
- on the initiative of the indigenous peoples, the Indigenous Communities Coordination Council was established comprising representatives from 57 indigenous tribal communities.

Nornickel adopted the international practices of free, prior, and informed consent and due diligence (ethnicity expert review) to identify indigenous communities that will be affected by the Company's investment and production activities along with the extent of such impact.

In 2023, Nornickel continued implementing the cooperation agreement to support indigenous peoples signed with the Federal Agency for Ethnic Affairs (FAEA). The media praised the Company's Indigenous Peoples of Russia – Social Diplomacy programme aimed at boosting civic consciousness and capability building among indigenous peoples as well as at supporting potential opinion leaders from among them. In 2023, 278 people (members of more than 30 indigenous peoples of Russia) registered for the programme.

Another outcome of the agreement was the Public-Private Partnership for the Sustainable Development of Indigenous Peoples, an international forum held in Moscow in November 2023 and sponsored by Nornickel, which welcomed more than 200 delegates from Russia and other countries in Moscow and sponsored by Nornickel, which welcomed more than 200 delegates from Russia and other countries. Participants included federal and regional authorities, municipalities, and indigenous peoples' associations from Russia, Africa, and Asia, reindeer herders, leaders of tribal communities from Taymyr, Yamal, and Chukotka, UN expert bodies on human rights and indigenous peoples, and industrial companies. The event was streamed live with simultaneous translation into English and Spanish. The participants discussed responsible state and corporate governance around respecting the rights of indigenous peoples, strategies and forms of business involvement in ensuring indigenous peoples' sustainability through corporate programmes, agreements with authorities and associations of indigenous peoples, infrastructure development, environmental protection of indigenous lands, and other matters.

The Company's dialogue with indigenous peoples of the North is based on the following key principles:

- "Nothing for us without us"
- awareness and consistency
- from patronising to partnering

The Company's regulatory document setting out the framework for dialogue with indigenous peoples of the North is the Indigenous Rights Policy first adopted back in 2018 and based on the following approaches:

- Application of the principle of free, prior, and informed consent (FRIC);
- Support and development of traditional trades;
- Commitment to the principle of consultations in good faith

Government relations

The Company's representatives also take part in parliamentary hearings, round table discussions, and working groups organised by the Federation Council, the State Duma of the Federal Assembly of the Russian Federation, the Government of the Russian Federation, federal executive authorities, the Civic Chamber of the Russian Federation, the Chamber of Commerce and Industry of the Russian Federation, the Association of Managers interregional non-governmental organisation, etc.

Nornickel's experts are involved in discussing draft regulations through anti-corruption expert reviews and regulatory impact assessments. This all helps to maintain a constructive dialogue with the government, cut red tape, and improve the country's business climate.

In 2023, Nornickel signed an agreement with Rostechnadzor. The agreement envisages the promotion of information exchange, joint organisation of scientific and practical workshops and conferences, development of scientific and methodological support, efforts to improve the legal framework in Russia, and identification of the best approaches to managing hazardous facilities.

Managing conflicts of interest

Nornickel has developed measures to prevent potential conflicts of interest involving shareholders, members of the Board of Directors and the Management Board as well as the President of the Company.

The Company's Articles of Association set forth the specific procedure for approving transactions by shareholders who hold more than 5% of voting shares and affiliated persons. Such transactions are only made if approved by a qualified majority of Board members (at least 10 out of 13 votes).

Interested-party transactions involving members of the Board of Directors and the Management Board as well as the President of the Company are regulated by the law on joint stock companies. The Company has in place the procedure for obtaining the Board of Directors' prior consent to interested-party transactions.

The Company also has in place the Code of Conduct and Business Ethics for Members of the Board of Directors, which aims to reinforce high standards of ethics and business conduct among members of the Board of Directors and serves as guidance in the event of ethical risks and conflict of interest situations. The Code provides for the obligation of members of the Board of Directors to refrain from actions that may result in a conflict of interest, and if such a conflict arises, they should promptly inform the Corporate Secretary in writing about such conflict.

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.

In 2023, no notifications of conflicts of interest were received from members of the Board of Directors.

General Meeting of Shareholders

The General Meeting of Shareholders is the highest governance body of MMC Norilsk Nickel responsible for making decisions on matters most critical to the Company's performance.

Matters within the remit of the General Meeting of Shareholders are listed in the Company's Articles of Association, and the procedures for convening, preparing, and holding general meetings are detailed in the Regulations on the General Meeting of Shareholders.

Types of General Meetings of Shareholders

- **By attendance:**
  - In person
  - In absentia
- **By frequency:**
  - Annual
  - Extraordinary

Remit of the Company's General Meeting of Shareholders

1. Amendments to the Articles of Association
2. Distribution of earnings, including dividend payout (declaration)
3. Approval of annual reports and annual accounting (financial) statements
4. Election of members of the Board of Directors and early termination of their appointment
5. Election of members of the Adit Commission and early termination of their appointment
6. Appointment of the auditor
7. Stock split and consolidation

Key shareholder dates

Events	Timeframe
Annual General Meeting of Shareholders	No sooner than three and no later than six months after the end of the reporting year
Extraordinary General Meeting of Shareholders	At any time at the initiative of the Board of Directors or upon request from the Audit Commission, the audit firm, or a shareholder owning at least 10% of voting shares in the Company
Publication of the notice of the General Meeting of Shareholders	Not later than 30 calendar days prior to the meeting
Compilation of the list of shareholders entitled to participate in the General Meeting of Shareholders	Not earlier than 10 days from the date of the Board of Directors' decision to hold the meeting and not later than 25 days prior to the date of the meeting[1]
Provision of materials for the General Meeting of Shareholders	20 calendar days prior to the meeting

[1] In certain cases, the Federal Law On Joint Stock Companies establishes other timelines for publishing the notice of the General Meeting of Shareholders / compiling the list of persons entitled to participate in the General Meeting of Shareholders.

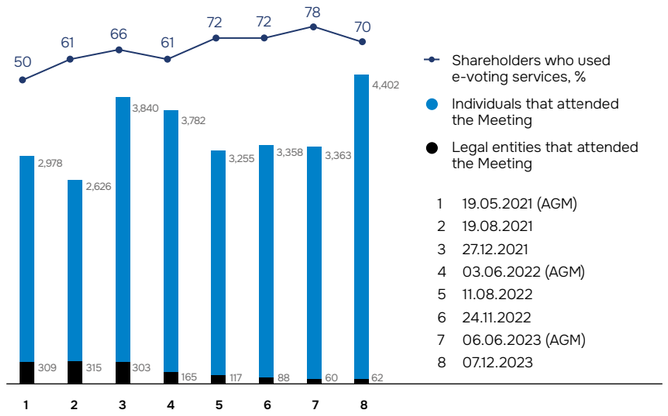
General Meetings of Shareholders held in 2023

Meeting date	Agenda
6 June 2023 – the Annual General Meeting of Shareholders (held in absentia)	The Meeting approved the Annual Report, annual accounting statements, and consolidated financial statements for 2022. The Meeting decided not to distribute earnings and not to pay dividends for 2022. A new Board of Directors and Audit Commission were elected; resolutions on their remuneration were passed. The auditor was approved to audit Nornickel's Russian accounting (financial) statements for 2023, consolidated financial statements for 2023, and interim consolidated financial statements for 1H 2023. The Meeting approved transactions to provide liability insurance for members of the Board of Directors and the Management Board, as well as transactions to reimburse members of the Board of Directors and the Management Board for losses that these persons may incur in connection with their appointment and discharge of their duties as members of the Board of Directors and the Management Board
7 December 2023 – the Extraordinary General Meeting of Shareholders (held in absentia)	Resolutions were passed to pay 9M 2023 dividends, split stock, and approve the Company's membership in the Corporate Sports Development Association.

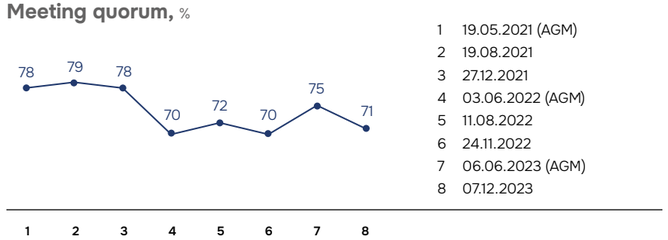
Except for the cumulative voting to elect members of the Board of Directors, each voting share represents one vote at the General Meeting of Shareholders.

Two General Meetings of Shareholders were held in 2023. All meetings were held by decision of the Board of Directors in absentia via an easy-to-use and reliable e-voting service. The e-voting service for General Meetings of Shareholders is provided by IRC – R.O.S.T., the Company's registrar (official website: Shareholder's Personal Account, rrost.ru). Each time, more and more shareholders take advantage of this service enabling them to vote regardless of their location.

Attendance at General Meetings of Shareholders



Meeting quorum, %



[1] AGM – Annual General Meeting of Shareholders.

Dividends

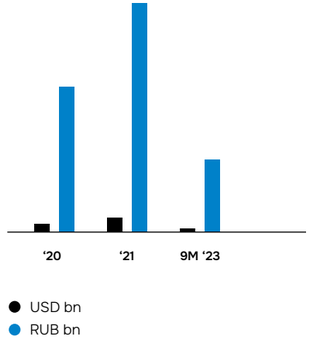
Dividends in 2023

On 7 December 2023, the Extraordinary General Meeting of Shareholders resolved to pay 9M 2023 dividends of RUB 915.33 per ordinary share, with the amount of dividend payout totalling close to RUB 130 billion (about USD 1.5 billion).

On 22 May 2024, the Company's Board of Directors recommended that the Annual General Meeting of Shareholders resolve not to pay a final dividend for the financial year 2023. The resolution will be passed at the Annual General Meeting of Shareholders on 28 June 2024.

~130
RUB BN
Total dividend payout for 9M 2023

Dividend history[1]



[1] Payments for 2021 included RUB 32.3 billion, or USD 0.5 billion, transferred by the Company to the Central Depositary as dividends to ADR holders and shareholders who are customers of foreign nominee holders and subsequently transferred back to the Company.

Board of Directors and Board committees

Composition of the Board of Directors

The Board of Directors plays a crucial role in designing and developing the corporate governance system, ensures the protection and exercise of shareholder rights, and supervises executive bodies.

The Board's authority and formation process as well as the procedure for convening and holding Board meetings are determined by the Company's Articles of Association and Regulations on the Board of Directors.

Remit of the Board of Directors

1. Determination of business priorities, development strategy, and budgets
2. Convening and holding Annual and Extraordinary Meetings
3. Acquisition of shares, bonds, and other securities placed by the Company in line with applicable laws
4. Recommendations on the amount of dividend per share
5. Approval and amendment of the dividend policy
6. Approval of a number of internal documents
7. Preliminary approval of annual reports and annual accounting (financial) statements
8. Establishment of the Company's branches and representative offices and approval of their regulations
9. Approval of material transactions specified in the Articles of Association
10. Determination of the principles and approaches for setting up the risk management and internal control systems, oversight of the said systems

According to Nornickel's Articles of Association, the Board of Directors has 13 members. The current size of the Board of Directors ensures a balanced mix of professionalism, expertise, and experience required for the Board to properly perform its functions and best align its activities with the Company's goals and objectives. All Board members enjoy an impeccable business reputation and recognition (including among investors) and have no conflicts of interest with Nornickel. The current Board of Directors comprises six independent directors. An objective judgement that independent directors bring to the table, along with their constructive feedback, is a valuable contribution to the Board's leadership and the Company's operations on the whole. The independent directors' contribution to decision making helps align the interests of various stakeholder groups while improving the quality of management decisions.

As of 1 January 2023, the Board of Directors consisted of Denis Alexandrov, Sergey Batekhin, Alexey Bashkirov, Elena Bezdenezhnykh, Andrey Bougrov, Sergey Volk, Alexey Germanovich, Alexandra Zakharova, Marianna Zakharova, Alexey Ivanov, Stanislav Luchitsky, Evgeny Shvarts, and Egor Sheibak, who were elected to the Board of Directors at the Extraordinary General Meeting of Shareholders in November 2022.

Following the Annual General Meeting of Shareholders that took place on 6 June 2023, Alexey Bashkirov, Alexey Germanovich, and Stanislav Luchitsky stepped down from the Board of Directors, and Irina Komarova, Sergey Malyshev, and Anton Sychev were elected as new Board members.

As of 31 December 2023, the Board of Directors had 13 members, including:

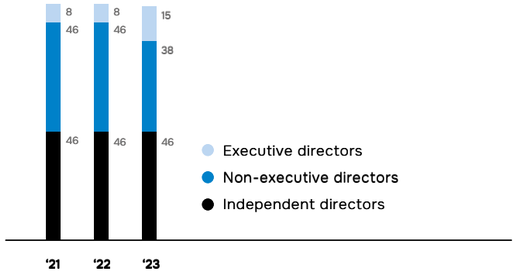
- six independent directors: Denis Alexandrov, Sergey Volk, Alexey Ivanov, Irina Komarova, Anton Sychev, and Evgeny Shvarts
- five non-executive directors: Sergey Batekhin, Elena Bezdenezhnykh, Andrey Bougrov, Alexandra Zakharova, and Egor Sheibak
- two executive directors: Marianna Zakharova and Sergey Malyshev.

Chairman of the Board of Directors

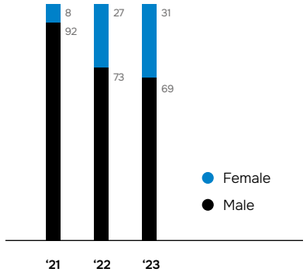
The Chairman of Nornickel's Board of Directors leads the Board of Directors, convenes and chairs its meetings, and ensures constructive collaboration between Board members and corporate management.

Since 2022, the position of the Chairman of the Board of Directors is held by Andrey Bougrov, a non-executive director with a long track record at the Company: until 2022 in his role as Senior Vice President for Sustainable Development, Andrey Bougrov focused on the sustainability aspect of the Company's development strategy and on monitoring corporate internal procedures, policies, and organisational structure for compliance with the requirements of international sustainability associations and certification procedures as well as on preparing and further improving the Company's sustainability reporting to bring it closer in line with international non-financial reporting standards. Andrey also oversaw the Company's investor relations.

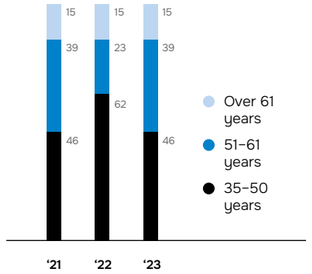
Status of Board members, %



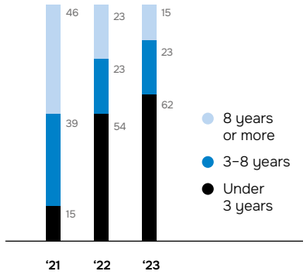
Board composition by gender, %



Board composition by age group, %



Tenure on the Board of Directors, %



Andrey Bougrov knows the ins and outs of the Company's operations and its internal business processes, which helps better understand them and facilitates fast but high-quality decision making at the Board level. Andrey Bougrov also boasts a vast track record of serving on expert councils on governance and sustainability, and chairs the Share Issuers Committee of Moscow Exchange.

In 2024, Andrey Bougrov won the Director of the Year National Award in the category Chairman of the Board of Directors: Contribution to the Development of Corporate Governance.

For more details on Andrey Bougrov's biography, please see this Annual Report and the Company website.

Independent directors

Independent directors are sufficiently professional, experienced, and self-reliant to form their own opinion and are capable of making unbiased judgements in good faith, free of influence by the Company's executive bodies, individual groups of shareholders, or other stakeholders.

In 2023, in line with corporate governance best practice, Nornickel's Board of Directors regularly evaluated Board nominees and new members against the independence criteria set out in the Company's Articles of Association and the Listing Rules of Moscow Exchange. If any signs of relationship were identified, the nature of such relationship was comprehensively assessed. Where the identified relationship was established to be formal in nature, the Company's Board of Directors determined whether the Board member in question met the independence criteria based on a recommendation by the Corporate Governance, Nomination, and Remuneration Committee. Thus, on 12 January 2023, Board member Alexey Germanovich was determined to be independent despite his formal relationship with the Company's contractor since such relationship did not affect his ability to exercise independent, fair, and unbiased judgement. Alexey Germanovich has signed a relevant statement, under which the Director committed to represent the interests of all shareholders and the Company, despite the fact that he meets a formal relationship criterion, and inform the Board of Directors if he might start to meet any other relationship criteria or have a conflict of interest, or other ethical issues.

Over the year, the Company was in compliance with the requirements of the Listing Rules of Moscow Exchange as regards the number of independent directors on the Board.

The Company's Board of Directors elected at the Annual General Meeting of Shareholders on 6 June 2023 was 46.2% independent, comprising six independent directors: Denis Alexandrov, Sergey Volk, Alexey Ivanov, Irina Komarova, Anton Sychev, and Evgeny Shvarts.

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	ESG
COMPOSITION OF THE BOARD OF DIRECTORS AS AT 2023-END							
Andrey Bougrov Non-executive Director, Chairman of the Board of Directors	2002–2020 2022 to date		•		•	•	•
Denis Alexandrov Independent Director	2022 to date	•		•			•
Sergey Batekhin Non-executive Director	2020 to date	•	•	•		•	
Elena Bezdenezhnykh Non-executive Director	2022 to date	•	•		•		
Sergey Volk Independent Director	2019 to date		•	•			
Marianna Zakharova Executive Director	2010 to date		•		•		
Alexandra Zakharova Non-executive Director	2022 to date			•	•		•

Name	Tenure on the Board of Directors	Key skills					
		Strategy	Law and corporate governance	Finance and audit	Metals and mining / engineering	International economic relations	ESG
Alexey Ivanov Independent Director	2022 to date			•			
Irina Komarova Independent Director	2023 to date		•	•		•	
Sergey Malyshev Executive Director	2023 to date			•	•		
Anton Sychev Independent Director	2023 to date	•	•	•			
Evgeny Shvarts Independent Director	2019 to date	•			•		•
Egor Sheibak Non-executive Director	2022 to date		•	•	•		
As at 31 December 2023, the average tenure on the Board of Directors was 4.8 years		5	8	9	7	3	4
BOARD MEMBERS WHO STEPPED DOWN IN 2023							
Alexey Bashkirov Non-executive Director	2013–2023	•	•	•		•	
Alexey Germanovich Independent Director	2022–2023		•	•			•
Stanislav Luchitsky Independent Director	2021–2023	•	•		•		•

Selection criteria and succession

The performance of the Company's Board of Directors is largely driven by a mix of skills, qualifications, experience, independent judgement, and degree of independence on the Board. The number of Board members and the composition of the Company's Board of Directors enable fair and comprehensive review of matters, most informed decision making, timely detection and prevention of conflicts of interest, as well as effective performance of the Board's other functions. When electing members to the Board of Directors, the Company is guided by the principles recommended by the Bank of Russia:

- Having a mix of skills on the Board of Directors that enables it to work as a close-knit team of professionals to drive informed and professional collective decision making by the Board;
- Balanced composition, whereby the experience, expertise, and skills of the Company's Board members complement each other and help the Board of Directors exercise fair and impartial judgement, timely identify strategic risks, and assess their potential impacts;
- Diversification, whereby the Board of Directors is able to review matters from different perspectives, bring up new ideas for discussion, and make more balanced decisions;
- Tailored approach, whereby the Company itself decides on the optimal composition of the Board of Directors and its committees and maintains succession plans for them considering the Company's objectives, business profile, and other factors;
- Independence, whereby the Board of Directors strives to make the most fair and independent decisions. Independent directors on the Company's Board of Directors play an important role in maintaining a balance of interests between various shareholder groups and working out the best possible solutions;
- Information transparency, whereby shareholders are provided with timely information about candidates, their professional qualities, experience, and skills.

Training of Board members

The Company has Professional development policy for members of the Company's Board of Directors.

In order to update the knowledge of the Company's Board members and better involve them in the Company's processes, training courses on handling insider information are delivered on a regular basis for directors.

In addition, Nornickel Academy has developed and posted Anti-corruption for Managers, a remote learning course for members of the Board of Directors, the Management Board, and senior management. Members of the Company's governance bodies and top management are expected to complete this course in the first quarter of 2024.

In September 2023, to keep up to date with local developments and progress on sustainability activities, the Company's top managers and Board members visited production sites at Kola MMC. A number of informal discussions and meetings took place during the visit.

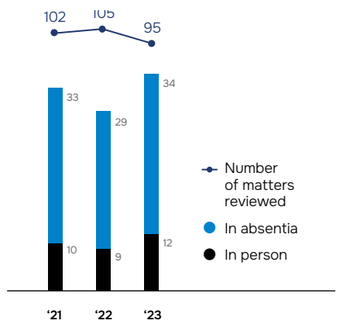
Board of Directors' performance

In 2023, the Company's Board of Directors held 46 meetings, including 12 meetings in person, and reviewed 95 matters.

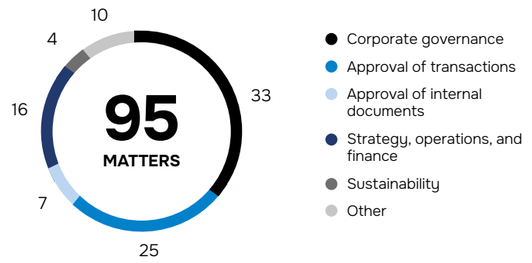
During the year, the Board of Directors continued to focus on matters critical to the Company's sustainable growth, investor relations strategy, and operational and financial performance.

In 2023, attendance at Board meetings was 100%.

Number of Board meetings



Matters reviewed in 2023



Attendance of Board and committee meetings in 2023[1]

Name	Status	Attendance at Board meetings			Attendance at committee meetings					
		Total	In person	In absentia	Strategy Committee	Budget Committee	Audit Committee	Corporate Governance, Nomination, and Remuneration Committee	Sustainable Development and Climate Change Committee	Transactions Committee
Andrey Bougrov	Non-executive Director / Chairman of the Board of Directors	46/46	12/12	34/34	5/6	5/7	8/16	4/13	5/8	-
Denis Alexandrov	Independent Director / Chairman of the Strategy Committee	46/46	12/12	34/34	6/6	2/7	16/16	3/13	8/8	-
Elena Bezdenezhnykh	Non-executive Director	45/46	11/12	34/34	6/6	3/7	1/16	4/13	5/8	-
Sergey Batekhin	Non-executive Director	46/46	12/12	34/34	6/6	7/7	1/16	13/13	2/8	-
Sergey Volk	Independent Director	46/46	12/12	34/34	4/6	4/7	8/16	13/13	5/8	-
Marianna Zakharova	Executive Director	46/46	12/12	34/34	3/6	4/7	3/16	4/13	3/8	7/7
Alexandra Zakharova	Non-executive Director / Chairwoman of the Transactions Committee	46/46	12/12	34/34	6/6	7/7	16/16	5/13	8/8	7/7
Alexey Ivanov	Independent Director / Chairman of the Audit Committee	46/46	12/12	34/34	5/6	1/7	16/16	4/13	7/8	-
Irina Komarova	Independent Director	20/46	5/12	15/34	4/6	5/7	8/16	8/13	3/8	-
Sergey Malyshev	Executive Director	20/46	5/12	15/34	6/6	5/7	7/16	3/13	4/8	1/7
Anton Sychev	Independent Director / Chairman of the Corporate Governance, Nomination, and Remuneration Committee	20/46	5/12	15/34	4/6	5/7	8/16	8/13	3/8	-
Evgeny Shvarts	Independent Director / Chairman of the Sustainable Development and Climate Change Committee	46/46	12/12	34/34	5/6	-	3/16	3/13	8/8	-
Egor Sheibak	Non-executive Director	46/46	12/12	34/34	6/6	7/7	9/16	13/13	6/8	7/7
Alexey Bashkirov	Non-executive Director	26/46	7/12	19/34	2/6	2/7	1/16	-	-	-
Alexey Germanovich	Independent Director	26/46	7/12	19/34	2/6	3/7	8/16	6/13	4/8	-
Stanislav Luchitsky	Independent Director / Chairman of the Sustainable Development and Climate Change Committee	26/46	7/12	19/34	2/6	-	3/16	5/13	3/8	-

[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 total number of meetings held.

Performance evaluation of the Board of Directors

The procedure for evaluating the performance of the Company's Board of Directors is regulated by the relevant policy approved by resolution of the Company's Board of Directors (Minutes No. GMK/1-pr-sd dated 20 January 2015). The policy provides for the evaluation of the Board of Directors' performance in the reporting financial year in the form of an internal evaluation conducted through a questionnaire survey of Board members within the Company, or in the form of an external evaluation as may be proposed by the Corporate Governance, Nomination, and Remuneration Committee of the Board of Directors and approved by resolution of the Board of Directors, with such external evaluations involving independent professional advisors.

As per the Board of Directors' resolution dated 7 February 2024, the evaluation of the Board of Directors' performance in 2023 was carried out in the form of an internal evaluation (self-evaluation).

The Corporate Governance, Nomination, and Remuneration Committee of the Board of Directors conducted the evaluation focussing on the performance of the Board of Directors as the Company's governance body, the performance of Board committees, and the performance of the Chairman of the Board of Directors while also paying attention to the evaluation of the Corporate Secretary's performance.

As part of the evaluation, detailed questionnaires were sent to the members of the Board of Directors, asking them to evaluate the performance of the Board of Directors against the following criteria: alignment of the Board's structure with its functions; qualitative composition; internal performance dynamics; activities of the Corporate Secretary; the Board's involvement in creating shareholder value; involvement in the Company's development strategy; interaction within the risk management, internal control, and compliance system; corporate governance system; supervisory function; holding meetings; activities of the Board's Chairman; activities of each individual Committee; and overall evaluation.

All 13 Board members took part in the survey.

The information obtained from the survey was reviewed by the Corporate Governance, Nomination, and Remuneration Committee and included in its report on the internal performance evaluation of the Board of Directors for 2023.

The Committee came to the following conclusions:

- 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 matches the scale and profile of the Company's business, its business objectives and risk profile, and meets the Company's current and anticipated 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 Committee also identified areas for development and made recommendations on Board functions requiring action to improve performance in those areas.

The results of the internal evaluation of the Board of Directors' performance in 2023, including the opinion and recommendations of the Corporate Governance, Nomination, and Remuneration Committee, were reviewed at a Board of Directors meeting. It was resolved to acknowledge that in the reporting year the Board of Directors, Board Chairman, Board committees, and Corporate Secretary discharged their duties effectively and that the recommendations of the Corporate Governance, Nomination, and Remuneration Committee should be taken into account in the Board's future activities in 2024.

During the reporting year, the Board of Directors' efforts paid particular attention to the areas for improvement identified by the Board's previous self-evaluation as well as to consolidating the progress made in priority areas.

For example, the Board of Directors and top managers resumed the practice of reviewing matters related to the Company's business and strategic priorities at in-person meetings, including informal ones. In September 2023, to keep up to date with local developments and progress on ESG adoption, the Company's top managers and Board members visited key production sites at Kola MMC (Severny Mine, Kola Superdeep Borehole) and discussed matters of the Company's strategic importance.

In 2023, the Corporate Governance, Nomination, and Remuneration Committee continued reviewing matters related to developing human capital and motivating employees, such as the Human Capital Development Programme 2021–2023, 2022 and 2023 KPI scorecards for the Company's top 10's and division directors, and remuneration of members of the Board of Directors and the Audit Commission. To reflect stakeholders' views and interests in the decision-making process, the Corporate Governance, Nomination, and Remuneration Committee continued collaborating with the Company's management during 2023 when resolving on matters within its remit.

In 2023, the Strategy Committee focussed on matters related to the Company's long-term growth CAPEX programme, future production programme, and the implementation status of several projects (including the Sulphur Project) and functional strategies.

Biographical details of Board members[1]

For biographies of the Board members who stepped down after the Annual General Meeting of Shareholders, please see the 2022 Annual Report.

Andrey Bougrov

Non-executive Director, Chairman of the Board of Directors since 2022

Born in: 1952
Shares of the Company: 0%

Education

Degree in International Economic Relations, Economist for Foreign Trade, Candidate of Economic Sciences, Moscow State Institute of International Relations (MGIMO University)

Experience in the last five years

Since 2016: chairman of the Share Issuers Committee of Moscow Exchange

Since 2015: member of the National Council on Corporate Governance non-profit partnership

Positions at Nornickel: Senior Vice President (2016–2020), Senior Vice President for Sustainable Development (2020–2022)

[1] Positions are indicated as at 2023-end.

Denis Alexandrov

Independent Director since 2022, Chairman of the Strategy Committee, member of the Audit Committee, member of the Sustainable Development and Climate Change Committee

Born in: 1974
Shares of the Company: 0%

Education

Degree in International Economic Relations and Management, Far Eastern State University, 1996

Bachelor of Science in Business and Management, University of Maryland, 1995

Experience in the last five years

Since 2023: managing partner of Laurus Capital Management

2022–2023: member of the council of the Union of Gold Producers of Russia

2022–2023: member of the board of directors of Petropavlovsk-Avia, a Petropavlovsk Group company

2021–2023: member of the board of directors of PHM Engineering, a Petropavlovsk Group company

2021–2023: member of the board of directors of Pokrovskiy Mine, a Petropavlovsk Group company

2020–2023: CEO of Atlas Mining

2020–2023: CEO of the public gold mining company Petropavlovsk PLC (POG)

2016–2020: CEO of Russdragmet

Sergey Batekhin

Non-executive Director since 2020, member of the Budget Committee, member of the Corporate Governance, Nomination, and Remuneration Committee, member of the Strategy Committee

Born in: 1965
Shares of the Company: 0%

Education

Degree in Finance and Credit, Economist, Plekhanov Russian Academy of Economics, 1998

Master of Business Administration, Moscow International Higher School of Business MIRBIS, 1998

Doctor of Philosophy, International Information Technology Academy, 2002

Speaks French, German, English, and Italian

Experience in the last five years

Since 2019: chairman of the presidium of the Night Hockey League non-profit amateur hockey foundation

2019–2022: member of the board of directors of Jokerit Hockey Club Oy

Since 2018: member of the board of directors of Kontinental Hockey League

2018–2020: Senior Vice President – Head of Sales, Procurement, and Innovation at MMC Norilsk Nickel

Elena Bezdenezhnykh

Non-executive Director since 2022, member of the Strategy Committee, member of the Sustainable Development and Climate Change Committee

Born in: 1973
Shares of the Company: 0.001146%

Education

Degree in Law, Lawyer, Krasnoyarsk State University, 1996

Experience in the last five years

Since 2023: vice president at RUSAL Management, Moscow

2020–2022: member of the board of directors of Yenisei Siberia Development Corporation

Since 2019: member of the presidium of the Association of Lawyers of the Russian Federation

2019-2023: vice president for regional policy and government relations at RUSAL Management, Moscow

2018–2019: vice president for regional policy and government relations of the branch at RUSAL Management, Moscow

Since 2018: member of the supervisory board of Siberian Federal University

Sergey Volk

Independent Director since 2019, member of the Corporate Governance, Nomination, and Remuneration Committee, member of the Strategy Committee

Born in: 1969
Shares of the Company: 0%

Education

Master of Business Administration (majoring in Finance), University of Texas at Austin (USA), 1998

Experience in the last five years

2019–2022: member of the board of directors of Fortenova grupa d.d. (Zagreb, Croatia)

2018–2022: member of the supervisory board of Mercator d.d. (Ljubljana, Slovenia)

Marianna Zakharova

Executive Director since 2010, member of the Management Board since 2016, member of the Transactions Committee

Born in: 1976
Shares of the Company: 0%

Education

Bachelor in Law, 1998; Master in Law, 2000, Peoples' Friendship University of Russia

Experience in the last five years

Since 2015: First Vice President – Head of Corporate Governance, Asset Management, and Legal Affairs at MMC Norilsk Nickel

Alexandra Zakharova

Non-executive Director since 2022, Chairwoman of the Transactions Committee, member of the Audit Committee, member of the Budget Committee, member of the Sustainable Development and Climate Change Committee

Born in: 1973
Shares of the Company: 0%

Education

Bachelor in Law, 1998; Master in Law, 2000, Peoples' Friendship University of Russia

Experience in the last five years

Since 2015: First Vice President – Head of Corporate Governance, Asset Management, and Legal Affairs at MMC Norilsk Nickel

Alexey Ivanov

Independent Director since 2022, Chairman of the Audit Committee, member of the Sustainable Development and Climate Change Committee

Born in: 1969
Shares of the Company: 0%

Education

Department of Economic Cybernetics, Faculty of Economics, 1991; postgraduate degree, Department of International Economic Relations, 1993, Leningrad State University

Institute of Chartered Accountants in England and Wales (ACA qualification), 1997

Experience in the last five years

Since 2023: member of the board of directors of Askona-Vek, Trading House Askona, and Halecroft Limited

Since 2022: member of the board of directors of QIWI PLC

Since 2021: CEO of Green Energy

2020–2023: CEO of Axioma

2016–2020: key account management partner at PricewaterhouseCoopers (Moscow)

Irina Komarova

Independent Director since 2023, member of the Audit Committee, member of the Budget Committee, member of the Corporate Governance, Nomination, and Remuneration Committee

Born in: 1970
Shares of the Company: 0%

Education

Mediator, Russian Academy of Advocacy and Notaries, 2020

EMBA – Legal Resource Management, HSE University (National Research University – Higher School of Economics), 2012

Degree in Law, Lawyer, Kutafin Moscow State Law Academy, 2001

Degree in Foreign Economic Affairs, Economist, Moscow International Business Institute at the Russian Foreign Trade Academy, 1995

Degree in Industrial and Civil Engineering, Construction Engineer, Kuibyshev Moscow Institute of Civil Engineering (Moscow), 1992

Experience in the last five years

Since 2013: deputy CEO – head of the legal department at High-Speed Rail Lines

Since 2014: member of the management board of High-Speed Rail Lines

Sergey Malyshev

Executive Director since 2023, member of the Management Board since 2013

Born in: 1969
Shares of the Company: 0%

Education

Mechanical Engineer, specialty – textile and light industry machines and apparatuses, Kosygin State University of Russia

Economist, specialty – finance and credit, Financial University under the Government of the Russian Federation

Degree in Religious Education and Spiritual Development, higher theological courses, Moscow Theological Academy of the Russian Orthodox Church

Public and Municipal Administration retraining programme, Institute of Advanced Training at the Russian Presidential Academy of National Economy and Public Administration

Information Security retraining programme, Moscow State Institute of Electronic Technology

Experience in the last five years

Positions at Nornickel: Deputy CEO, Chief Financial Officer (2013-2015); Vice President and Chief Financial Officer (2015- 2016); Senior Vice President – Chief Financial Officer (since 2016)

Anton Sychev

Independent Director since 2023, Chairman of the Corporate Governance, Nomination, and Remuneration Committee, member of the Budget Committee, member of the Audit Committee, member of the Strategy Committee

Born in: 1978
Shares of the Company: 0%

Education

Degree in Finance and Credit, Economist (graduated with distinction), Financial University under the Government of the Russian Federation, 2000

Postgraduate degree, Candidate of Economic Sciences, Financial University under the Government of the Russian Federation, 2004

FCCA, Association of Chartered Certified Accountants, 2011

Experience in the last five years

Since 2023: chief financial officer of LITASCO Middle East

2021–2022: member of the board of directors of Goldman Sachs Bank, co-head of investment banking, co-head of the Russian office of Goldman Sachs

2011–2021: managing director of investment banking, natural resources, Russia and the CIS, Goldman Sachs

Evgeny Shvarts

Independent Director since 2019, Chairman of the Sustainable Development and Climate Change Committee

Born in: 1958
Shares of the Company: 0%

Education

Degree in Zoology and Botany, Biologist, Lomonosov Moscow State University, 1982

Candidate of Geographical Sciences (Biogeography and Soil Geography), Institute of Geography, Academy of Sciences of the Soviet Union, 1987

Doctor of Geographical Sciences (Geoecology), Institute of Geography, Russian Academy of Sciences, 2003

Experience in the last five years

Since 2023: leading researcher at the Department of Physical Geography and Environmental Management Problems of the Institute of Geography, Russian Academy of Sciences

Since 2021: professor at the Faculty of Geography and Geoinformation Technology, HSE University (National Research University – Higher School of Economics); head of the Centre for Responsible Environmental Management at the Institute of Geography, Russian Academy of Sciences

2020–2023: leading researcher at the Department of Physical Geography and Environmental Management Problems of the Institute of Geography, Russian Academy of Sciences

Since 2020: member of the board of directors of UC RUSAL, IPJSC

2007–2019: director for conservation policy at WWF

Since 1992: member of the board of the Biodiversity Conservation Centre charitable foundation

Egor Sheibak

Non-executive Director since 2022, Chairman of the Budget Committee, member of the Corporate Governance, Nomination, and Remuneration Committee, member of the Transactions Committee

Born in: 1986
Shares of the Company: 0.00013%

Education

Degree in Public Administration, Manager, Lomonosov Moscow State University, 2008

Experience in the last five years

Since 2023: Advisor to Vice President for Internal Control and Risk Management at MMC Norilsk Nickel

2013–2023: head of project of the Financial Control Service of MMC Norilsk Nickel

Board committees

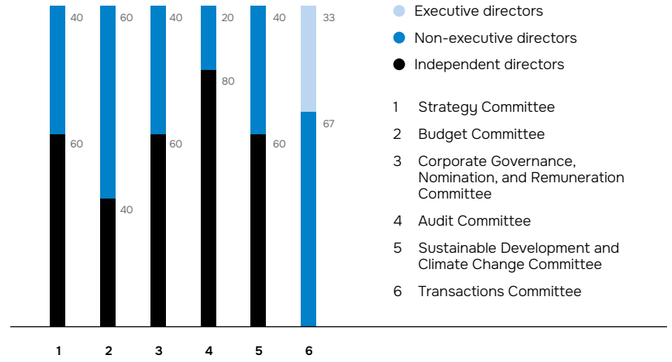
Committees established by Nornickel's Board of Directors are responsible for conducting a preliminary review of critical matters related to the Company's activities and making recommendations for decision making on matters reserved for the Board. To discharge their responsibilities in an effective way, the committees may consult Nornickel's governance bodies and seek opinions from independent external advisors.

From the beginning of the reporting year, the Board of Directors had five committees, each consisting of five members:

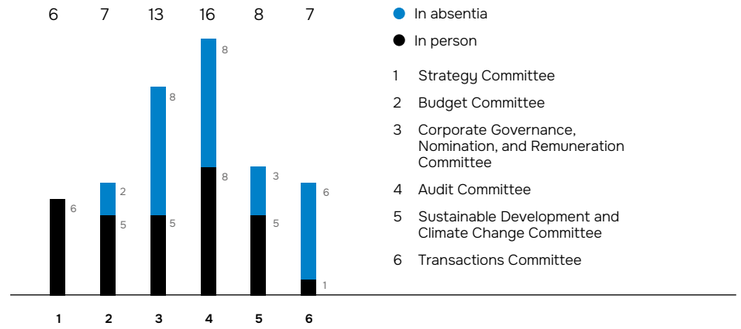
- Strategy Committee
- Budget Committee
- Corporate Governance, Nomination, and Remuneration Committee
- Audit Committee
- Sustainable Development and Climate Change Committee

In June 2023, the Board of Directors decided to set up the Transactions Committee to preview transactions requiring approval by a qualified majority of Board members and issue recommendations regarding decisions on the approval of such transactions and other matters related to the Company's transactions.

Status of Board committee directors, %



Number of Board committee meetings in 2023



Strategy Committee

The Strategy Committee is made up of five directors, three of whom are independent, including the Chairman. In 2023, the Committee held six meetings in person.

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.

During the reporting year, the Strategy Committee made recommendations to the Board of Directors and reviewed progress and status updates on Nornickel's major investment projects, including the Sulphur Project, the Company's sales and marketing activities, assessment of the impact on the production programme from the current macroeconomic environment, long-term investment plans, and the Company's financial model, as well as downstream strategic initiatives and partnerships. The Committee reported on the Company's operational performance, comprehensive efforts to promote employee engagement and corporate values, as well as on health and safety. In addition, the Committee approved the innovation and R&D strategy and reviewed the Company's strategy for financing, developing the fuel and energy complex and strategy of geologic exploration activities.

In 2024, the Committee plans to continue monitoring the implementation of functional strategies and progress on the Company's key promising projects and reviewing management reports on other matters within the Committee's remit.

Committee members as at 2023-end
Denis Alexandrov (Chairman, Independent Director)
Elena Bezdenezhnykh
Sergey Batekhin
Sergey Volk (Independent Director)
Anton Sychev (Independent Director)

The Strategy Committee's key functions

- Supporting Nornickel's Board of Directors in developing, overseeing, and adjusting the corporate strategy;
- Recommending uplates to the strategy

Proportion of independent directors:

60%

Budget Committee

Nornickel's current Budget Committee is made up of five directors, two of whom are independent.

In 2023, the Committee held seven meetings, including two in absentia.

In 2023, the Budget Committee focused on making recommendations to the Board of Directors to inform decision making on the amount of the Company's FY 2022 and 9M 2023 dividend and the dividend record date. The Committee prepared an overview of initiatives under the efficiency improvement programme and reviewed metal price and FX forecast updates to support the Company's 2024 budgeting. The Budget Committee also approved and recommended that the Board of Directors approve Nornickel's 2024 budget.

Committee members as at 2023-end
Egor Sheibak (Chairman)
Sergey Batekhin
Alexandra Zakharova
Irina Komarova (Independent Director)
Anton Sychev (Independent Director)

Proportion of independent directors:

40%

The Budget Committee's key functions

- Organising and monitoring the Company's budgeting and business planning processes;
- Monitoring the execution of budgets and business plans;
- Reviewing and preparing proposals and recommendations to the Board of Directors regarding dividends and dividend policy;
- Preparing recommendations to the Board of Directors on establishing and using the Company's reserve and other funds

Corporate Governance, Nomination, and Remuneration Committee

The Committee is made up of five directors, three of whom are independent, including the Committee Chairman.

In the reporting year, the Committee held 13 meetings, including seven in absentia, four in person, and two joint meetings with the Sustainable Development and Climate Change Committee of the Board of Directors (one in person and one in absentia).

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 2022, on changes to the Company's Management Board, and on the approval of a number of the Company's internal documents. The Committee reviewed the implementation of the Digital Investor programme, the Company's charitable policy, sponsorship efforts, and other social programmes, the Human Capital Development Programme, and the Youth Engagement Programme and presented performance against 2022 team and individual KPIs for the Company's top 10's and division directors. The Committee also reviewed the annual evaluation of the Board of Directors' performance in 2022, 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.

Committee members as at 2023-end
Anton Sychev (Chairman, Independent Director)
Sergey Batekhin
Sergey Volk (Independent Director)
Irina Komarova (Independent Director)
Egor Sheibak

Proportion of independent directors:

60%

The Corporate Governance, Nomination, and Remuneration Committee's key

- 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 Nomickel's inforation policy

Audit Committee

The Audit Committee is made up of five directors, four of whom are independent, including the Committee Chairman. On average, Committee members have more than 10 years of experience in finance.

In the reporting year, the Committee held 16 meetings, including seven in person, seven in absentia, and two joint meetings with the Sustainable Development and Climate Change Committee of the Board of Directors (one in person and one in absentia).

During 2023, the Audit Committee prepared for the Board of Directors a number of recommendations for decision making on matters related to the accuracy and reliability of Nornickel's financial statements, health and safety, approval of new versions of the Internal Control Policy and the Risk Management Policy, as well as approval of the Regulations on the Corporate Risk Management Framework. The Committee also reviewed the results of audits by the Internal Audit Department and Internal Control Department; reports by the Risk Management Service on the Company's key risks; reports by the Inspection Department for Monitoring Technical, Production, and Environmental Risks; a report on the Ecology Department's performance; as well as the Corporate Risk Appetite Statement for 2023.

In 2023, in addition to the matters mentioned above, the Audit Committee:

- reviewed the annual audit plan and internal audit development plans
- reviewed bonus-related performance targets 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.

The Audit 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.

Committee members as at 2023-end
Alexey Ivanov (Chairman, Independent Director)
Denis Alexandrov (Independent Director)
Alexandra Zakharova
Irina Komarova (Independent Director)
Anton Sychev (Independent Director)

Proportion of independent directors:

80%

The Audit Committee's key functions

- Reviewing financial reporting matters;
- Reviewing health and safety matters
- Managing risks and internal controls;
- Managing external and internal audit;
- Preventing wrongdoing by Nornickel employees and third parties

Sustainable Development and Climate Change Committee

The Committee is made up of five directors, three of whom are independent, including the Committee Chairman. In accordance with its Regulations, the Committee has five members, with an option to increase its membership should the Board of Directors decide to do so.

In the reporting year, the Committee held eight meetings, including three in person, one in absentia, two joint meetings with the Corporate Governance, Nomination, and Remuneration Committee of the Board of Directors (one in person and one in absentia), and two joint meetings with the Audit Committee of the Board of Directors (one in person and one in absentia).

In 2023, the Committee discussed the presented options for developing in-house power generation facilities based on low-carbon technologies, took note of the 2031 medium-term emission reduction targets, and decided to continue technical studies and further explore options for developing in-house power generation facilities based on low-carbon technologies until 2050.
At a joint meeting, the Sustainable Development and Climate Change Committee and the Audit Committee discussed the 2022 Sustainability Report, the Group's 2022 Human Rights Report, and the Group's 2021–2022 Responsible Supply Chain Report.

In 2023, the Sustainable Development and Climate Change Committee made recommendations to the Board of Directors to inform decision making on the approval of the Socially Sustainable Development Strategy. The Committee reviewed the Climate Change Report, noting the high quality of the disclosure.

Proportion of independent directors:

60%

Committee members as at 2023-end
Evgeny Shvarts (Chairman, Independent Director)
Denis Alexandrov (Independent Director)
Elena Bezdenezhnykh
Alexandra Zakharova
Alexey Ivanov (Independent Director)

The Sustainable Development and Climate Change Committee's key functions

- Integrating sustainability principles, including dimate change, into the Company's activities;
- Developing and implementing the Sustainable Development and Climate Change Strategy;
- Managing risks and internal controls related to sustainable development and dimate change;
- Preparing the Company's internal reports and disclosures on sustainable development and dimate change;
- Overseeing the external audit of the Company's reports and activities related to sustainable development and dimate change

Transactions Committee

The Committee is made up of three directors. In accordance with its Regulations, the Committee has three members, with an option to increase its membership should the Board of Directors decide to do so.

In 2023, the Committee held seven meetings, including one in person and six in absentia.

During the year, the Committee reviewed matters relating to capital raising, the Company's bond transactions.

Committee members as at 2023-end
Alexandra Zakharova (Chairwoman)
Marianna Zakharova
Egor Sheibak

The Transactions Committee's key functions

- Previewing transactions requiring approval by a qualified majority of Board members, in line with the Company's Artides of Association;
- Reviewing other matters related to the Company's transactions requiring approval by the Board of Directors and potential major transactions

Executive bodies

The President and the Management Board are Nornickel's executive bodies in charge of day-to-day operations.

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 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 and contract of any member of the Management Board.

The Management Board had 10 members at the start of 2023, according to the composition approved by the Board of Directors on 1 June 2022. On 16 October 2023, the Board of Directors resolved to elect Dmitry Kushnarev to the Company's Management Board and to establish an 11-member Management Board as from 16 October 2023.

In 2023, the Management Board held 34 meetings (all in absentia).

During 2023, the Management Board made a number of important decisions, including restructuring the Norilsk Division and setting up the new Sales Division; passed resolutions regarding the Company's branch directors and amendments to their employment contracts; reviewed the Company's capital-raising and bond transactions; made recommendations to the Board of Directors on approval of the Socially Sustainable Development Strategy; approved the launch of the Palladium Development Programme; approved the scope of internal control system self-evaluation for 2023; and reviewed matters related to the progress of the Environmental and Climate Change Strategy and key focus areas of the Carbon Neutrality Strategy.

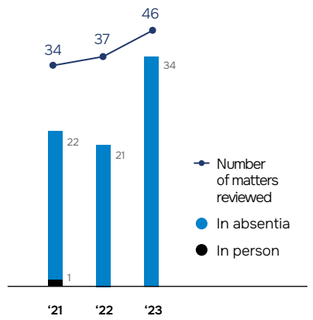
In addition to the decisions made, in 2023, the Management Board preliminarily reviewed and recommended that the Board of Directors approve the Sustainability Report, the Climate Change Report, and the Company's Annual Report.

In 2023, in a first for the Company, the Management Board reviewed and recommended that the Board of Directors approve the Human Rights Report and the Responsible Supply Chain Report.

The President and the Management Board ensure:

- implementation of resolutions passed by 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 system (RMICS).

Number of Management Board meetings



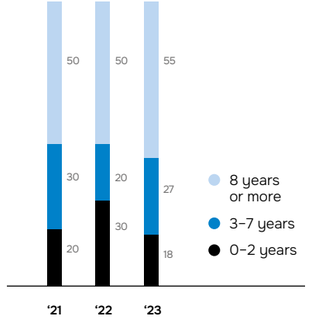
34 MEETINGS OF THE COMPANY'S MANAGEMENT BOARD

held in 2023

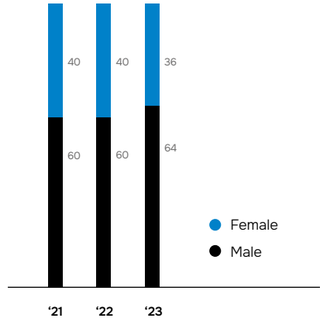
Attendance at meetings in 2023

Name	Tenure on the Management Board (years)	Meetings attended / total number of meetings
Vladimir Potanin	12	34/34
Anton Berlin	2	34/34
Sergey Dubovitsky	6	34/34
Marianna Zakharova	8	34/34
Larisa Zelkova	11	34/34
Dmitry Kushnarev[1]	1	9/34
Sergey Malyshev	11	34/34
Nina Plastinina	11	34/34
Elena Savitskaya	10	34/34
Sergey Stepanov	3	34/34
Evgeny Fyodorov	3	34/34

Tenure on the Management Board, %



Management Board composition by gender, %



[1] Joined the Management Board on 16 October 2023 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
Shares of the Company: 0%

Education

Degree in International Economics, Moscow State Institute of International Relations (MGIMO University)

Experience in the last five years

Since 2022: member of the management board of the Russian Ice Hockey Federation

Since 2021: member of the board of trustees of the Football Union of Russia non-governmental organisation

2020–2022: chairman of the board of trustees of the Vladimir Potanin Foundation

Since 2020: member of the board of trustees of the ROZA Club for Sport Development and Support

Since 2018: member of the board of trustees of the Russian–American Council for Business Cooperation trade association; member of the board of trustees of the Fund for the Conservation and Development of the Solovetsky Archipelago

Since 2017: chairman of the supervisory board of the Norilsk Development Agency autonomous non-profit organisation

Since 2016: 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

Since 2011: member of the board of trustees of the State Hermitage Museum Endowment Fund non-profit organisation; member of the board of trustees of the Moscow Church Construction Foundation

Since 2010: member of the board of trustees of the Russian Geographical Society all-Russian non-governmental organisation

Since 2009: deputy chairman of the board of trustees of the Russian International Olympic University

Since 2007: member of the board of trustees of Saint Petersburg State University, deputy chairman of the board of trustees of the MGIMO University Endowment Fund

Since 2006: deputy chairman of the board of trustees of the Moscow State Institute of International Relations (MGIMO University), member of the board of trustees of the Graduate School of Management at Saint Petersburg University

Since 2005: member of the board of trustees, member of the board of the Russian Olympians Foundation non-profit charitable organisation

Since 2004: chairman, member of the presidium of the National Council on Corporate Governance non-profit partnership

Since 2003: chairman of the board of trustees of the State Hermitage Museum

2001–2022: member of the board of trustees of the Solomon R. Guggenheim Foundation (New York, NY)

Since 1995: member of the presidium of the International Foundation for the Unity of Orthodox Christian Nations

[1] Positions are indicated as at 2023-end.

Anton Berlin

Member of the Management Board since 2022

Born in: 1973
Shares of the Company: 0.002%

Education

Faculty of Radio Electronic Equipment, Systems Engineer – Administrator of Production, MATI – Russian State Technological University named after K. E. Tsiolkovsky, 1996

Postgraduate degree, MATI – Russian State Technological University named after K. E. Tsiolkovsky, 1999

Experience in the last five years

Since 2023: member of the board of directors of Holding Company BYSTRA

Since 2019: Vice President – Head of Sales Divisions of MMC Norilsk Nickel

Sergey Dubovitsky

Member of the Management Board since 2018

Born in: 1978
Shares of the Company: 0%

Education

Public Relations Specialist with Foreign Language Skills, Moscow State Institute of International Relations (MGIMO University)

Experience in the last five years

Since 2021: member of the boards of directors of MPI Nickel Pty Ltd, Norilsk Nickel Africa Pty Ltd, and Norilsk Nickel Mauritius, member of the Executive Committee of Nkomati

Positions at Nornickel: 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 (2020–2023), Senior Vice President – Head of Strategy and Business Development (since 2023)

Marianna Zakharova

Member of the Management Board since 2016, member of the Board of Directors since 2010

Born in: 1976
Shares of the Company: 0%

Education

Bachelor in Law, 1998; Master in Law, 2000, Peoples' Friendship University of Russia

Experience in the last five years

Since 2015: 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

Born in: 1969
Shares of the Company: 0%

Education

Journalist, Newspaper Literary Editor, Lomonosov Moscow State University, 1991

Experience in the last five years

Since 2023: member of the board of trustees of the Vladimir Potanin Foundation

Since 2020: chairwoman of the management boards of the Second School centre for community initiatives in the Pechengsky District and the Monchegorsk Development Agency

Since 2019: member of the councils of the endowment funds for the replenishment of the Tretyakov Gallery's collection and development of its small museums at the State Tretyakov Gallery Foundation non-profit organisation

Since 2018: chairwoman of the board of trustees of the Russian International Olympic University (RIOU) Endowment Fund

Since 2017: chairwoman of the management board and member of the supervisory board of the Norilsk Development Agency autonomous non-profit organisation

Since 2016: member of the board of trustees of the Endowment Fund for Education and Culture (until 2021 – chairwoman)

2015–2020: member of the board of trustees of the Russian Academy of Education

2015–2022: member of the board of trustees of the Hermitage Foundation UK

2014–2023: chairwoman of the board of the Vladimir Potanin Foundation

2011–2020: member of the board of directors of Rosa Khutor Ski Resort Development Company

Since 2011: chairwoman of the management board of the State Hermitage Museum Endowment Fund non-profit organisation

Since 2009: member of the board of trustees of the Pavlovsk Gymnasium private autonomous non-profit organisation

Since 2007: member of the presidium of the MGIMO University Endowment Fund

Positions at Nornickel: d 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 (since 2016)

Dmitry Kushnarev

Member of the Management Board since 2023

Born in: 1979
Shares of the Company: 0.0000059%

Education

Degree in Economics, Financial University under the Government of the Russian Federation, 2008

Degree in Mechanics, Applied Mathematics, Lomonosov Moscow State University, 2001

Experience in the last five years

Since 2023: member of the board of directors of Bystra Holding Company

Positions at Nornickel: Director of the Economic Department (2013–2020), Vice President for Economics (2020–2023), Senior Vice President – Head of Sales, Commerce, and Logistics (since 2023)

Sergey Malyshev

Executive Director since 2023, member of the Management Board since 2013

Born in: 1969
Shares of the Company: 0%

Education

Mechanical Engineer, specialty – textile and light industry machines and apparatuses, Kosygin State University of Russia

Economist, specialty – finance and credit, Financial University under the Government of the Russian Federation

Degree in Religious Education and Spiritual Development, higher theological courses, Moscow Theological Academy of the Russian Orthodox Church

Public and Municipal Administration retraining programme, Institute of Advanced Training at the Russian Presidential Academy of National Economy and Public Administration

Information Security retraining programme, Moscow State Institute of Electronic Technology

Experience in the last five years

Positions at Nornickel: Deputy CEO, Chief Financial Officer (2013-2015); Vice President and Chief Financial Officer (2015- 2016); Senior Vice President – Chief Financial Officer (since 2016)

Nina Plastinina

Member of the Management Board since 2013

Born in: 1961
Shares of the Company: 0%

Education

Degree in Chemical Machine and Fixture Building, Mechanical Engineer, Moscow Chemical Machine Building Institute

Postgraduate degree in Economics and Production Management, Bauman Moscow State Technical University

Experience in the last five years

Positions at Nornickel: Director of Internal Control Department (2013 – 2015); Vice President – Head of Internal Audit (2015 -2016); Vice President – Head of Internal Control and Risk Management (since 2016)

Elena Savitskaya

Member of the Management Board since 2014

Born in: 1972
Shares of the Company: 0%

Education

Degree in Psychology, Psychologist, Psychology Teacher, Moscow Pedagogical State University

Experience in the last five years

Positions at Nornickel: Chief of Staff (2013-2015), Vice President – Chief of Staff (since 20215)

Sergey Stepanov

Member of the Management Board since 2021

Born in: 1977
Shares of the Company: 0.001%

Education

Lomonosov Moscow State University, 1998: Bachelor in Economics (with distinction)

2000: Master in Economics (with distinction)

Experience in the last five years

Since 2021: Senior Vice President – Operational Director of MMC Norilsk Nickel

2020–2021: CEO of VSMPO-AVISMA Corporation

2014–2020: CEO of Raspadskaya

2012–2020: vice president, head of Evraz's Coal Division

since 2022: chairman of the board of directors of Polarniy Litiy

Evgeny Fyodorov

Member of the Management Board since 2021

Born in: 1978
Shares of the Company: 0%

Education

Degree in Economics and Enterprise Management, Economist/Manager, Bauman Moscow State Technical University, 2001

Candidate of Economic Sciences, Moscow Power Engineering Institute (Technical University), 2003

Experience in the last five years

Since 2023: member of the board of directors of Vareineftegaz

Since 2021: Vice President – Head of Energy Division of MMC Norilsk Nickel

2018–2020: member of the board of directors, advisor to the CEO of TRUST SM

Since 2018: member of the board of directors of Unitile Holding

Corporate Secretary

Pavel Platov

Corporate Secretary since 2011

Born in: 1975
Shares of the Company: 0%

Education

Linguistics University of Nizhny Novgorod

Academy of National Economy under the Government of the Russian Federation

Experience in the last five years

Since 2011: Corporate Secretary of MMC Norilsk Nickel

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.

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

At present, Pavel Platov is Nornickel's Corporate Secretary. In December 2021, the Board of Directors extended Pavel Platov's term as Corporate Secretary by another three years.

Control system

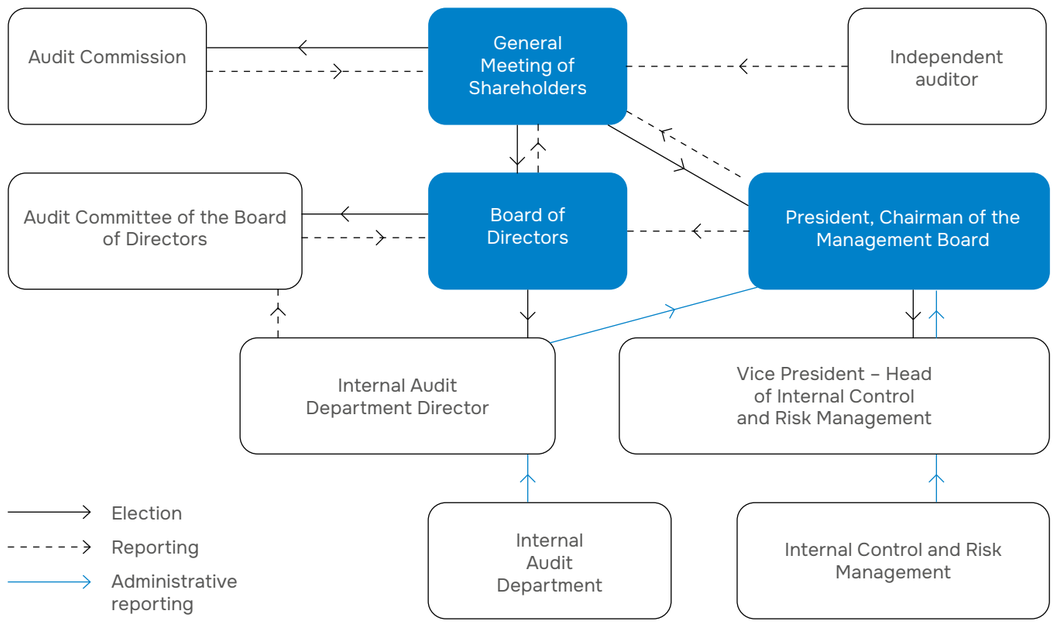
The Company has in place an internal control system (ICS) covering key business processes and all management levels across the Group.

The internal control system integrated into the Company's corporate governance processes is geared towards achieving the goals related to accurate financial reporting and operational efficiency as well as compliance goals.

The system comprises the following control bodies:

- Audit Commission;
- Audit Committee of the Board of Directors;
- Internal Audit Department;
- Internal Control and Risk Management, comprising the Internal Control Department, Risk Management Service, and the Centre for Monitoring Technical, Production, and Environmental Risks

Control structure



Audit Commission

The Audit Commission is Nornickel's standing internal control body that monitors its financial and business operations. The five members of the Audit Commission are elected annually at the Annual General Meeting of Shareholders.

Audit Commission's performance

In 2023, the Audit Commission audited Nornickel's business operations for 2022, with the auditors' report presented to the shareholders as part of materials for the Annual General Meeting of Shareholders. Results of the audit of the Company's business operations for 2023 will be reported to the Annual General Meeting of Shareholders in 2024.

The Annual General Meeting of Shareholders on 6 June 2023 elected the Audit Commission as follows: Alexey Dzybalov, Anna Masalova, Georgy Svanidze, Eduard Gornin, and Elena Yanevich.

Internal audit

Internal audit at the Company is performed by the Internal Audit Department, which was set up to assist the Board of Directors and executive bodies in better managing the Company 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.

The Internal Audit Department conducts objective and independent audits to assess the effectiveness of the ICS and the corporate risk management system (CRMS). Based on the audits, the Department prepares reports and proposals for senior management on improving internal controls and monitors the development of remedial action plans.

In order to ensure independence and objectivity, the Internal Audit Department functionally reports to the Board of Directors through the Audit Committee and administratively to Nornickel's President. The Company has in place an Internal Audit Policy approved by the Board of Directors.

In 2023, the Audit Committee:
- updated the Guidelines for Assessing the Corporate Risk Management System
- discussed the Department's performance in 2022, 6M 2023, and 9M 2023, including the results of completed audits, gaps identified, and remedial actions designed by management to improve internal controls and minimise risks
- reviewed the results of internal audit self-evaluation
- reviewed the annual audit plan of the Internal Audit Department
- approved KPI scorecards of the Internal Audit Department Director.

The Audit Committee commended the work of the Internal Audit Department in the reporting period.

In 2023, the Internal Audit Department audited the following areas:
- Operation of automated process control systems (APCS) at the Company's production facilities
- Progress on the Company's strategic investment projects
- Shipping the Company's cargoes by sea and river
- Corporate governance processes
- Controls over IT assets and IT projects

The Internal Audit Department is strongly focused on driving the adoption of digital data processing methods. For instance, in 2023, the Department leveraged data analysis tools to audit procurement processes, processing significant data volumes and presenting them graphically – the capabilities unlocked by advanced-analytics approaches.

In the reporting year, the Internal Audit Department also performed an annual performance evaluation of the Company's CRMS and ICS and concluded that CRMS and ICS are generally functioning effectively, there are some comments. The evaluation results were reviewed by an Audit Committee meeting.

Based on the recommendations issued during the audits, management developed corrective actions and implemented a total of 214 such actions over 2023. The actions included updating regulatory documents, developing new or amending existing control procedures, communicating them to employees, training employees, and identifying and assessing risks.

The Internal Audit Department uses the SAP AM solution to continuously monitor the implementation of initiatives developed by management, with the resulting insights on types and number of initiatives regularly reviewed by the Audit Committee.

Internal control

The Internal Control Department ensures uniform approaches to ICS building, operation, and development as well as to building a control environment and a system for assessing business process risks, implementing control procedures, and segregating duties and access rights in information systems.
The Internal Control Department regularly monitoring the Company's high-risk business processes:
- Procurement and investing activities;
- Capital construction and corporate insurance transactions
- The existing systems of accounting for metal-bearing products.

The Company also continuously monitors compliance with regulatory requirements to combat the unlawful use of insider information and market manipulation, as well as money laundering, terrorist financing, and proliferation financing.

The performance and maturity of internal control system elements are evaluated annually as part of an external financial statement audit and ICS self-evaluation. Reports containing the ICS evaluation results are reviewed by Nornickel's management and the Audit Committee of the Board of Directors.

The Company maintains data on its ICS in a SAP GRC PC information system, runs procedures to assess its effectiveness, and prepares relevant reports.

Corporate Trust Line

Nornickel runs its Corporate Trust Line (CTL) speak-up programme established to respond promptly to:
- any irregularities
- embezzlement or misuse of Company property
- any actions that may be viewed as corruption, abuse of power, bribery, or fraud
- violation of employees' rights
- breach of ethical standards or rules of conduct by employees.

Employees, shareholders, and other stakeholders can report any actual or potential actions that cause financial or reputational damage to Nornickel.

All reports submitted via the line are registered, assigned a unique number, and thoroughly investigated.

Nornickel will in no circumstances retaliate against a whistleblower who raises a concern via the CTL, meaning that no disciplinary action or sanction will be taken (including employees' dismissal, demotion, forfeiture of bonuses, etc.). If pressure on a whistleblower is reported, the Company conducts mandatory investigations of such reports and thoroughly reviews their findings. Whistleblower status is regularly monitored at all levels to identify cases of undue pressure.
In 2023, the Company introduced mechanisms to provide feedback to whistleblowers and collect satisfaction data from them through a feedback form for comments on complaint/report investigation and handling.

Key CTL principles

1. Keeping reports confidential
2. Keeping whistleblowers anonymous
3. Investigating all submitted reports in a timely and objective manner

Complaints/reports about violations of ethical standards or rules are considered at meetings of commissions established by the head of the Company's division or Group entity requested to investigate the complaint/report. If a report about employees violating corporate ethical standards or unresolved personal conflicts is confirmed, management takes steps to resolve conflict situations, once again explains the need for employees to comply with ethical business standards, and holds town-hall meetings. Employees can be disciplined over violating ethical standards and principles.

Anti-corruption

Nornickel believes that honest, transparent, and ethical business conduct, as well as a strong culture, helps strengthen the Company's business reputation and build trusting relations with investors, partners, employees, and other stakeholders.

In its day-to-day operations, Nornickel has zero tolerance for any corrupt practices, complying with anti-corruption laws of Russia and other countries in which it operates and recognising the importance of implementing and complying with procedures to prevent corruption.

Members of Nornickel's Board of Directors and Management Board role model a zero-tolerance approach to corruption in any form or manifestation at all levels across the organisation.

To ensure compliance with legal requirements and rules of ethical and transparent business conduct, Nornickel has put in place and is continuously improving an anti-corruption compliance system focussed primarily on preventing and mitigating corruption risks and strengthening the commitment of Company employees to high ethical standards. Anti-corruption standards have been approved across the Group

The Company takes regular steps to identify and analyse corruption risks and manages them within its overall risk management system, including control and monitoring of anti-corruption measures and procedures, and uses a wide range of tools to assess and eliminate potential corruption risks when engaging with counterparties.

Nornickel strives to maintain respectful, strong business relations with its partners and does not prohibit giving and receiving business gifts, which is common business practice. The requirements and criteria concerning business gifts are set out in the Regulations on Business Gifts applicable to all Company employees.

The Company is committed to minimising corruption risks of the current and new business processes, so its internal documents are subject to regular anti-corruption due diligence to ensure that they present no potential for corruption. If such potential is identified, the document owner is advised to amend the paragraph or section in question as necessary.

Once every two years, we submit a declaration to the Anti-corruption Charter of the Russian Business to prove our compliance with anti-corruption requirements.

Facilitation payments and political contributions are strictly prohibited by Nornickel's policy.

Nornickel annually publishes statistics on recorded corruption incidents in its Sustainability Report, demonstrating its commitment to openness and transparency to stakeholders.

Compliance with the Company's anti-corruption principles is achieved when each employee feels a strong sense of personal ownership. When recruited, all Company employees take an induction briefing in compliance with anti-corruption laws, familiarise themselves with anti-corruption documents, and sign an agreement setting out their anti-corruption responsibilities, on a mandatory basis.

Nornickel also provides employees with regular training in anti-corruption, involving them in anti-corruption programmes. The Company delivers effective training culminating in tests and tailored to different target audiences: for example, all employees take an annual anti-corruption training course online, all HR employees – a course on anti-corruption compliance for HR services, and members of the Board of Directors and of the Management Board – an online course on anti-corruption for managers. As of the end of 2023, 100% of employees were trained to be familiar with the Group's anti-corruption policies and methods. Over the year, the training on statutory requirements and provisions of corporate anti-corruption regulations covered about 26 thousand people.

One of the focus areas in anti-corruption compliance is managing conflicts of interest, which are the most common cause of corruption. The Regulations on the Prevention and Management of Conflicts of Interest in place require any pre-conflict situations to be disclosed and timely measures to be taken to prevent any potential appearance of conflict of interest. The Company set up standing conflict of interest commissions across the organisation to enhance the effectiveness of preventing, identifying, and resolving conflicts of interest, as well as to ensure legal compliance and improve corporate culture.

The Company strives to uphold and promote a culture of zero tolerance for corruption. To do this, the Company maintains various channels to report corruption. All employees of the Group and its partners have free and convenient access to information

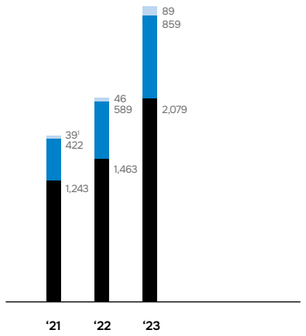
Reporting channels (24/7):

- 8 (800) 700-19-41,
  8 (800) 700-19-45
- skd@nornik.ru
- Reporting form on Nornickel's website: Corporate Trust Line – Nornickel (nornickel.ru)
- Mailing address: Corporate Trust Line of MMC Norilsk Nickel, 15 1st Krasnogvardeysky Drive, Moscow, 123112, Russia
- Corporate application NIKA (for employees)

The Company is annually included in the Anti-corruption Ranking of Russian Business. Following a comprehensive independent evaluation of the Company's anti-corruption management system carried out in 2023, Nornickel received the top rating, AAA+++, reflecting management's particular commitment to developing and improving the system to prevent and combat corruption.

Nornickel will not tolerate any retaliation, disciplinary or other action against an employee who reports a concern about suspected bribery or corruption, or refuses to offer a bribe, facilitate bribery, including commercial bribery, or take part in any other corrupt activities.

CTL report statistics



- Including reports about violations of ethical standards or principles
- Total number of reports that triggered investigation
- Total number of reports

Detailed report statistics are published annually in the Sustainability Report.

[1] In 2021, reports of violations of ethical standards and principles were classified as Production-Related Abuses.

about the documents and current measures to combat corruption, available on the Company website in the dedicated Anti-corruption section.

In order to mitigate potential risks associated with contractor engagement, Nornickel evaluates business standing, integrity, and solvency of its potential counterparties. To prevent procurement misconduct and maximise value capture through unbiased selection of best proposals, Nornickel's procurement owner, customer, and secretary of a collective procurement body adhere to the following rules:

- Procurement relies on the principle of division of roles
- Commercial proposals submitted by suppliers are compared using objective and measurable criteria approved prior to sending a relevant request for proposal
- The selection results and the winning bidder in the material procurement process are approved by the collective procurement body comprised of representatives from various functions of Nornickel
- A Master Agreement containing an anti-corruption clause is signed with each supplier or updated on an annual basis the anti-corruption clause outlines the course of action to be taken between the supplier and Nornickel with respect to risks of abuse. Moreover, by signing the Master Agreement, suppliers acknowledge that they have read the Company's Anti-corruption Policy

In 2023, to develop and improve its anti-corruption compliance system, the Company:

- approved a uniform approach to assessing corruption risks when engaging with counterparties
- updated and launched Anti-corruption and Anti-corruption for Managers, remote learning courses across the Group
- surveyed employees on the effectiveness of its anti-corruption measures
- delivered a training campaign on managing conflicts of interest for the Group employees responsible for implementing anti-corruption procedures
- revised and updated its anti-corruption procedural documents.

The Anti-corruption section on the Company website provides information on its anti-corruption regulations and measures taken to combat and prevent corruption.

Over the past three years, the Corporate Trust Line (CTL) has not received any reports classified as "corrupt practices".

Statistics on CTL corruption reports

Item	2021	2022	2023
Number of CTL corruption reports	0	0	**0**

Antitrust compliance

In 2023, as in previous years, no antitrust violations by Nornickel were identified, and no administrative action was taken for such violations.

The antitrust compliance system in place at the Company since 2017 establishes the processes for the timely prevention, identification, and elimination of causes and conditions facilitating antitrust violations and ensures compliance of the Company and its corporate entities with applicable laws.

Federal Law No. 135-FZ On Protection of Competition, dated 26 July 2006, was amended in 2020 to set requirements for internal antitrust compliance regulations of organisations and establish the right of organisations to submit these regulations to the Federal Antimonopoly Service and obtain its opinion upon confirmation of compliance. The Company was the first in Russia to use the new statutory procedure to obtain a confirmation of the Federal Antimonopoly Service that its antitrust compliance system meets legal requirements, issued on 25 March 2021.

Nornickel carried out an internal assessment and identified business units whose activities are exposed to antitrust risks. At such units, the Company designated antitrust compliance owners and briefed them on the applicable prohibitions and restrictions stipulated by antitrust laws. Management decisions in the Company are made taking into account the requirements of the antitrust regulations.

Corporate security

Nornickel's corporate security system management is based on a set of programmes to ensure corporate and economic security.
In furtherance of the Corporate Fraud Policy approved by the Company's Board of Directors, the Company is building consistent measures to prevent, identify, and combat abuses, corporate fraud, and corrupt practices. The Company deploys the following measures to shore up economic security:

- Incorporating signs of price fixing, conflict of interest, lobbying for bidders, unreasonable restrictions, etc. as red flags into the procurement system
- Optimising the counterparty due diligence methodology
- Developing a corporate fraud training course and incorporating it into the framework of training courses for Group employees

In 2023, we deployed a comprehensive corporate security solution for the Group's strategic investment projects, shoring up economic protection for the Company's legitimate interests in its engagements with contractors, staff security, and site security.

In 2023,

> 520
TRAININGS

242
GENERAL DRILLS

22 TACTICAL AND SPECIAL DRILLS

were conducted to maintain a high level of emergency preparedness across facility security teams and equipment.

The operation of a dedicated unit, the Centre for Forensic Chemistry Research and Examinations featuring a range of modern analytical equipment, was taken to a fundamentally new level to address essential tasks of ensuring the economic security of production assets. This has significantly expanded the Centre's functions and unlocked a wide range of research aimed at providing technical assistance to production units as well as control and analytical teams in quality assurance, investigation of the root causes of shop-floor emergencies, in-depth chemical, mineralogical, and structural studies of materials and substances when developing new technologies for concentration and metallurgical facilities or when running special external quality control processes and verifying the reliability of non-ferrous and precious metal analysis. The Comprehensive Methodology for Analysis and Identification of Metal-Containing Materials developed by the Centre was praised by members of the International Platinum Group Metals Association.

Measures to protect production, transport, and energy sector facilities against terrorism and to prevent unlawful interference in their operations are implemented on a scheduled basis.

Information security

In 2023, the Company revised its approach to information security to reflect external challenges and the Russian market's specific profile. The information security function was reorganised, and a strategy for its further development was designed and approved. Among other things, it envisages continued efforts around import substitution of information security solutions as well as the transition to a service-based model.

The Company took extra steps to protect its enterprises' technological infrastructure and mitigate risks, as the number and complexity of cyber attacks continued to grow and some of Company employees were still remote, which called for measures to shore up the information security of corporate resources and infrastructure.

The Company is continuously monitoring the security of its systems to promptly identify and address vulnerabilities as well as prevent cyber intrusions.

Nornickel Sfera, a Company subsidiary, provides all key information security and process protection services to Group enterprises. Established in 2022 and leveraging a wide range of technical competences, Nornickel Sfera was staffed up in 2023, with its range of services expanded to match the needs and profiles of Nornickel's businesses.

Programmes

The Company has in place relevant information security processes, including:

- identification and classification of data assets
- managing access to data assets
- security analysis
- risk management
- information security incident management
- information security architecture management
- monitoring and using data protection tools
- review of information technology and automated process control system (APCS) projects for compliance with information security requirements.

In 2023, as part of an ongoing process of identifying and classifying data assets, the Company continued to actively implement plans to bring its data assets in line with corporate information security standards by rolling out the necessary solutions and information security tools.

APCS protection

In 2023, Nornickel revised its approach to process protection relying on domestic solutions. The Company's priority remains unchanged: to roll out basic protection measures (tools and systems) to the maximum number of enterprises and production sites using APCSs. Particular attention is paid to compliance with regulatory requirements for the protection of industrial automation systems.
As previously planned, the Company has completed the deployment of basic process safeguards across major production sites of the Norilsk Division as well as at the gas industry enterprise producing and transporting energy to the Norilsk Industrial District.

In 2023, the Company ran an internal audit to evaluate how process safeguards are managed at Nornickel as well as the overall approach to protecting automated process control systems, and the effectiveness of technology infrastructure security measures. The audit gave the information security function good marks:

- The Company runs projects to create systems that protect production/industrial processes; a procedure has been established to deploy APCS safeguards in line with global best practice
- Procedural documents regulating information security and technical support for APCSs are in place at the Company-wide level.

Audit recommendations will be implemented in 2024 to boost the overall security of our APCSs.

Import substitution

Since many foreign suppliers of information security solutions have left the Russian market, as well as to comply with new legal requirements, Nornickel continues to drive the import substitution process, including for industrial automation systems. The Company has compared and selected 100% of information security solutions for first-priority data protection tools and 65% of solutions for second-priority data protection tools. In 2023, Nornickel launched projects to deploy the selected data protection tools. The Company plans to replace imported basic data protection tools with domestic alternatives across the Group's most critical enterprises no later than in 2026 while complying with all legal and regulatory requirements. This import substitution process is expected to be completed no later than in 2028 across all Group enterprises.

Cyber incident response system

The Company's cyber incident response unit operating as part of the Company's information security function uses a range of advanced technical solutions and leverages best practices in managing cyber defence. Nornickel continues to scale its seamless information security processes and procedures that have been previously developed and documented to boost the function's resilience in the event of incidents and emergencies. These procedures are tested for relevance at least once a quarter.

Any Nornickel employee detecting any suspicious content or activity on company devices can send an alert to the information security team for investigation. Experts assess the possible negative impact on the Company's information systems and take measures to prevent and eliminate the consequences of incidents. Over 6 thousand investigations into incidents reported by Nornickel employees were conducted over the year.

During the year, the information security team handled over 1 thousand incidents and over 18 thousand information security events in total.

The information security function has traditionally worked closely with industry partners and regulators. The Company has maintained its positive partnership with the National Coordination Centre for Computer Incidents, with a relevant cooperation agreement already in its second year.

Vulnerability management

In 2023, the Company maintained its focus on the practical aspects of information security by managing vulnerabilities and analysing the security of corporate resources in order to minimise risks and ensure their resilience against existing cyber threats in a fast-changing digital environment.

The use of advanced security analysis methods helped identify and promptly address weaknesses in 57 existing systems. Regular penetration testing helped the Company assess its preparedness for advanced cyberattacks. New vulnerability management strategies were developed and deployed over the year to address new manipulation techniques used by cyber attackers and ensure the continuous security of the Company's systems.

In an effort to continuously improve its information security, the Company has been successfully delivering on its DevSecOps strategy (Development, Security, and Operations: a process that ensures security throughout the entire software development life cycle), which integrates security elements directly into software development and operation, driving more effective and transparent security management throughout the app life cycle.

The Company has committed to driving the secure development of three key mining projects as part of the Metallurgy Industrial Competence Centre (ICC) to actively engage in cutting-edge technology and best practice sharing while also delivering unique industry-specific solutions. The process being deployed has shown that DevSecOps principles and practices are effective in early detection and rapid responses to potential cyber threats.

Training and communication

The Company is strongly focused on improving employee awareness about information security principles and digital hygiene. In 2023, the Group set a global goal to enhance information security culture among all of its employees.

Employees are trained on an annual basis, including on newly emerging cyber threats and risks. A total of 95 scheduled and 19 unscheduled trainings (including e-courses and face-to-face lectures) were held in 2023, where 34,104 Group employees were trained.

Furthermore, the Company runs regular drills including simulations of phishing attacks and other unlawful practices that affect users. Following the drills, instructions for employees are updated.

In addition, the Company uses regular dedicated newsletters to improve employee awareness about current information security threats and digital hygiene.

> 1 THOUSAND INCIDENTS

were processed by the information security team over the year

> 18 THOUSAND

information security events handled

> 6 THOUSAND INVESTIGATIONS

conducted over the year into incidents reported by Nornickel employees

Certification

In line with international best practices, Nornickel enterprises have in place information security management systems (ISMSs) compliant with ISO/IEC 27001:2013 requirements. An ISMS compliant with international standards helps systematise and structure information security support processes while building an effective matrix of controls and ensuring timely risk identification and mitigation.

Strong management engagement in ISMS processes and preparedness of the enterprises to respond to new threats and challenges earned praise from an external auditor following the audits conducted at Nornickel's sites in 2023. Employees involved in the operation of the ISMS showed excellent knowledge of information security.

Thanks to the continuous improvement effort around information security management processes, Nornickel's projects to develop and implement advanced cyber security solutions for industrial assets have been repeatedly recognised by the professional community and industry associations.

To further maintain information security processes at a high maturity level, Nornickel's enterprises have planned a series of audits for 2024 to transition to ISO/IEC 27001:2022.

Top management engagement

Nornickel's Information Security Policy applies to all employees and includes the engagement boundaries and responsibilities of the Board of Directors and the Management Board in this regard. Their responsibilities include, among other things, reviewing information security risks and budgets for relevant programmes and projects. Risks are monitored on a regular basis through dedicated committees and corporate reporting.

95 SCHEDULED AND 19 UNSCHEDULED CYBERSECURITY TRAININGS

held in 2023

34,104 EMPLOYEES

trained in 2023

In 2023, five of Nornickel's enterprises had the high effectiveness of their information security management processes confirmed:

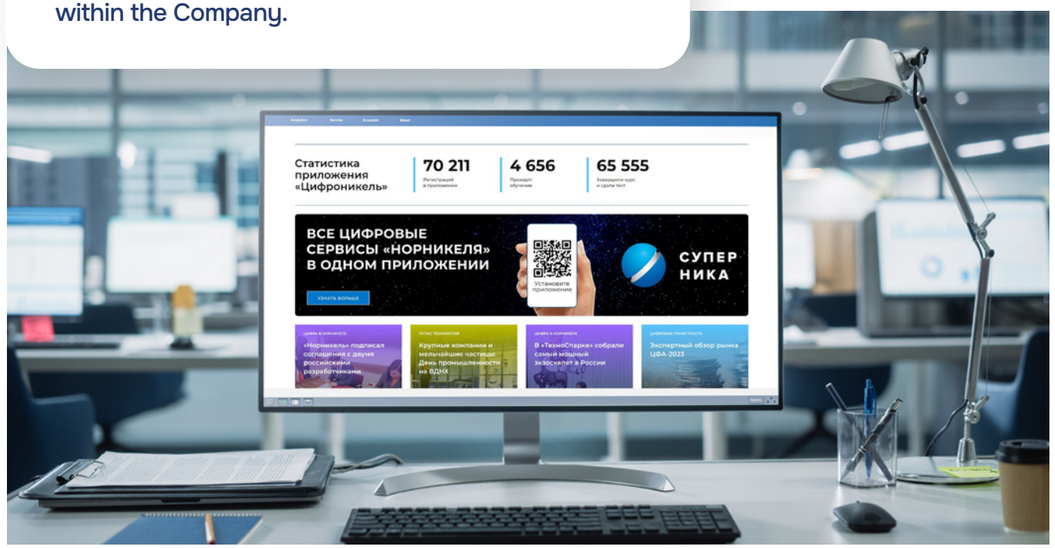
1. Murmansk Transport Division
2. Kolskaya Mining and Metallurgical Company (Kola Division)
3. Nadezhda Metallurgical Plant (Norilsk Division)
4. Copper Plant (Norilsk Division)
5. Talnakh Concentrator (Norilsk Division)

Cross-functional collaboration

In 2023, Nornickel put its Supernika corporate application into commercial operation. The app is a single space for digital services and communications within the Company.

Built on a commercial platform, the application is available to any Nornickel employee anytime from any company or own device. As part of the project, the Company placed a particular emphasis on the app's information security aspects. Nornickel initiated significant updates to the application to bring it into compliance with internal regulations. As a result, many updates were migrated to the publicly available version of the platform, making a valuable contribution to stronger information security of corporate communications across the country on the whole.

In 2023, Nornickel put its Supernika corporate application into commercial operation. The app is a single space for digital services and communications within the Company.



Partnerships and best practice sharing

For more than six years now, the Information Security in Industry Club initiated by Nornickel has been one of the most respected associations for information security and IT managers of major Russian industrial holding companies. The Club has become a recognised platform for sharing experience and best practices in protecting information systems as well as for maintaining public-private dialogue, including on topical matters such as industry-specific legislation and import substitution in information security.

Prompted by changes in the external environment and emerging new digital challenges and threats, the Club updated its agenda in 2023, including by moving into new corporate security areas. The Club has doubled its membership to over 70 Russian businesses now, including flagship companies from key industries.

In international information security, Nornickel cooperates with the Security Council and the Ministry of Foreign Affairs of the Russian Federation, contributing to the development and discussion of position papers in this area. The Company also participates in the National Association for International Information Security.

Nornickel is committed to contributing to the development of the information security market for the industrial segment. The Company actively engages with providers of information security solutions in this area.

In 2023, the Company was the first among other customers to run a public meeting with developers and vendors of information security products and services. At the meeting, Nornickel's information security team members shared information on their approaches and requirements, customer expectations, and outlooks for productive collaboration under the import substitution programme. Over 200 Russian companies (information security market players and industry partners) took part in the meeting.

The parties plan to jointly develop proposals to improve, test, and implement information security solutions for industrial systems, including those ensuring an uninterrupted production cycle and business process integrity at Nornickel.

> 70
RUSSIAN COMPANIES

are currently members of the Information Security in Industry Club

> 200
REPRESENTATIVES OF RUSSIAN COMPANIES

took part in the Company's public meeting with developers and vendors of information security products and services

In 2023, guided by the principles of open and productive collaboration, the Company entered into three strategic agreements with the information security market leaders: Kaspersky, Security Vision, and R-Vision.

Personal data protection

The Company has implemented and put in practice a set of organisational and technical measures to protect the personal data (including third parties' personal data) of different types of owners and ensure compliance with Russian laws. Technical protection involves anti-virus protection, leak prevention, monitoring of removable devices, and analysis of security incidents.

Face-to-face trainings conducted for enterprise staff have proven to be an effective tool to raise awareness about personal data protection. In 2023, such trainings were delivered to more than 200 employees.

The Company places a heightened emphasis on maintaining legal compliance of its personal data processing. The Company has developed and continuously updates its Personal Data Compliance Guidelines. In 2023, in line with these Guidelines, 13 Group enterprises brought their personal data processing procedures into compliance with legal requirements and the Company's local regulations.

Independent audit

An independent auditor for Nornickel's financial statements is selected through competitive bidding in accordance with the Company's established procedure. The Audit Committee of the Board of Directors reviews the shortlist and makes a recommendation to the Board of Directors on the proposed auditor to be approved by the Annual General Meeting of Shareholders of MMC Norilsk Nickel.

In 2023, on the recommendation of the Board of Directors, the General Meeting of Shareholders approved Kept as the auditor for RAS and IFRS financial statements for 2023.

The Audit Committee of the Board of Directors recorded no comments to the auditor's reports, praised the quality of materials supporting financial statement reconciliation, and described Kept's performance as the Company's auditor in 2023 as effective.

AT 13 GROUP ENTERPRISES

personal data processing procedures were brought into compliance with legal requirements in 2023

Remuneration report

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 of the Management Board but encourages them to invest in Nornickel shares.

Remuneration paid to members of the Board of Directors and of the Management Board in 2023 totalled RUB 6.6 billion (USD 77.9 million).[1]

Directors' remuneration

The Board of Directors' annual remuneration is set out in the Remuneration Policy. 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. Members of the Company's Board of Directors are covered by liability insurance at the Company's expense under the directors' liability insurance programme. In addition, indemnity agreements are signed with members of the Board of Directors, covering the losses that they may incur in connection with their service on the Board of Directors. The Corporate Governance Code recommends that companies pay for their directors' liability insurance to be able to recover potential losses through the insurer.

Remuneration of the Chairman of the Board of Directors

Remuneration of the Chairman of the Board of Directors differs from the 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.

Remuneration of non-executive directors

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 serving on a Board committee
- Additional remuneration 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 share-based payments), share options, benefits package, or pension plans.

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.

[1] The amount of remuneration paid does not include the remuneration accrued but not yet paid as at 2023-end, as well as insurance premiums and voluntary health insurance (VHI) contributions. Adding the amounts above, remuneration of members of Nornickel's governance bodies for 2023 as per the IFRS statements totalled RUB 7.7 billion (USD 90 million).

Directors' remuneration

Type	2023	
	RUB mln	USD mln
For serving on the Board of Directors and Board committees	373.7	4.4
Salary	31.5	0.4
Bonuses	–	–
Reimbursement	0.2	0.003
Other	–	–
TOTAL	**405.4**	**4.8**

Remuneration of executive bodies

In line with Nornickel's Articles of Association, the remuneration and reimbursement payable to members of the Management Board are determined by the Board of Directors.

Remuneration of members of the Management Board is fixed. Remuneration of the Company's senior management, including individuals who are members of the Management Board, is comprised of basic salary and bonuses (variable part). Bonuses comprising the variable part of senior management's remuneration are based on the KPI system aligned with Nornickel's strategic goals, depend on the Company's performance, and are linked to both financial (EBITDA) and non-financial metrics (work-related injury rate (weight: 10%), GHG reduction (weight: 5%), zero environmental incidents (weight: 5%), and other individual KPIs). KPIs are updated on an annual basis by the Corporate Governance, Nomination, and Remuneration Committee of the Board of Directors. In 2023, KPIs for industrial safety, occupational health, and environment had a significant weight (20%) in senior management's KPI scorecards, which confirms that safety culture remains top of mind for Nornickel.

Determining the remuneration and reimbursement payable to the Company's President is within the remit of the Board of Directors. Remuneration payable to the President is comprised of basic salary and bonuses. The Board of Directors decides whether to pay the President of the Company a performance bonus for the reporting year.

Remuneration of Board members and the President

Type	2023	
	RUB mln	USD mln
For serving on the Management Board	2.5	0.03
Salary	3,131.3	36.7
Bonuses	3,094.7	36.3
Other	5.2	0.1
TOTAL	**6,233.7**	**73.1**

Audit Commission's remuneration

The Annual General Meeting of Shareholders held on 6 June 2023 set total remuneration at RUB 1.8 million per year (before taxes) for each member of Nornickel's Audit Commission who is not an employee of the Company. The above remuneration level is similar to the remuneration rate set for members of the Audit Commission in 2022. Members who are Nornickel employees are not paid remuneration for their work as part of the Audit Commission. No bonuses or other rewards were paid in 2023.

Audit Commission's remuneration

Type	2021	2022	2023	
	RUB mln	RUB mln	RUB mln	USD mln
For serving on the Audit Commission	7.2	7.2	7.2	0.084

Auditor

Auditor's fee

The fee paid to Kept for its audit and auxiliary audit services as well as other audit-related services in 2023 totalled around RUB 232 million (USD 2.7 million), net of VAT, with the share of other audit-related services (non-audit services) accounting for 30% of the total.

To prevent conflict of interest, Kept has in place a specific policy covering different types of services they provide to auditees, which complies with the requirements of the International Ethics Standards Board for Accountants (IESBA), the Russian Independence Rules for Auditors and Audit Firms, and other applicable standards.

Auditor's fee

Service type	2021	2022	2023	
	RUB mln	RUB mln	RUB mln	USD mln
Audit	131.2	116.9	125.8	1.5
Auxiliary audit services	42.3	57.3	36.7	0.4
Other audit services	161.6	165.6	69.7	0.8
TOTAL	**335.1**	**339.8**	**232.2**	**2.7**

Risk management

Risk management system

The existing corporate risk management system is integrated into the Company's business processes and enables effective risk-based decisions at various organisational levels to achieve strategic and operational goals.

Nornickel has set the following key risk management objectives:
- Increase the likelihood of achieving the Company's goals
- Improve resource allocation
- Boost Nornickel's investment case and shareholder value

The risk management system is based on the principles and requirements set forth in Russian 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, COSO Enterprise Risk Management – Integrating with Strategy and Performance, and Recommendations for Public Joint Stock Companies to Organise Risk Management, Internal Controls, Internal Auditing, and the Work of Auditing Committees under Boards of Directors (Supervisory Boards) (Appendix to the Bank of Russia's Letter No. IN-06-28/143 dated 1 October 2020).

To manage production and infrastructure risks, Nornickel develops, approves, updates, and tests business continuity plans to maintain operations and take recovery steps in case of emergency.

Risk management framework

Board of Directors
- Approving the corporate Risk Management Policy
- Supervising the development of the risk management system
- Approving the Corporate Risk Appetite Statement (annualy)
- Managing strategic risks on an ongoing basis
- Reviewing and approving the risk management development roadmap and assessing its implementation status (annualy)
- Reviewing reports on strategic and key risks (annually/quarterly)
- Assessing risk management performance at Nornickel (annualy)

Audit Committee of the Board of Directors

Management Board
- Reviewing strategic risks and reports on key risks
- Reviewing materialised risks and lessons learned
- Reviewing risk appetite metrics
- Making decisions related to key risk management
- Reviewing business continuity plans
- Reviewing the strategy and development plans for the Corporate Risk Management System (CRMS) and Internal Control System (ICS)
- Reviewing the performance of dedicated risk management committees within business verticals

Risk Management Committee of the Management Board

Internal audit
- Making independent assessments of the effectiveness of risk management, internal controls, and corporate governance (annually)

Internal control
- Methodological support and participation in risk assessment of business processes

Risk Management Service
- Developing and updating the risk management methodology
- Preparing reports on Nornickel's top risks (quarterly)
- Preparing reports on strategic risks (annualy)
- Enhancing quantitative risk assessment with simulation modeling tools
- Improving the Company's business continuity management svstem
- Introducing the practice of using risk appetite
- Ensuring employee training in practical approaches to risk management

Risk owners
- Day-to-day risk management within the integrated risk management model, including risk identification, analysis, assessment, and/or prioritisation, as well as development and execution of response plans and mitigation measures
- Risk-based decision making

In 2023, the Company completed the following projects/initiatives to develop, improve, and maintain the maturity of its risk management system:

- Piloted a project to automate project risk management via the existing GRC-based system, and automated links between risks and control procedures for environmental risks
- Ran a quantitative assessment of the cumulative impact of risks on functional strategies
- Prepared training materials on project risk management
- Trained employees of the Kola and Norilsk Divisions on environmental risk management
- Maintained regular activities of the Management Board's Risk Management Committee and dedicated function-level risk management committees
- Improved integration between risk management and budget planning processes through GRC-based automation tools
- Ran a quantitative assessment of the cumulative impact of key risks on the Company's 2024 budget, as well as an analysis of the budget sensitivity to key risks, with follow-up risk management measures included in the budget
- Broke down the Company's risk appetite into lower organisational levels, set up monitoring of relevant metrics, and completed process automation
- Further improved quantitative assessment tools for operational risks
- Ran regular quantitative assessments of investment risks
- Had the risk management system's maturity independently assessed by a third party, confirming its high maturity level
- Developed the concept for assessing long-term climate-related risks as part of a project to ensure compliance with TCFD recommendations

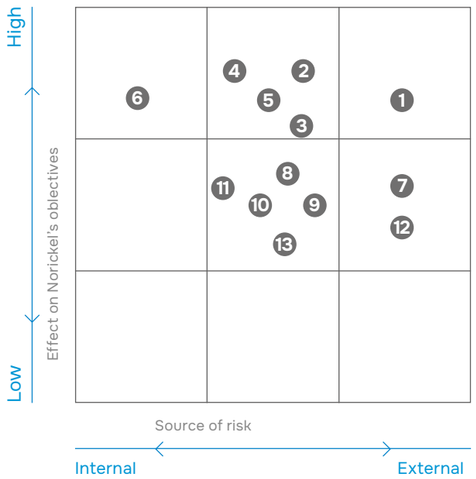
In line with risk management system improvement plans for 2024, the following areas have been prioritised:

- Further automating risk management processes and system functionality
- Expanding the scope of quantitative risk assessment in strategic and operational planning
- Enhancing the methodology to analyse, assess, and manage various categories and types of risks
- Applying and enhancing the concept for assessing long-term climate-related risks in line with TCFD requirements

A high-level map of Nornickel's material risks leverages global best practices in risk management. The risk map ranks material risks by effect on the Group's objectives and by source.

Map of Nornickel's material risks with year-on-year changes in 2023

Risk Map



Risk

1. Price risk
2. Market risk
3. Financial risks
4. Technical and production risk
5. Investment risks
6. H&S risks
7. Permafrost degradation
8. Supply chain risks
9. Compliance risk
10. Information security risks
11. Environmental risks
12. Low water levels in rivers
13. Social risk

Risk: effect of uncertainty on objectives (ISO/GOST R 31000).

Risk source: element which alone or in combination has the potential to give rise to risk (ISO/GOST R 31000). The assessment takes into account the predominance of external or internal factors.

The Effect on Nornickel's Objectives scale shows the relative impact of risks.

По сравнению с прошлым годом

- Risk increased year-on-year
- Risk decreased year-on-year
- Risk has not changed year-on-year

Changes in risk status in 2023 reflect the continued or increased effect of multiple external factors on the Company as it adapted to a new normal.

Key strategic risks

The Company's strategic risks were updated in 2023. Nornickel sees the following groups of risks as its key risks:

- Lower demand for the Company's products
- Lower productivity and disruptions of operations
- Mismatch between Nornickel's financial position and its growing strategic development needs
- Failure to achieve targets to reduce environmental footprint

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. The Company annually approves a comprehensive programme that defines key parameters by insurance type, key business area, and project. Nornickel has developed and implemented a corporate insurance programme that covers assets, equipment failures, and business interruptions across the Group as well as enterprises in the core production chain, all on the same terms. The directors' and officers' liability, freight, construction and installation, vehicle, and other types of liability insurance programmes of the Company are also centralised and promote continuity.

Nornickel maintains insurance contracts with major Russian insurers.

The Company applies industry best practice and leverages insurance market trends to negotiate the best insurance and insured risk management terms.

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 effect on Nornickel's objectives.

Climate-related risks

For more details on Nornickel's climate-related risks and opportunities, please see our Climate Change Report.

Nornickel assesses climate-related risks and opportunities based on the Bank of Russia's recommendations for public joint stock companies to disclose non-financial information[1] as well as TCFD recommendations, which prioritise the following risks categories:

Physical risks can manifest themselves as abnormal weather (acute) or lasting changes in weather patterns (chronic). Consequences of climate-related physical risks for the Company can include permafrost thawing, changes in water levels in water bodies, precipitation amounts and patterns, and other climate risk factors which may adversely affect the Group's operations.

Transition risks arise from the transition to a low-carbon economy. Key risks of this type include relevant political, regulatory, technological, market, and reputational risks that can substantially affect demand for Nornickel products.

[1] The Bank of Russia's Information Letter No. IN-06-28/49 On Recommendations for Public Joint Stock Companies to Disclose Non-financial Information Related to Their Activities, dated 12 July 2021.

The Company's assets are located in regions that have long been affected by climate change, which is reflected in our current technical, production, and environmental risks. The Company continues integrating its climate risk and risk factor management process into its business processes in accordance with TCFD and COSO recommendations. The continued integration of physer-term risks. Transition risks can be classified in line with TCFD recommendations both as a standalone risk and as a risk factor for other risks. The Company has compiled a list of its transition risks and ran their pilot assessment. ical risks implies structuring the procedure and rules around managing both current and longAs part of implementing the TCFD Compliance Roadmap and meeting the objectives set in the corporate Environmental and Climate Change Strategy, Nornickel has been improving its climate risk management.

Developing climate risk management procedures

	1 Forecast	2 Identification	3 Assessment	4 Mitigation and adaptation	
Physical risks	Forecasting climate risk factors for regions of operation	Analysing the incorporation of climate risk factors into risk assessments, identifying new risks	Assessing the impact on the Company's financial performance	Developing mitigation and adaptation tools	Integrating risks into the Company's business processes
Transition risks and opportunities	Developing our own scenarios for global economy and climate change	Identifying transition risks and opportunities			

The analysis of physical risks relies on public scenarios of the Intergovernmental Panel on Climate Change (SSP1-2.6, SSP2-4.5, SSP5-8.5) localised for all regions where the Company operates its production facilities. To analyse transition risks, we rely on our own scenarios for global economy and climate change until 2050. As part of permafrost thawing risk management, the Company further develops its facility monitoring system for continuous automated monitoring of permafrost foundation soil temperature and foundation deformations. The monitoring system is developed by the Buildings and Structures Monitoring Centre of the Norilsk Division, which is responsible for technical supervision and permafrost monitoring and serves as a centre of excellence in engineering geology.

Permafrost degradation (physical climate risk)

Loss of bearing capacity by pile foundation beds may lead to deformation and collapse of buildings and structures.

Key risk factors

- Climate change, average annual temperature increases over the last 15 to 20 years
- Increased depth of seasonal permafrost thawing

Effect on Nornickel's development goals and strategy

- Effective 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
- No emergency situations of interregional or nationwide scale, including environmental damage

Risk assessment

Effect on objectives: **medium.**

Source of risk: **external.**

Year-on-year change in risk: **stable.**

Key mitigants

To manage this risk, Nornickel:

- carries out regular monitoring of soil condition under the foundations of buildings and structures
- carries out geodetic monitoring of the movement of buildings
- uses satellite technology to monitor Nornickel's assets and further analyse the data
- regularly monitors the ongoing condition of Nornickel's buildings and structures and subsequently processes the results to check for potential risks of Earth surface displacements
- regularly monitors the ongoing condition of Nornickel's buildings and structures by scaling the information and diagnostic system (in particular, by deploying automated observation points to monitor the key factors that affect the safe operation of buildings and structures)
- monitors soil temperature in the foundations of buildings and structures
- takes corrective and adaptive actions to ensure that buildings and structures are technically operational.

Low water levels in rivers (physical climate risk)

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.

Key risk factors

- Extreme weather events (droughts) caused by climate change

Effect on Nornickel's development goals and strategy

- Social responsibility: comfort and safety of people living in Nornickel's regions of operation
- Lower share of renewables in the Company's energy mix

Risk assessment

Effect on objectives: **medium.**

Source of risk: **external.**

Year-on-year change in risk: **stable.**

Key mitigants

To manage this risk, Nornickel:

- improves the performance of the closed water circuit to reduce water withdrawal from surface sources (water bodies)
- 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 in the water withdrawal areas to increase water withdrawal reliability during low water periods
- implements a number of measures to reduce water consumption by boosting the performance of equipment and production chains
- replaced hydropower units at the Ust-Khantayskaya HPP to increase power output through improving the hydropower units' performance.

Transition risks and opportunities

To assess risks and opportunities arising from the global energy transition, Nornickel has developed three own scenarios for global economy and climate change until 2050.

For this exercise, we engaged experts from the Institute for Economic Forecasting of the Russian Academy of Sciences (IEF RAS) and conducted an analysis of some 190 available public scenarios from widely recognised sources, such as the International Energy Agency, the World Energy Council, the International Renewable Energy Agency, OPEC, Bloomberg, NGFS, Shell, BP, DNV, and others. The resulting three global economy and climate change scenarios are aligned with climate change pathways described in public scenarios SSP1-2.6, SSP2-4.5, and SSP5-8.5.

Key characteristics of the scenarios developed to assess transition risks and opportunities until 2050

	Rapid Transition SSP1-2.6	Sustainable Palladium SSP2-4.5	Global Growth SSP5-8.5
Probability	**25%**	**70%**	**5%**
Development focus	Low-carbon development paradigm with the globalcommunity's efforts focused on the reduction of GHG emissions	Maintaining current socioeconomic trends. Traditional industries remain centre stagealong with the green economy	Abandoning efforts to curb climatechange with further rapid economic growth fuelled by hydrocarbons
Inflation	High	Moderate	Low
Resource/Energy intensity	Low	Moderate reduction	High
Climate regulation	Strict	Moderate	Insignificant
CO_2 prices	Major increase	Moderate increase	At 2021 levels
Temperature change by 2050[1]	+1.7°C	+2.0°C	+2.5°C
Alignment with the ParisAgreement goal	**+**	**-**	**-**

The Company has chosen the Sustainable Palladium as its baseline scenario, according to which traditional industries are expected to remain centre stage along with the growing green economy. In particular, internal combustion engine vehicles are expected to retain a large market share, resulting in a steady long-term demand for palladium. The other two scenarios will be used by the Company to stress-test climate-related risks.

Scenario analysis[2]

Based on its global economy and climate change scenarios, Nornickel has conducted a scenario analysis of the consolidated financial and economic model until 2050. The analysis has shown revenue growth in all scenarios by 2050 against the average value for 2017–2021. The key revenue growth drivers in the Global Growth scenario are the highest GDP and population growth rate, which will fuel the strongest demand for palladium, nickel, and copper in 2050 vs the other two scenarios.

Although the Rapid Transition scenario is based on the most aggressive decarbonisation rates, which is impossible without green metals – nickel and copper, – the scenario projects the global economy to slow down, with the lowest GDP and population growth rates. On top of that, the total car fleet, along with the fleet of passenger EVs, hydrogen cars, and plug-in hybrids, in the Rapid Transition scenario will be lower than that in the Sustainable Palladium scenario as a result of the general trend towards reduction in car ownership and use and ride-sharing development.

[1] Growth in temperature vs pre-industrial levels.
[2] A scenario analysis of the consolidated financial and economic model until 2050 in line with three climate scenarios.

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.

Key risk factors

- 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
- Replacement of metals produced by the Company with alternative materials

Effect on Nornickel's development goals and strategy

Upgrade of the existing and construction of new facilities to ramp up our output of core metals and maintain financial stability

Risk assessment

Effect on objectives: **high.**

Source of risk: **external.**

Year-on-year change in risk: **stable.**

Key mitigants

Nornickel is consciously accepting the existing price risk. 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 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
- searches for new applications and uses for palladium.

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.

Key risk factors

- Foreign regulators imposing new foreign trade restrictions that impact the Company's activities
- Competition from producers of cheaper nickel
- More aggressive transport electrification programmes, requirements on metals and their forms
- Stricter market requirements for product quality and ESG compliance

Effect on Nornickel's development goals and strategy

Upgrade of the existing and construction of new facilities to ramp up our output of core metals and maintain financial stability

Risk assessment

Effect on objectives: **high**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key mitigants

To manage this risk, Nornickel:

- monitors and analyses changes in market demands for product quality and forms and ESG compliance
- stimulates the demand for its key metals
- monitors changes in the vehicle fleet mix by engine type and requirements for metals used
- 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 roadmap
- seeks partnership opportunities with key producers of cathodes for lithium-ion batteries
- maintains strategic partnerships with automakers based on guarantees of long-term palladium supplies
- explores partnership options to drive nickel demand in Russia
- works on building and enhancing alternative PGM supply/trading platforms.

Financial risks

This group includes FX, interest rate, and liquidity risks, as well as other risks related to the financial security of the Company's operations and investments.

Key risk factors

- Increased debt financing costs
- Deteriorating market conditions
- Sharp rouble exchange rate fluctuations
- Limitation of the possibility to raise debt financing due to deterioration in financial markets
- Lack of access to key segments of global financial markets (debt and derivatives), limited access to the foreign currency debt market
- Unexpected major expenses
- Counterparty credit risk
- Foreign regulators imposing restrictions that affect Nornickel's operations, its key business partners, and infrastructure partners

Effect on Nornickel's development goals and strategy

- A debt portfolio with a well-balanced profile in terms of maturity, currency composition, and sources of financing
- Maintaining a strong investment case

Risk assessment

Effect on objectives: **high**

Source of risk: **mixed**

Year-on-year change in risk: **decreased**

Key mitigants

To manage this risk, Nornickel:

- maintains a balanced debt portfolio
- raises additional rouble-denominated debt to prevent a liquidity shortfall
- holds liquidity reserves on the Group's balance sheet to ensure timely payments
- monitors its account balances and existing cash gaps, as well as the availability of liquidity reserves on its balance sheet
- regularly evaluates key potential risk events through scenario modelling and develops prevention and response plans
- constantly seeks new potential partners among borrowing and financial institutions, expanding and diversifying its financial infrastructure
- uses different financial models for various purposes, expands the array of financial risk assessment tools (stress testing and reverse stress testing of all financial risks and risk factors considering their combinations, interrelations, and changes over time).

Technical and production risks

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 result in the need to compensate damage to third parties.

Key risk factors

- 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 or structures
- Infrastructure breakdowns

Effect on Nornickel's development goals and strategy

Effective delivery of finished products (metals) in line with the production programme

Risk assessment

Effect on objectives: **high**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key mitigants

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
- ensures timely replacement of fixed assets to consistently achieve production safety targets
- continuously monitors the ongoing 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 its 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
- continuously monitors the industrial asset management system
- ensures risk review by collective bodies at all management levels of the Company
- 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 risks causing maximum damage. These plans ensure that Nornickel resumes its production operations as soon as possible after any disruption
- engages, on an annual basis, independent surveyors to analyse Nornickel's exposure to disruptions in the production chain and make assessments of related risks.

Investment risks

Risk related to time and budget overruns, and performance targets of Nornickel's major investment projects.

Key risk factors

- Changes in forecasts of ore volumes, grades, and properties resulting from follow-up exploration
- Changes in investment project timelines
- Further changes to budgets of investment projects
- Amendments to project performance targets in the course of implementation

Effect on Nornickel's development goals and strategy

- 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

Risk assessment

Effect on objectives: **high**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key mitigants

To manage this risk, Nornickel:

- carries out accelerated exploration and updates project 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 project management tools
- promotes the use of pilot units across all technically challenging and unique processing stages
- redesigns projects and substitutes supply routes to source materials/services from friendly countries, taking into account sanctions
- implements a transformation programme for Gipronickel Institute to improve the quality and reduce the timelines of R&D projects and survey and engineering activities
- enhances project management competences of project teams and ensures best practice sharing through its Project Forum held on a regular basis.

Health and safety risks

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.

Key risk factors

- Suboptimal methods of work organisation
- Disruptions in technological processes
- Exposure to hazards

Влияние на цель и стратегию развития Компании

Health and safety

Risk assessment

Effect on objectives: **high**

Source of risk: **internal**

Year-on-year change in risk: **stable**

Key mitigants

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 as well as 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 work-related hazards
- provides regular training and briefings to 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 across Group enterprises as part of the Risk Control project
- reviews the competencies of line managers across Nornickel enterprises, 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.

Compliance risks

The risk of legal liability, 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 applicable laws, regulations, instructions, rules, standards, codes of conduct, or from the imposition of sanctions and/or other corrective measures by external supervisory bodies.

Key risk factors

- Discrepancies in rules and regulations
- Considerable powers and a high degree of discretion exercised by supervisory bodies
- Regulatory instability
- Market practices driven by business customs and specific to the country

Влияние на цель и стратегию развития Компании

Compliance by Nornickel and Russian entities of the Norilsk Nickel Group with applicable laws, regulatory requirements, corporate standards, and business codes

Risk assessment

Effect on objectives: **medium**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key mitigants

To manage this risk, Nornickel:

- ensures the development and update of key procedural documents on compliance
- applies best practices to further improve the compliance system
- takes measures to ensure compliance with applicable laws
- protects its interests during regulatory inspections and administrative proceedings
- ensures that agreements signed by Nornickel contain clauses safeguarding its interests
- ensures pre-contractual due diligence of counterparties, partners, and suppliers
- takes measures to prevent and mitigate compliance risks at the Norilsk Nickel Group
- consistently keeps employees up to date on the Company's requirements and measures to mitigate compliance risks
- ensures that the Corporate Trust Line receives and handles reports of corruption, fraud, embezzlement, or other wrongdoing, either planned or committed
- maintains and enhances an antitrust compliance system
- ensures performance evaluation of compliance controls at the Norilsk Nickel Group.

Information security risks

This group includes risks such as potential cybercrimes, an unauthorised transfer, modification, or destruction of data assets, disruption or reduced efficiency of Nornickel's IT services as well as business, technological, or production processes.

Key risk factors

- 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
- Working from home / hybrid work schedule and hiring remote employees outside Nornickel's regions of operation
- Sanctions restricting the functionality of protection tools

Effect on Nornickel's development goals and strategy

Mitigation of the information security risk and risk of cyberattacks on Nornickel's information systems and automated process control systems

Risk assessment

Effect on objectives: **medium**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key mitigants

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 data 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
- substitutes imported data protection tools whose functionality was restricted due to sanctions
- uses technical means to ensure information security of assets and manage access to data assets
- 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 information security regulations
- sets up and certifies the Company's information security management system
- implements measures to ensure safe remote access.

Environmental risks

This risk group includes events that result in environmental pollution, are not provided for in approved technological processes and Russian laws, and affect the achievement of the Company's environmental goals.

Key risk factors

- Failure to comply with the requirements of environmental laws when operating the Company's facilities
- Poor internal management and control
- Delay in implementing environmental programmes and measures
- Natural and climate phenomena

Effect on Nornickel's development goals and strategy

Compliance of business with applicable environmental laws, regulations, corporate standards, and business codes related to environmental protection

Risk assessment

Effect on objectives: **medium**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key mitigants

To manage these risks, Nornickel:

- develops, implements, and improves environmentally sustainable business processes and introduces advanced practices and approaches
- has in place an incentive system and promotes environmental competencies of its employees
- implements its corporate Environmental and Climate Change Strategy
- implements environmental initiatives at the Company and Russian entities of the Norilsk Nickel Group
- oversees environmental compliance and the implementation of environmental programmes and measures.

Social risk

Tensions may escalate among the workforce due to the deterioration of social and economic conditions in Nornickel's regions of operation.

Key risk factors

- 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 Group employees
- Reallocation of funds originally intended for social programmes and charity

Effect on Nornickel's development goals and strategy

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
- Running wide-ranging charity programmes and projects

Risk assessment

Effect on objectives: **medium**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key mitigants

To manage this risk, Nornickel:

- strictly adheres to the terms and conditions of collective bargaining agreements between Group companies and employees (the Group has signed a total of 22 collective bargaining agreements)
- interacts with regional authorities, municipalities, and civil society institutions
- fulfils its social obligations under public-private partnership agreements
- runs corporate social responsibility programmes and the World of New Opportunities charity programme aimed at supporting and promoting regional civil initiatives, including by indigenous peoples of Taimyr, and the Plant of Goodness employee volunteering programme
- 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
- carries out regular sociological monitoring across its operations
- surveys Norilsk residents on living standards, employment, migration trends, and general social sentiment to identify major issues
- runs social projects and programmes aimed at supporting employees and their families, as well as Nornickel's former employees
- maintains dialogues with stakeholders and conducts stakeholder 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.

Supply chain risks

Supply chain interruption/disruption within the existing transport and logistics system.

Key risk factors

- Challenging natural and climatic conditions in the regions of operation
- Limitations of the transport and logistics system
- Growing inflation, FX rates, pricing pressure from suppliers, poor planning, and other factors
- Breach of contracts by contractors

Effect on Nornickel's development goals and strategy

- Effective delivery of finished products in line with the production programme
- Timely supply of products to consumers

Risk assessment

Effect on objectives: **medium**

Source of risk: **mixed**

Year-on-year change in risk: **stable**

Key mitigants

To manage this risk, Nornickel:

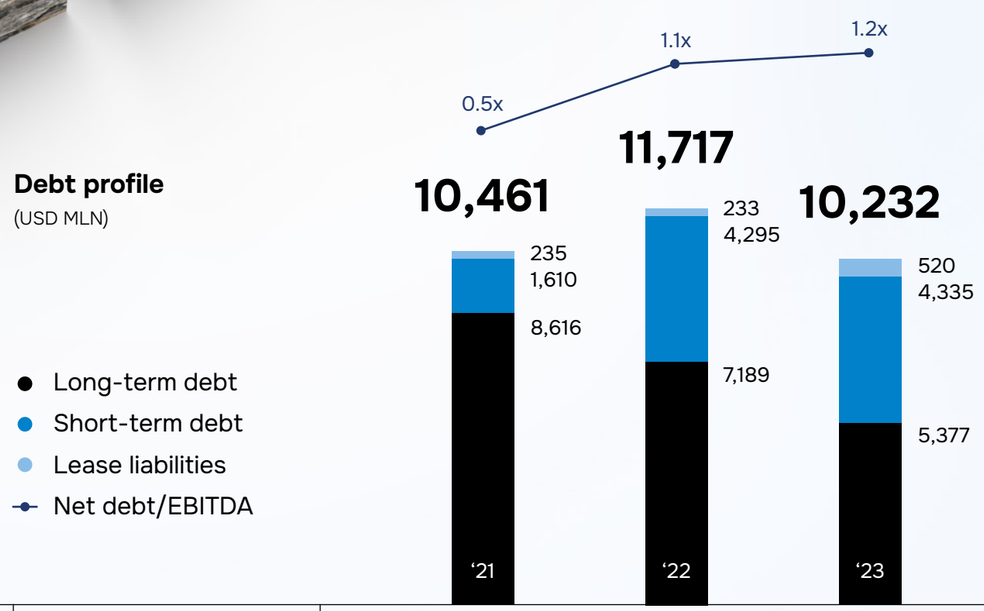
- actively engages Russian manufacturers to expand competition
- uses long-term agreements / contracts / price lists with fixed optimal prices for materials, equipment, and spare parts on terms that are most beneficial for the Company
- drafts lists of critical manufacturers of equipment and materials, works to prevent supply disruptions, and monitors suppliers' performance
- implements its Logistics Infrastructure Development Programme.

STAYING BALANCED

Leverage remains at a conservative level

Expert RA affirmed Nornickel's highest national credit rating

Debt profile
(USD MLN)



Shareholder Information

224 Share capital

228 Dividend policy

231 Debt portfolio management

233 Shareholder relations

Share capital

The Company has only issued ordinary shares; the Company's Articles of Association do not provide for the issuance of preferred shares. Shares in the Company are voting shares, with each voting share counted as one vote, except for cumulative voting, used when electing members of the Board of Directors.

The current shareholding structure is available at the Company website

Shareholder rights

All shareholders are guaranteed equal rights and treatment in their relations with Nornickel. Shareholders can exercise their 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 that do not limit their right to attend General Meetings of Shareholders depending on their location or residence.

Authorised capital as at 31 December 2023

152,863,397

ordinary shares

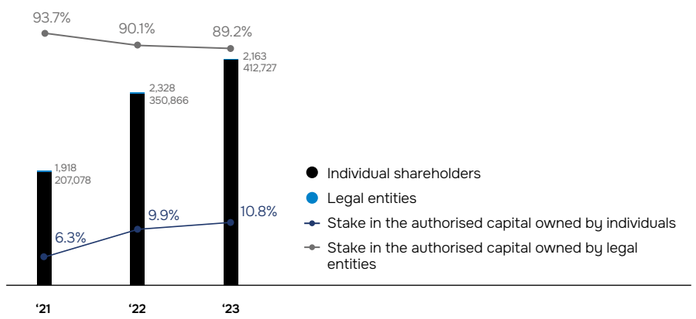
RUB 1

par value

Shareholding structure as at calendar year-end (%)

Shareholder	2021	2022	2023
Interros	35.95	37.0	**37.0**
EN+ GROUP IPJSC	26.25	26.4	**26.4**
Treasury shares	0.51	–	**–**
Other shareholders (including free float)	37.29	36.6	**36.6**
Total shares	153,654,624	152,863,397	**152,863,397**

Nornickel shareholders and their holdings[1]



[1] Data as at the dates of the Annual General Meetings of Shareholders. Stakes in the authorised capital.

Shares

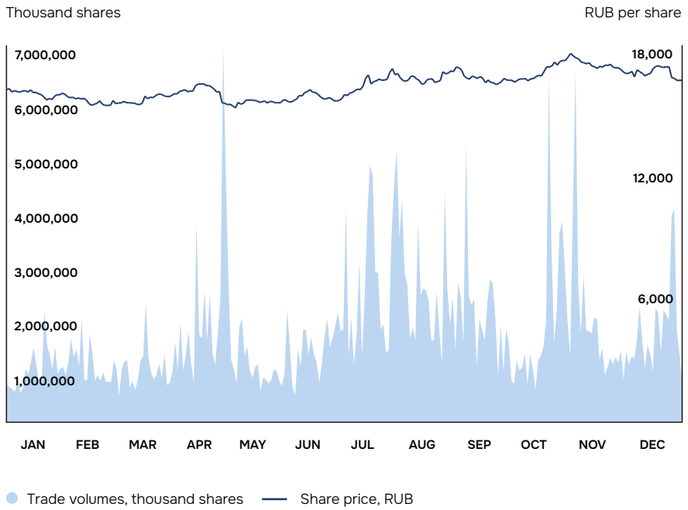
Nornickel shares have been traded in the Russian stock market since 2001. Since 2014, the shares have been on the First Level quotation list of the Moscow Exchange (ticker: GMKN).

Shares (ordinary)	
Amount	152,863,397
Registered number	1-01-40155-F
Issue date	1997
Date of assignment of the state registration number	2006
ISIN	RU0007288411
Ticker	GMKN
Registrar	Registrar IRC – R.O.S.T.

Registrar

IRC – R.O.S.T. is the Company's registrar. Shareholders, including those owning shares via nominee holders, can participate in General Meetings of Shareholders via e-ballots by using the Shareholder's Personal Account online service developed by the registrar. The access procedure for the Shareholder's Personal Account is detailed on the registrar's website. Shareholders can also use the Shareholder.online mobile app.

Nornickel share price performance and trade volumes on the Moscow Exchange in 2023



Nornickel's market capitalisation at year-end 2023 was

RUB **2,472** billion

USD **27** billion

RUB 14,218

low

RUB 18,078

high

RUB 15,766

average traded price

RUB 16,172

year-end price

Source: Company calculations based on closing prices on the Moscow Exchange

Share split

On 7 December 2023, Nornickel's Extraordinary General Meeting of Shareholders resolved to split[1] the Company's ordinary shares.

The split procedure involves amendments to the Company's decision to issue ordinary shares providing for a decrease in their par value, as well as registration of such amendments with the Bank of Russia. Shares will be converted on the tenth business day from the date of state registration by the Bank of Russia of amendments to the issuance decision.

As a result of this procedure, every ordinary share of the Company will be converted into 100 shares. After the split, Nornickel will have 15,286,339,700 shares with a par value of RUB 0.01 each.

A share split makes Nornickel's stock more available to a wider range of retail investors, thereby boosting the securities' appeal.

American depositary receipts

On 28 April 2023, the permission for the circulation of Company ADRs outside Russia lapsed[2]. In accordance with legislation, Company shares that remain in nominee accounts under depositary receipt programmes are not vested with voting rights for holders and no dividends are paid on them.

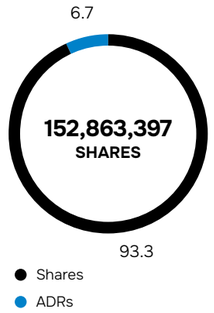
On 21 February 2023, The Bank of New York Mellon, the Company's ADR programme depositary, published a notice of the termination of the deposit agreement with Nornickel, effective 23 May 2023. However, under the terms and conditions of the deposit agreement, ADR holders retain the right to surrender their ADRs for delivery of Nornickel shares. The ADRs are cancelled by their issuer, The Bank of New York Mellon.

Unpaid dividends may be claimed by those who were ADR holders as at 28 April 2023 and who received Company shares upon repayment of the ADRs belonging to them as per the procedure established for the unclaimed dividends by the Federal Law On Joint Stock Companies.

On 23 May 2023, Nornickel ADRs were delisted from the London Stock Exchange.

Information and official notices are available at www.adrbnymellon.com.

Share and ADR split as at year-end 2023 (%)



[1] A share split happens when the issuer increases the number of its securities while reducing their par value without changing its capitalisation.
[2] Permission from the Government Commission on Monitoring Foreign Investment in the Russian Federation.

Digital Investor, employee motivation programme

In 2023, Nornickel launched Digital Investor, a motivation programme for its employees. This innovative product is unique in the Russian employment market, and a new instrument in the investment market.

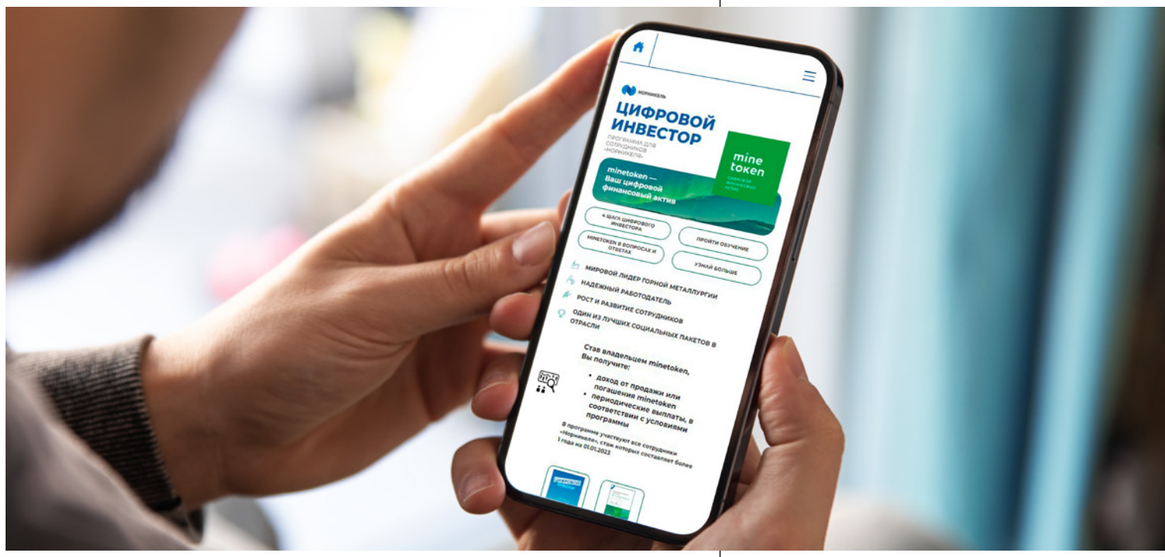
Digital Investor represents a new model of the employer-employee relationship, which provides for 100% financing of an investment by the employee in a digital financial asset (DFA) at a price equal to the market value of Nornickel shares at issuance and at redemption.

DFA is a financial instrument recognised by Russian laws and offering the advantages of blockchain. DFAs may be linked to non-digital assets such as metals, oil, or shares. Under the Digital Investor programme, DFAs are linked to the price of Nornickel shares.

The number of DFAs that an employee is eligible to receive depends on their length of service at the Group as at the reference date, 1 January 2023. Under the programme, employees have the right to receive dividends on Nornickel shares and sell DFAs after holding them for a year, or have them redeemed after holding them for five years.

Although the programme's first cycle is still being rolled out, as many as over 60 thousand Company employees have already become digital investors and received their tokens.

OVER
60 THOUSAND
Company employees have already become digital investors and received their tokens.



Dividend policy

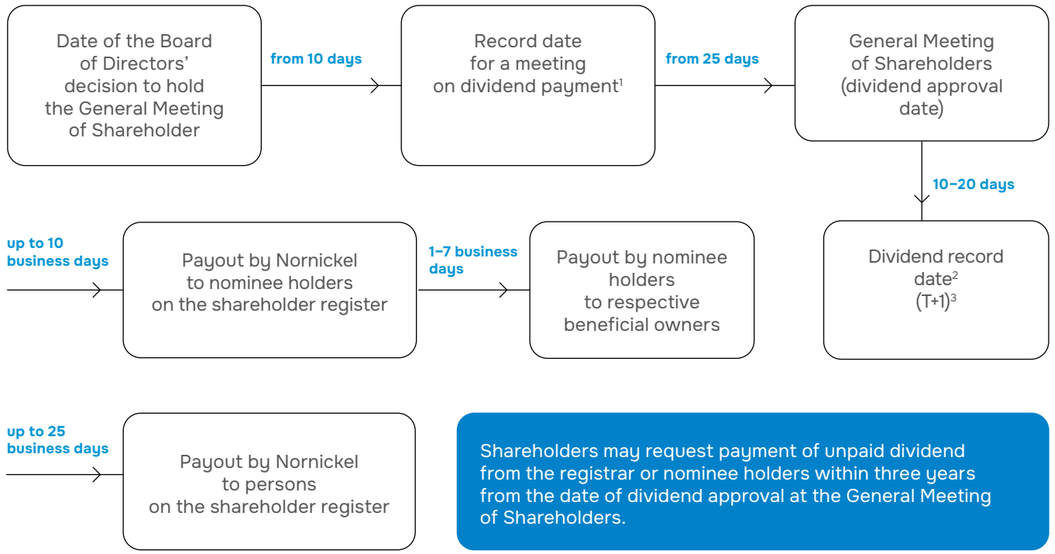
The Company's Regulations on the Dividend Policy approved by the Board of Directors seek to ensure the transparency of the mechanism for determining the amount of dividend and the dividend payment procedure.

Upon the Board's recommendations, the General Meeting of Shareholders determines the dividend amount and record date, which, as per Russian laws, is to be set within 10–20 days of the General Meeting of Shareholders.

Dividends to a nominee holder are paid directly within 10 business days, while dividends to persons listed on the shareholder register are paid through the registrar within 25 business days after the record date.

Any person who has not received the declared dividend because their 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 request payment of unpaid dividend within three years from the date of the resolution to pay the dividend. Beyond this period, any declared but unclaimed dividends are recovered as part of the undistributed profit of the Company, and there will be no obligation to pay them.

Dividend payment dates



[1] Meeting record date is the date on which shareholders need to hold shares in the Company to be entitled to participate in the meeting.
[2] Dividend record date is the date on which shareholders need to hold shares in the Company to be entitled to receive dividend on such shares.
[3] Ex-dividend date is the date on which shares are traded without granting the right to receive the next dividend. Stocks are traded on the Moscow Exchange on a T+1 basis, that is, shares purchased by investors are not delivered to them until one business day has elapsed after the purchase.

In 2023, the Company paid dividends subject to current regulatory restrictions:

- Shareholders who are customers of foreign nominee holders and ADR holders: dividends were paid directly to security holders; the payment was made if information to identify the security holder and other information required to make the payment was available
- Certain categories of foreign shareholders: dividends were paid to type "C" accounts opened with Russian credit institutions

Report on dividend paid[4]

Reporting period for which dividends were paid	Total dividend paid		Declared dividend per share
	USD mln	RUB mln	RUB
9M 2023	**1,475**	**129,982**	**915**
2022	0	0	0
2021	6,196	410,917	2,689
2020	3,532	259,893	1,645
2019	5,011	323,482	2,045

Dividends in 2023

On 7 December 2023, the Extraordinary General Meeting of Shareholders resolved to pay 9M 2023 dividend of RUB 915.33 per ordinary share, with the amount of dividend payout totalling close to RUB 130 billion (about USD 1.5 billion).

RUB 915.33
Total dividend per ordinary share in 2023

> RUB 130 BN
Total dividend paid in 2023

[4] Earlier dividend history is available at the Company website.Dividends are paid out to shareholders within three years from the respective dividend resolution date. Beyond this period, any unclaimed dividends are recovered as part of the undistributed profit of the Company, and there will be no obligation to pay them.Including RUB 32.3 billion, or USD 0.5 billion in dividend payments to ADR holders for 2021, transferred to the depository (NSD) and returned to the Company due to the restrictions imposed by the President's Executive Order No. 95 dated 5 March 2022 and the Resolution of the Bank of Russia's Board of Directors dated 10 June 2022.

Securities taxation

Income from securities is taxable pursuant to the applicable laws of the Russian Federation.

Under international double tax treaties, non-Russian tax residents may claim a reduced rate of withholding tax or relief from tax in Russia[1]. To claim these benefits, non-residents need to submit the following 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 tax treaty (tax residency certificate)
- A confirmation of the actual right to receive income
- A confirmation that they meet other conditions set forth in the applicable treaty

If such confirmations are not provided by the date of income payment, the tax shall be withheld at the standard rates.

Dividend tax formula for Russian residents

$AT = P \times TR \times (D_1 - D_2)$, where

AT – amount of tax to be withheld
P – proportion of the dividend amount payable to one recipient to the total dividend amount to be distributed
TR – tax rate stipulated by the Russian Tax Code
D_1 – dividend amount to be distributed among all recipients
D_2 – dividend amount[2] received by the organization at the time of distribution of dividends in favor of shareholders (participants), provided that previously this amount was not included in the taxable income

Taxation of income from securities (%)

Shareholder	From transactions	Interest	Dividend
INDIVIDUALS			
Residents	13/15[3,4]	13/15[4]	13/15[4]
Non-residents	30[3]	30	15
LEGAL ENTITIES			
Residents	20[3]	20	13[5]
Non-residents	20[6]	20	15

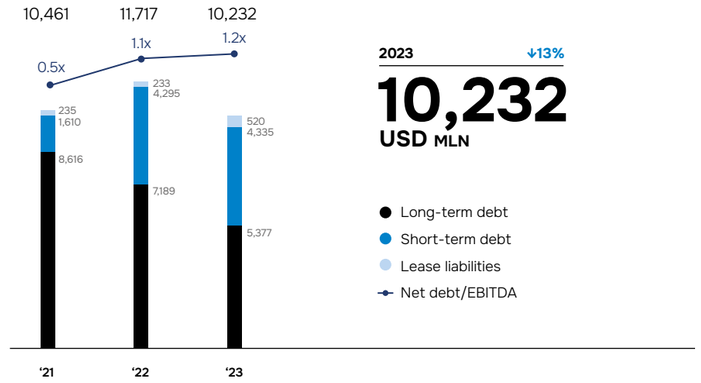
1 Executive Order of the Russian President No. 585 dated 8 August 2023 suspended the main provisions of double tax treaties between Russia and "unfriendly" countries.
2 Excluding the dividend amount eligible for a zero tax rate pursuant to Subclauses 1–1.1, Clause 3, Article 284 of the Russian Tax Code.
3 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 Clause 2, Article 284.2 of the Russian Tax Code have been met. The terms and conditions of applying the 0% rate to international holding companies are set forth in Article 284.7 of the Russian Tax Code. Pursuant to Subclause 1, Clause 1, Article 219.1 of the Russian Tax Code, individuals who are Russian tax residents are eligible for investment tax deductions in the amount of the profits from sales of the Company shares owned by the taxpayer for over three years.
4 Pursuant to Clause 1, Article 224 of the Russian Tax Code, a tax rate of 15% applies to income over RUB 5 million for the reporting period.
5 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.
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 portfolio management

Debt management

Nornickel maintains a conservative approach to managing its debt. As at 2023-end, its net debt/12M EBITDA stood at 1.2x. To raise new debt, the Company considers both public instruments and bank loans, striving to balance both in its debt portfolio. When choosing debt financing sources, the Company pays particular attention to the debt currency and loan parameters. The Company strives to maintain a comfortable level of liquidity and standby credit facilities to cover its refinancing needs.

Debt profile (USD MLN)



In November 2023, the Expert RA national rating agency affirmed the Company's highest investment-grade credit rating "ruAAA".

As at 2023-end, the Company's debt decreased by 13% from 31 December 2022 to USD 10,232 million, driven among others by a weaker rouble during 2023.

Bonds

In May, the Company placed a five-year RUB 60 billion exchange-traded bond with a coupon rate of RUONIA + 1.3%, named by Cbonds as the Best Primary Offering of a Metals Company.

In April, the Company timely fulfilled its obligation to redeem its USD 1 billion eurobond.

The Company closely monitors changes in the external regulatory environment to enable timely responses, while prioritising strict compliance with the terms of debt instruments and promptly aligning loan documents with applicable laws. The Company meets all payment schedules on time, fully servicing its debt as planned. In addition, the Company timely renews permits from the Russian Government required to make payments of principal and interest in foreign currencies to foreign creditors.

The Company continues to make split coupon payments on all of its eurobonds in accordance with the terms and conditions of the offering documents and the requirements of Russian laws: payments to holders whose rights are recorded by Russian depositories and holders whose rights are recorded by foreign institutions. The scheduled redemption of the eurobond in April also involved split payments.

In December 2023, as required by Executive Order of the Russian President No. 430 dated 5 July 2022, the Company placed replacement bonds[1] to substitute for the eurobonds maturing in 2025 and 2026. The outstanding issues were worth USD 315.6 million and USD 333.5 million, respectively. In October 2023, the Company was permitted not to place replacement bonds to substitute for the eurobonds maturing in 2024.

As at 2023-end, ten bond issues were outstanding:

- three eurobond issues worth a total of USD 1.1 billion (nominal value is net of the nominal value of replacement bonds issued)
- three bond issues worth a total of RUB 110 billion
- two replacement bond issues worth a total of USD 649 mln
- two bond issues worth a total of CNY 9 billion

Outstanding eurobonds

Instrument	Offering date / maturity date	Issue size	Coupon rate (%)	Coupon frequency
ISSUER: MMC FINANCE D.A.C.				
Eurobond 2024 (LPN)	28.10.2019/28.10.2024	USD 750 mln	3.375	Twice a year
Eurobond 2025 (LPN)	11.09.2020/11.09.2025	USD 500 mln[2]	2.55	
Eurobond 2026 (LPN)	27.10.2021/27.10.2026	USD 500 mln[3]	2.80	

Outstanding replacement bonds

Instrument	ISIN	Offering date / maturity date	Issue size	Coupon rate (%)	Coupon frequency
ISSUER: MMC NORILSK NICKEL					
Exchange-traded bond, BO-001P-01	RU000A100VQ6	01.10.2019 / 24.09.2024	RUB 25 bn	7.20	Every 182 days starting from the offering date
Exchange-traded bond, BO-001P-02	RU000A105A61	11.10.2022 / 05.10.2027 (put option expiring 14.10.2025)	RUB 25 bn	9.75	
Exchange-traded bond, BO-001P-05-CNY	RU000A105ML5	19.12.2022 / 15.12.2025	CNY 4 bn	3.95	
Exchange-traded bond, BO-001P-06-CNY	RU000A105NL3	22.12.2022/18.06.2026 (put option expiring 25.12.2025)	CNY 5 bn	LPR 1Y+ 0.1	Every 91 days starting from the offering date
Exchange-traded bond, BO-09	RU000A1069N8	24.05.2023/17.05.2028	RUB 60 bn	RUONIA + 1.3	
Exchange-traded bond, ZO25-D	RU000A107BL4	20.12.2023 / 11.09.2025	USD 315.559 mln	2.55	Twice a year
Exchange-traded bond, ZO26-D	RU000A107C67	22.12.2023/27.10.2026	USD 333.485 mln	2.8	

Information on debt instruments is posted on the Company website.

[1] Bonds which, when placed, are paid for in eurobonds or in cash with the proceeds earmarked to purchase eurobonds.
[2] Issue size net of replacement bonds is USD 184.4 million.
[3] Issue size net of replacement bonds is USD 166.5 million

Shareholder relations

Nornickel maintains an active dialogue with a wide universe of Russian and international investors and security analysts. The Company holds regular conference calls and meetings with investors, participates in investment conferences, and organises site visits to the Company's production facilities.

In 2023, the Company remained committed to global best practice for disclosure, using an array of disclosure tools, including press releases, presentations, annual and sustainability reports, corporate action notices, as well as interactive tools. Nornickel provides disclosure both in Russian and in English. Materials for investors are available in the Investors section of the Company website.

The number of retail investors in the reporting period exceeded 400 thousand, accounting for about 11% in Nornickel's shareholding structure. Growing the number of retail investors and their share in the Company's authorised capital to 25% remains a strategic priority.

In 2023, Nornickel continued to actively deliver on its retail investor strategy:

- Nornickel's presence on retail investor social networks: promoting accounts on professional platforms Pulse, Profit and Smart-Lab to engage with market participants. Nornickel's blog is among the top 10 most visited account profiles across all platforms
- Leveraging information channels: participating in webinars, podcasts, video conferences with brokers, live broadcasts with bloggers, and conferences in Telegram channels
- Creating educational content: publishing analytical reports in Russian on the non-ferrous metals market (metals market review) and participating in the Let's Go Figure It Out travel project to explain the inner workings of major companies
- Participating in dedicated conferences for retail investors: Smart-Lab annual conference, Tinkoff House within the St Petersburg International Economic Forum, Association of Retail Investors, and ATON industry conferences
- Engaging prime customers in the private and premium banking segments: holding meetings with prime customers of major Russian banks

In August 2023, Nornickel supported the first youth forum on financial literacy, Healthy Finance in Bobrovy Log: Invest Smartly.

The forum's objective is to give young people essential knowledge about the basics of investing in a fun way and to demonstrate that a competent and balanced approach can make investments a reliable source of income. Experts, analysts, and bloggers spoke to school graduates and university students about financial literacy and shared useful tips on how to manage personal funds and investments. More than 300 people attended the event, and about 6,000 people watched the online broadcast of the forum.

In 2023, Nornickel participated in over 50 investor and shareholder events

Additional Information

Consolidated financial statements for the years ended 31 December 2023, 2022 and 2021

Index

235	Statement of management's responsibilities for the preparation and approval of the consolidated financial statements for the years ended 31 December 2023, 2022 and 2021
236	Independent auditors' report
240	Consolidated income statement for the years ended 31 December 2023, 2022 and 2021
241	Consolidated statement of comprehensive income for the years ended 31 December 2023, 2022 and 2021
242	Consolidated statement of financial position at 31 December 2023, 2022 and 2021
243	Consolidated statement of cash flows for the years ended 31 December 2023, 2022 and 2021
245	Consolidated statement of changes in equity for the years ended 31 December 2023, 2022 and 2021
246	Notes to the consolidated financial statements for the years ended 31 December 2023, 2022 and 2021

Statement of management's responsibilities for the preparation and approval of the consolidated financial statements for the years ended 31 December 2023, 2022 and 2021

The following statement, which should be read in conjunction with the auditors' responsibility stated in the independent auditors' report, 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 respects the consolidated financial position of the Group at 31 December 2023, 2022 and 2021 and its consolidated financial performance, comprehensive income, consolidated cash flows and changes in equity for the years ended 31 December 2023, 2022 and 2021, 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 Notes to 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 2023, 2022 and 2021 were approved by:

President
V.O. Potanin

Senior Vice President – Chief Financial Officer
S.G. Malyshev

Moscow, Russia
9 February 2024

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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 2023, 2022 and 2021, the consolidated income statements, the consolidated statements of comprehensive income, changes in equity and cash flows for the years ended 31 December 2023, 2022 and 2021, and notes, including material accounting policy information 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 2023, 2022 and 2021, and its consolidated financial performance and its consolidated cash flows for the years ended 31 December 2023, 2022 and 2021 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.

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Disclosures on the impact of the economic situation on the Group’s operations

Please refer to the Notes 34, 35 in the consolidated financial statements.

THE KEY AUDIT MATTER	HOW THE MATTER WAS ADDRESSED IN OUR AUDIT
During 2023 new restrictive measures were introduced in addition to previously introduced restrictive measures by the United States of America, the European Union and some other countries against the Russian government, major financial institutions, certain other legal entities and individuals in Russia, resulting in significant capital markets volatility, supply and distribution interruptions, and limited availability of debt financing. The Group made a comprehensive disclosure on the impact of economic and geopolitical environment on the Group’s current and future operations which we consider to be a key audit matter.	Our audit procedures included the following: • We obtained and critically reviewed the management’s assessment of the impact of the economic and geopolitical situation on the Group’s operations; We reviewed the assessment of revenue, production and capital expenditures amounts budgeted for the next financial year; • We assessed the Group’s analysis of sensitivity to the major market, financial and regulatory risks, such as currency risks, interest rate risks and risks associated with the availability of external financing; • We analysed the disclosure of credit risk, including the Group’s assessment of dependency from major customers and credit risk concentration. We compared the information on credit ratings of the banks to external sources; • We analysed the disclosure of liquidity risk including maturity profile and respective cash flows and reconciled information on credit line commitments at the reporting date. We considered the overall adequacy and appropriateness of the disclosures related to the analysis of the impact of the economic situation on the Group’s current and future operations in the consolidated financial statements.

Impairment of non-current assets

Please refer to the Note 14 in the consolidated financial statements.

THE KEY AUDIT MATTER	HOW THE MATTER WAS ADDRESSED IN OUR AUDIT
Due to the current economic situation and changes in market and macroeconomic conditions, the Group performed the analysis of impairment indicators for non-currents assets as at 31 December 2023. Given the materiality of the carrying amount of non-current assets, complexity of the impairment analysis in current economic environment and high degree of judgement in preparation of a discounted cash flow model, we consider impairment of non-current assets to be a key audit matter.	Our audit procedures included the analysis of methodology used by the Group to identify individual assets and determine cash-generating units (CGUs) for the purpose of assessing indications of impairment. We also analysed the process and control procedures developed by the Group to ensure the completeness of analysed external and internal indicators of impairment and further estimation of the recoverable amount if impairment test is to be performed. We analysed the existence of internal and external indicators of impairment by separate CGU and individual assets. For CGUs with impairment indicators at the reporting date, we involved Kept valuation specialists to assist us in evaluating the methodology used by the Group when preparing discounted cash flow models and analysis of key assumptions in terms of their relevance and reasonableness, taking into consideration current macroeconomic conditions, historic performance results and future plans. We compared: • forecast metal prices, inflation and exchange rates with publicly available market information; • discount rates calculation to our own assessment of key components of discount rate calculation • production volumes with estimates of mineral reserves and historical operating performance for certain CGUs. We also assessed appropriateness and completeness of the disclosure in the consolidated financial statements in relation to significant assumptions used in determination of recoverable amount.

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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 2023, 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 do 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 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, 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 Audit Committee of Board of Directors for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with 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.

Audit Committee of Board of Directors is responsible for overseeing the Group’s financial reporting process.

Auditors’ Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors’ report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group’s internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management’s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors’ report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors’ report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with Audit Committee of Board of Directors 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 Audit Committee of Board of Directors 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 Audit Committee of Board of Directors, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our 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:

Velichko Natalia Nikolaevna

Principal registration number of the entry in the Register of Auditors and Audit organizations No. 21906109427, acts on behalf of the audit organization based on the power of attorney No. 375/22 as of 1 July 2022 JSC “Kept”

Principal registration number of the entry in the Register of Auditors and Audit Organizations No. 12006020351

Moscow, Russia

9 February 2024

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Audited entity: PJSC “Mining and Metallurgical Company “Norilsk Nickel” Independent auditor: JSC “Kept
Registration number in the Unified State Register of Legal Entities: No. 1028400000298

Consolidated income statement for the years ended 31 December 2023, 2022 and 2021

US Dollars million

	Notes	For the year ended 31 December 2021	2022	2023
REVENUE				
Metal sales	7	17,103	16,073	13,702
Other sales		749	803	707
Total revenue		**17,852**	**16,876**	**14,409**
Cost of metal sales	8	(5,057)	(6,090)	(6,322)
Cost of other sales		(746)	(829)	(721)
Gross profit		**12,049**	**9,957**	**7,366**
General and administrative expenses	9	(989)	(1,353)	(1,093)
Selling and distribution expenses	10	(191)	(255)	(285)
Impairment of non-financial assets, net	14	(48)	(90)	(179)
Other operating expenses, net	11	(1,285)	(678)	(269)
Operating profit		**9,536**	**7,581**	**5,540**
Foreign exchange (loss)/gain, net		(53)	251	(1,512)
Finance costs, net	12	(279)	(493)	(567)
Gain/(loss) from disposal of subsidiaries and foreign joint operations	21	29	(110)	32
Income from investments		52	150	41
Profit before tax		**9,285**	**7,379**	**3,534**
Income tax expense	13	(2,311)	(1,525)	(664)
PROFIT FOR THE YEAR		**6,974**	**5,854**	**2,870**
Attributable to:				
Shareholders of the parent company		6,512	5,458	2,384
Non-controlling interests		462	396	486
		6,974	**5,854**	**2,870**
EARNINGS PER SHARE				
Basic and diluted earnings per share attributable to shareholders of the parent company (US Dollars per share)	22	41.9	35.7	15.6

The accompanying notes on pages 13-86 form an integral part of the consolidated financial statements

Consolidated statement of comprehensive income for the years ended 31 December 2023, 2022 and 2021

US Dollars million

	For the year ended 31 December 2021	2022	2023
PROFIT FOR THE YEAR	**6,974**	**5,854**	**2,870**
OTHER COMPREHENSIVE (LOSS)/INCOME			
Items that are or may be reclassified to profit or loss in subsequent periods:			
Reclassification of translation reserve for disposed foreign operations to profit or loss (Note 21)	20	–	–
Effect of translation of foreign operations and other reserves	(2)	29	(31)
Other comprehensive (loss)/income that are or may be reclassified to profit or loss in subsequent periods, net	**18**	**29**	**(31)**
Items not to be reclassified to profit or loss in subsequent periods:			
Effect of translation to presentation currency	80	891	(1,825)
Other comprehensive (loss)/income not to be reclassified to profit or loss in subsequent periods, net	**80**	**891**	**(1,825)**
Other comprehensive (loss)/income for the year, net of tax	**98**	**920**	**(1,856)**
TOTAL COMPREHENSIVE INCOME FOR THE YEAR, NET OF TAX	**7,072**	**6,774**	**1,014**
Attributable to:			
Shareholders of the parent company	6,618	6,332	779
Non-controlling interests	454	442	235
	7,072	**6,774**	**1,014**

The accompanying notes on pages 13-86 form an integral part of the consolidated financial statements

Consolidated statement of financial position at 31 December 2023, 2022 and 2021

US Dollars million

	Notes	At 31 December 2021	2022	2023
ASSETS				
Non-current assets				
Property, plant and equipment	14	12,699	16,264	15,181
Intangible assets		265	302	238
Investments in associates and joint ventures	16	17	8	76
Other financial assets		72	113	58
Deferred tax assets	13	167	340	335
Other non-current assets	18	345	365	350
		13,565	**17,392**	**16,238**
CURRENT ASSETS				
Inventories	18	3,026	4,945	3,817
Trade and other receivables	19	468	846	764
Advances paid and prepaid expenses		111	192	173
Other financial assets		43	40	3
Income tax receivable		203	17	101
Other taxes receivable	17	412	477	344
Cash and cash equivalents	20	5,547	1,882	2,139
Other current assets		60	4	1
		9,870	**8,403**	**7,342**
TOTAL ASSETS		**23,435**	**25,795**	**23,580**
EQUITY AND LIABILITIES				
Capital and reserves				
Share capital	22	6	6	6
Share premium		1,218	1,212	1,212
Treasury shares	22	(305)	–	–
Translation and other reserves		(5,415)	(4,541)	(6,146)
Retained earnings		8,184	10,448	11,324
Equity attributable to shareholders of the parent company		**3,688**	**7,125**	**6,396**
Non-controlling interests	23	1,100	1,442	1,199
		4,788	**8,567**	**7,595**
Non-current liabilities				
Loans and borrowings	24	8,616	7,189	5,377
Lease liabilities	25	178	190	466
Provisions	26	894	916	689
Social liabilities	27	633	613	399
Trade and other long-term payables		55	56	51
Derivative financial instruments		72	67	–
Deferred tax liabilities	13	73	415	142
Other non-current liabilities	29	43	93	30
		10,564	**9,539**	**7,154**
CURRENT LIABILITIES				
Loans and borrowings	24	1,610	4,295	4,335
Lease liabilities	25	57	43	54
Trade and other payables	28	2,224	1,381	1,273
Dividends payable	30	3,146	496	1,924
Employee benefit obligations	29	417	585	555
Provisions	26	146	180	90
Social liabilities	27	158	201	207
Derivative financial instruments		15	–	114
Income tax payable		41	169	7
Other taxes payable	17	269	339	272
		8,083	**7,689**	**8,831**
Total liabilities		**18,647**	**17,228**	**15,985**
TOTAL EQUITY AND LIABILITIES		**23,435**	**25,795**	**23,580**

The accompanying notes on pages 13-86 form an integral part of the consolidated financial statements

Consolidated statement of cash flows for the years ended 31 December 2023, 2022 and 2021

US Dollars million

	For the year ended 31 December 2021	2022	2023
OPERATING ACTIVITIES			
Profit before tax	**9,285**	**7,379**	**3,534**
Adjustments for:			
Depreciation and amortisation	928	1,026	1,165
Impairment of non-financial assets, net (Note 14)	48	90	179
Loss on disposal of property, plant and equipment (Note 14)	35	70	36
(Gain)/loss from disposal of subsidiaries			
and foreign joint operations (Note 21)	(29)	110	(32)
Change in provisions and allowances (Notes 26, 27)	896	236	77
Finance costs, net (Note 12)	279	493	567
Income from investments	(52)	(150)	(41)
Foreign exchange loss/(gain), net	53	(251)	1,512
Other	36	(106)	124
	11,479	**8,897**	**7,121**
MOVEMENTS IN WORKING CAPITAL:			
Inventories	(796)	(1,693)	(185)
Trade and other receivables	38	(347)	(4)
Advances paid and prepaid expenses	(30)	(60)	(62)
Other taxes receivable	31	(121)	12

		For the year ended 31 December	
Employee benefit obligations	34	129	39
Trade and other payables	669	(1,096)	51
Provisions	(2,145)	(160)	(179)
Other taxes payable	(27)	164	99
Cash generated from operations	**9,253**	**5,713**	**6,892**
Income tax paid	(2,211)	(1,127)	(1,164)
Net cash generated from operating activities	**7,042**	**4,586**	**5,728**
INVESTING ACTIVITIES			
Purchase of property, plant and equipment	(2,683)	(4,227)	(2,988)
Investments in associates and joint ventures	(21)	(29)	(71)
Purchase of intangible assets	(81)	(71)	(50)
Loans issued	(6)	–	(31)
Proceeds from repayment of loans issued	43	22	38
Net change in deposits placed	(35)	34	–
Proceeds from disposal of property, plant and equipment	12	11	1
Net cash inflow/(outflow) from disposal of subsidiaries and foreign joint operations (Note 21)	49	(46)	11
Interest and other investment income received	84	157	48
Net cash used in investing activities	**(2,638)**	**(4,149)**	**(3,042)**
FINANCING ACTIVITIES			
Proceeds from loans and borrowings (Note 34)	1,000	9,104	5,569
Repayments of loans and borrowings (Note 34)	(415)	(7,775)	(6,642)
Payments of lease liabilities (Note 34)	(55)	(50)	(45)
Dividends paid to shareholders of the parent company (Note 30)	(2,198)	(6,196)	–
Dividends paid to non-controlling interests	–	(73)	(503)
Receipt of dividends not remitted to shareholders and ADR holders (Note 30)	–	544	–
Proceeds/(payments) on exchange of flows under cross-currency interest rate swaps, net	4	(19)	8
Interest paid	(315)	(599)	(791)
Acquisition of own shares from shareholders (Note 22)	(2,068)	–	–
Net cash used in financing activities	**(4,047)**	**(5,064)**	**(2,404)**
Net change in cash and cash equivalents	**357**	**(4,627)**	**282**
Cash and cash equivalents at the beginning of the year (Note 20)	**5,191**	**5,547**	**1,882**
Effects of foreign exchange differences on balances of cash and cash equivalents	(1)	962	(25)
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR (NOTE 20)	**5,547**	**1,882**	**2,139**

The accompanying notes on pages 13-86 form an integral part of the consolidated financial statements

Consolidated statement of changes in equity for the years ended 31 December 2023, 2022 and 2021

US Dollars million

	Notes	Equity attributable to shareholders of the parent company							
		Share capital	Share premium	Treasury shares	Translation and other reserves	Retained earnings	Total	Non-controlling interests	Total
Balance at 1 January 2021		**6**	**1,254**	**–**	**(5,521)**	**8,290**	**4,029**	**646**	**4,675**
Profit for the year		–	–	–	–	6,512	6,512	462	6,974
Other comprehensive income/(loss)		–	–	–	106	–	106	(8)	98
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		**–**	**–**	**–**	**106**	**6,512**	**6,618**	**454**	**7,072**
Dividends	30	–	–	–	–	(5,374)	(5,374)	–	(5,374)
Other effects related to transactions with									
non-controlling interest owners	23	–	–	–	–	490	490	–	490
Acquisition of own shares from shareholders	22	–	–	(2,075)	–	–	(2,075)	–	(2,075)
Cancellation of ordinary shares from treasury stock		–	(36)	1,770	–	(1,734)	–	–	–
BALANCE AT 31 DECEMBER 2021		**6**	**1,218**	**(305)**	**(5,415)**	**8,184**	**3,688**	**1,100**	**4,788**
Profit for the year		–	–	–	–	5,458	5,458	396	5,854
Other comprehensive income		–	–	–	874	–	874	46	920
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		**–**	**–**	**–**	**874**	**5,458**	**6,332**	**442**	**6,774**
Dividends	30	–	–	–	–	(2,895)	(2,895)	(100)	(2,995)
Cancellation of ordinary shares from treasury stock	22	–	(6)	305	–	(299)	–	–	–
BALANCE AT 31 DECEMBER 2022		**6**	**1,212**	**–**	**(4,541)**	**10,448**	**7,125**	**1,442**	**8,567**
Profit for the year		–	–	–	–	2,384	2,384	486	2,870
Other comprehensive loss		–	–	–	(1,605)	–	(1,605)	(251)	(1,856)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		**–**	**–**	**–**	**(1,605)**	**2,384**	**779**	**235**	**1,014**
Dividends	30	–	–	–	–	(1,508)	(1,508)	(478)	(1,986)
BALANCE AT 31 DECEMBER 2023		**6**	**1,212**	**–**	**(6,146)**	**11,324**	**6,396**	**1,199**	**7,595**

The accompanying notes on pages 13-86 form an integral part of the consolidated financial statements

Notes to the consolidated financial statements for the years ended 31 December 2023, 2022 and 2021

1. General information

Organisation and principal business activities

Public Joint Stock Company “Mining and Metallurgical Company “Norilsk Nickel” (the “Company” or PJSC “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.

Major production facilities of the Group are located on Russia’s Taimyr and Kola Peninsulas and in the Zabaikalsky Territory.

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 significantly 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 the Russian Federal Law No 208-FZ On consolidated financial statements (“208-FZ”) which was adopted on 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 the consolidated financial statements for the year ended 31 December 2023 are generally consistent with those applied in the preparation of the Group’s consolidated financial statements as at and for the years ended 31 December 2022 and 2021.

Adoption of new and revised standards and interpretations during for the year ended 31 December 2023

Adoption of the new Standard and amendments to the following Standards did not have material impact on the accounting policies, financial position or financial results of the Group:

- IFRS 17 Insurance Contracts (new Standard);
- IAS 1 Presentation of financial statements (amended);
- IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors (amended);
- IAS 12 Income Taxes (amended);

Adoption of new and revised standards and interpretations during the year ended 31 December 2022

Adoption of amendments to the following Standards did not have material impact on the accounting policies, financial position or financial results of the Group:

- IFRS 9 Financial Instruments (amended);
- IFRS 1 First-time Adoption of International Financial Reporting Standards (amended);
- IFRS 3 Business combinations (amended);
- IFRS 16 Leases (amended);
- IAS 16 Property, plant and equipment (amended);
- IAS 37 Provisions, contingent liabilities and contingent assets (amended).

Adoption of new and revised standards and interpretations during the year ended 31 December 2021

Adoption of amendments to the following Standards did not have material impact on the accounting policies, financial position or financial results of the Group:

Amendments related to interest rate benchmark reform:

- IFRS 4 Insurance Contracts (amended);
- IFRS 7 Financial Instruments: Disclosures (amended);
- IFRS 9 Financial Instruments (amended);
- IFRS 16 Leases (amended);
- IAS 39 Financial Instruments: Recognition and Measurement (amended).

Other amendments:

- IFRS 16 Leases (amended).

Standards and interpretations issued but not yet effective

The Group did not early adopt any standard, interpretation or amendment that had been issued but was not yet effective.

Standards and Interpretations	Summary of amendments	Effective for annual periods beginning on or after
IFRS 7 Financial Instruments: Disclosures	Additional disclosures of supplier financing agreements	1 January 2024
IFRS 16 Leases	Lease obligations on sale and leaseback	1 January 2024
IAS 1 Presentation of financial statements	Classification of liabilities as current or non-current, non-current liabilities with covenants	1 January 2024
IAS 7 Statement of Cash Flows	Additional disclosures of supplier financing agreements	1 January 2024
IAS 21 The Effects of Changes in Foreign Exchange Rates	Lack of Exchangeability	1 January 2025

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, except for additional disclosures of supplier financing arrangements in the consolidated financial statements.

Reclassification

Management reassessed classification of certain items of cost of metal sales and selling and distribution expenses for the year ended 31 December 2023. Information for the years ended 31 December 2022 and 2021 was reclassified to conform with the current period presentation and the effect of the reclassification was immaterial.

4.Material accounting policies

Investments in associates and joint ventures

An associate is an entity over which the Group exercises significant influence, but not control or joint control, through participation in financing and operating policy decisions, in which it normally owns between 20% and 50% of the voting equity. A joint venture is an entity in which the Group and other investors have joint control, i.e. decisions about the relevant activities of the investee require unanimous consent of the parties sharing control and the Group has rights to its share of the investee’s net assets. The existence of significant influence or joint control is determined based on the respective rights of investors established by investee’s charter, corporate agreement, shareholders’ agreement or similar arrangements.

Investments in associates and joint ventures are accounted for using the equity method from the date significant influence or joint control commenced until the date that significant influence or joint control effectively ceased.

Under the equity method of accounting, investments in associates and joint ventures are initially recognised at cost and are adjusted thereafter to recognise the Group’s share of the post-acquisition profit or loss and other movements in investee’s equity and reserves.

Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group’s interest in the investees. Unrealised losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Functional and presentation currency

Russian rouble (“RUB”) is the functional currency of the Company and all of its subsidiaries except for the Group’s foreign subsidiary operating in metal processing whose functional currency is US Dollar (“USD”).

The presentation currency of the Group’s consolidated financial statements is US Dollar (“USD”). Using USD as a presentation currency is a common practice among global mining companies. The Group also issues consolidated financial statements which use RUB as the presentation currency to comply with Federal Law 208-FZ.

Components of the consolidated statement of financial position, consolidated income statement, consolidated statement of comprehensive income, consolidated statement of cash flows and consolidated statement of changes in equity are translated into presentation currency using the following applicable exchange rates:

Component of consolidated statements	Applicable exchange rates
Assets and liabilities	Period-end rate
Income, expenses, and cash flows	Date of underlying transaction or average approximating exchange rates prevailing at the dates of the transactions
Equity	Historical rates

All exchange differences resulting 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.

The exchange rates of certain currencies to the Russian Rouble used in the preparation of the consolidated financial statements are as follows:

	At 31 December 2021	At 31 December 2022	At 31 December 2023
US Dollar/RUB	74.29	70.34	89.69
Euro/RUB	84.07	75.65	99.19
Chinese Yuan/RUB	11.65	9.89	12.58

Revenue recognition

Metal sales revenue
Revenue from metal sales is recognised at a point of time when control over the asset is transferred to the customer and represents the invoiced value, 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 the goods are delivered. A gain or loss on forward contracts expected to be settled by physical delivery or on a net basis is 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 promised goods or a service to a customer and the customer pays for those goods or services is one year or less.

Certain contracts are provisionally priced so that price is not settled until a predetermined future date, as of which the delivery price is settled based on the market price (contracts with quotation period). Revenue from such transactions is initially recognised at the market price at the date of sale. Price adjustments under provisionally priced contracts are recognised in revenue.

Leases

At the inception of a contract, the Group assesses whether such contract or its components constitute 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 plot lease payments are treated as variable lease payments, if they are linked to the cadastral value and changes in the latter do not depend on market rental rates. The Group recognises such 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 comprises 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 where it is located.

Right-of-use assets are subsequently measured at initial 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 life or over the term of the lease, whichever is 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 in lease payments. The lease payments are discounted using the 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 the lease term and currency of the lease payments.

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 subsidised housing programs for employees are presented in Other non-current assets in the consolidated statement of financial position and amortised over a certain period of employee participation in the programme (two to ten years). Long-term employee benefit obligations are discounted to present value.

Defined contribution plans
The Group contributes to the following major defined contribution plans:
- Social 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 during the period in which they arise. Such 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 in the consolidated statement of 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 excludes items that are not taxable or deductible.

Deferred tax
Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax assets and liabilities are not recognised in the consolidated financial statements, if temporary differences arise from the initial recognition of 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 and do not give rise to equal taxable and deductible temporary differences.

The carrying amount of deferred tax assets is reviewed at each reporting date 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 assets and liabilities 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 tax assets against tax liabilities and when they relate to income taxes levied by the same tax authority.

Property, plant and equipment

Mining assets
Mine development costs are capitalised and comprise expenditures directly related to:
- acquiring mining and exploration licences;
- developing new mines;
- estimating revised content of minerals in the existing ore bodies currently developed;
- expanding mine capacity.

Mine development costs include directly attributable finance costs capitalised during mine development.

Mine development costs are recognised as mining assets and start to be depreciated when a mine reaches commercial production quantities.

Mining assets are recognised at cost less accumulated depreciation and impairment losses. Mining assets include cost of acquiring and developing mining properties, pre-production expenditure, mine infrastructure, property, plant and equipment that process extracted ore, subsoil use rights, mining and exploration licenses, finance costs eligible for capitalisation and discounted value of future decommissioning costs.

Carrying value of mining assets is depreciated over the lesser of their individual economic useful life on a straight-line basis, or the remaining life of mine. Life of mine is estimated based on the Group production plans. Average useful lives vary from 2 to 47 years.

Exploration expenditure
Exploration expenditure, including geophysical, topographical, geological and similar types of expenditure is capitalised and amortised over the life of mine from the moment the commercial viability of the project is established. Otherwise, it is expensed in the period in which it is incurred.

Exploration expenditure written-off before the start of mine development is not subsequently capitalised, even if commercial production subsequently commences.

Non-mining assets
Non-mining assets include metallurgical processing plants, buildings, infrastructure, machinery and equipment, and other non-mining assets. Such assets are measured at cost less accumulated depreciation and impairment losses. Non-mining assets include property, plant and equipment used both in operations directly and to provide social services in the regions where the Group operates.

Non-mining assets are depreciated on a straight-line basis over their economic useful life.

Depreciation charge is calculated over the following economic useful life:
- buildings, facilities and infrastructure 5 to 50 years
- machinery, equipment and transport 2 to 33 years
- other non-mining assets 2 to 20 years

Capital construction-in-progress
Capital construction-in-progress comprises costs directly related to the construction of mining and non-mining assets, including:
- prepayments for the purchase of property, plant and equipment and materials acquired

for the construction of buildings, processing plants, infrastructure, machinery and equipment;
- irrevocable letters of credit opened for future fixed assets deliveries and secured by deposits placed with banks;
- directly attributable finance costs capitalised during construction.

Depreciation of these assets begins when they become available for use and are in the location and condition necessary for them to be capable of operating in the manner intended by management.

Capitalisation of finance cost
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 the assets are 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.

Impairment of non-current assets, excluding goodwill

At each reporting date, the Group analyses the indicators of impairment of its non-current assets to determine whether there is any indication that an impairment loss has been incurred. If any such indicators exist, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any).

Recoverable amount is the higher of fair value less costs to sell or 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. Where the fair value less costs of disposal of an individual asset is higher than their carrying amount the Group does not estimate its value in use. 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 is 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 immediately.

Inventories

Refined metals
The Group's 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. Export customs duties (if applicable), transportation costs and other costs incurred by the Group before the produced finished goods are designated for sale under a particular contract with a customer are included in the cost of production, all costs incurred after that point are included in selling and distribution expenses. By-products are initially measured at net realisable value, based on current market prices. Net realisable value estimates take into consideration fluctuations of price or cost directly relating to events after the reporting date, to the extent that such events confirm conditions existing at the end of the reporting period.

Work-in-process
Work-in-process includes all costs incurred in the ordinary course of business for producing each product including direct material and labour costs, allocation of production overheads, depreciation, amortisation and other costs, given its stage of completion, less allowance for adjustment to net realisable value. Changes in the amount of allowance are recognised in Cost of metal sales in the consolidated income statement.

Materials and supplies
Materials and supplies are measured at cost less allowance for obsolete and slow-moving items.

Financial assets

Financial assets are recognised when the Group becomes party to contractual provisions of the instrument and are initially measured at fair value, plus directly attributable transaction costs, except for those financial assets measured at fair value through profit or loss, which are initially measured at fair value.

Financial assets are classified into the following categories:
- financial assets measured at amortised cost;
- financial assets measured at fair value through other comprehensive income;
- financial assets measured 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 cash flow characteristics of the financial asset 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 period. The effective interest rate is the rate that exactly discounts estimated future cash receipts (including directly attributable 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 rate basis for debt instruments other than those financial assets measured at fair value through profit or loss or fair value through other comprehensive income.

Financial assets measured at amortised cost
The Group generally classifies cash and cash equivalents, trade and other receivables (excluding trade receivables measured at fair value through profit and loss under provisionally priced contracts), loans issued and bank deposits as financial assets measured at amortised cost.

Financial assets measured at fair value through profit or loss
All financial assets not classified as measured at amortised cost or at fair value through other comprehensive income are classified as financial assets measured 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 market price for the period till the price settlement date outlined 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 either of the following methods:

Lifetime expected credit losses	Trade and other receivables
	Financial assets other than trade and other receivables for which credit risk has increased significantly since initial recognition
	Financial assets other than trade and other receivables at initial recognition
12-months expected credit losses since the reporting date	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 reliable and supportable information, including both quantitative and qualitative information and analysis based on the Group's historical experience and forward-looking information.

The Group applies the simplified approach to measuring expected credit losses under IFRS 9 Financial Instruments, which uses a lifetime expected loss allowance for trade receivables. The Group assumes that expected credit loss for all trade and other receivables which are overdue for more than 365 days is equal to their carrying amount. To measure the expected credit losses trade and other receivables that are overdue 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 uncollectable, they are written off against the respective loss allowance. Changes in the amount of allowance are recognised in the consolidated income statement.

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, the 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 used for calculating the amortised cost of a financial liability and for allocating interest expense over the 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.

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 resources embodying economic benefits will be required to settle the obligation, and the amount of the obligation can be reliably estimated. If, in the course of discharging an obligation, the Group recognises property, plant and equipment, then this settlement does not result in an outflow of the Group's resources and, therefore, no provision is recognised.

Provisions may be recognised in respect of the Group social, environmental, asset decommissioning or other obligations, and are presented

in these consolidated financial statements accordingly. In particular, the Group's social provisions are presented together with other liabilities related to its social expenditure as a separate item Social Liabilities in the consolidated statement of financial position.

The amount recognised as a provision is the best estimate of the expenditure 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 future cash flows, 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 costs and related obligations, discounted to present value, are recognised 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 and are depreciated over the useful life of the asset. The unwinding of discount on decommissioning obligations is recognised in Finance cost, net in the consolidated income statement. Decommissioning obligations are periodically remeasured for changes in applicable laws, regulations, expected closure dates, inflation and discount rates.

Environmental provisions may include expenditure for remediation of the damage to the environment, including land and water bodies clean-up and rehabilitation costs, restoration of biological resources, settlement of legal claims and environmental damages, fines and penalties imposed by government authorities in respect of the environmental incidents.

5. Critical accounting judgements and key sources of estimation uncertainty

When preparing the consolidated financial statements, the Group's management necessarily makes estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the reporting date, and the amounts of income and expenses for the reporting period. Estimates and assumptions require management judgement based on historical experience, current and expected economic conditions, and any other available information. Actual results may differ from such estimates. Key estimates and assumptions made by the Group's management are disclosed below or elsewhere in the notes to the consolidated financial statements if applicable.

The most significant areas requiring the use of management estimates and assumptions are as follows:
- useful economic life of property, plant and equipment;
- impairment of non-financial assets;
- decommissioning obligations and environmental provisions;
- income taxes.

Useful economic life of property, plant and equipment

The factors that may affect estimates of the useful economic life of mining assets include the following:
- changes in proved and probable ore reserves;
- the grade of ore reserves changing significantly over 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;
- changes in capital, operating, mining, processing and decommissioning costs, discount rates and foreign exchange rates that could possibly adversely affect the economic viability of ore reserves.

The useful economic life of non-mining property, plant and equipment is reviewed by the management periodically, based on the current condition of the assets and the estimated period during which they will continue to bring economic benefits 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 in full or in part. For the purpose of the impairment test, the assets that do not generate independent cash flows are allocated to an appropriate cash-generating unit. Management applies judgement in allocating assets that do not generate independent cash flows to appropriate cash-generating units, and in estimating the timing and amounts of the underlying cash flows. Subsequent changes to the assets allocation to cash generating units or the timing and amounts of cash flows may affect the recoverable amount 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 the management's understanding of the current legal requirements in the various jurisdictions in which it operates, terms of licence agreements and internally generated engineering estimates. Decommissioning obligations and environmental provisions are measured at present value using inflation and discount rates at the date of respective cash outflows.

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 risks and uncertainties surrounding the present obligation, including probable compensations under civil lawsuits and costs to be incurred under corresponding environmental programmes. Where it is possible to determine a reliable timing of the environmental obligations, estimates are based on the discounted value of cash flows required to settle those obligations, otherwise the management uses the best estimate of the future cash outflows related to the environmental obligations.

Actual costs incurred in future periods may differ materially from the amounts of the provisions. Additionally, future changes to environmental laws and regulations, life of mine estimates, discount rates, court decisions and government actions may affect the carrying amount of these provisions.

Income taxes

The Group is subject to income taxes in numerous jurisdictions. Significant judgement is required in determining provisions for income taxes paid in various jurisdictions due to the complexity of legal frameworks. There are many transactions and calculations for which the ultimate tax determination is uncertain. The Group recognises provisions for taxes arising from tax audits based on estimates of whether additional taxes will be due. Where, following the tax disputes, the final tax amount differs from the amounts that were initially recognised, such differences are recognised in the consolidated financial statements for the period when such determination is made.

The carrying amount of deferred tax assets is reviewed at each reporting date and adjusted to the extent that it is probable that sufficient taxable income will be available to enable full or partial utilisation of the deferred tax asset.

Various factors are considered when assessing the probability of the future utilisation of deferred tax assets, including past operating results, the Group's operational plan, expiration of tax losses carried forward, and tax planning strategies. If actual results differ from these estimates or if these estimates are to be adjusted in future periods, the financial position and financial results of the Group may be affected.

6. Segments

Reportable segments are based on internal reports on components of the Group that are regularly reviewed by the Management Board.

Management has determined the following reportable segments:
- GMK Group segment includes main mining, processing and metallurgy operations as well as transport services, energy, repair and maintenance services located on Taimyr Peninsula. GMK Group metal sales to external customers include metal volumes produced from semi-products purchased from South cluster, Kola Division and GRK Bystrinskoye segments. Intersegment revenue from metal sales includes primarily sale of semi-products to Kola division for further processing. Metal sales to external customers include an approximately equal portion of base and precious metals sales in 2023 and 2022, while in 2021 the share of base metals sales did not exceed 45%. GMK Group's intersegment other sales include revenue from metal processing services provided to other segments. GMK Group's other sales to external customers primarily include revenue from energy and utilities services provided on Taimyr Peninsula;
- South cluster segment includes certain ore mining and processing operations located on Taimyr Peninsula. Intersegment revenue from metal sales includes sale of semi-products to the GMK Group for further processing. The South cluster segment revenue from other sales includes intersegment ore processing services under tolling arrangements provided to the GMK Group segment;
- During 2023 the Group revised the composition of the reporting segments based on the management's approach to segments' supervision; information for 2022 and 2021 was recalculated accordingly. The Group has identified the following activities as part of the new segment "Kola Division": mining and processing operations, metallurgy and subsequent processing of metal semi-products, as well as energy and utilities services and mineral exploration activities on the territory of Kola Peninsula. Kola Division segment sells metals to external customers, including metals produced from semi-products purchased from the GMK Group segment. These metal sales include in approximately equal portions base and precious metals sales. Metal sales to other segments include sales of semi-products to the GMK Group segment for further processing. Other sales of Kola Division segment include metal processing services provided to other segments of the Group, as well as energy and utilities services provided to external customers on Kola Peninsula;
- GRK Bystrinskoye segment includes ore mining and processing operations located in the Zabaikalsky Territory of the Russian Federation. Approximately 50% of the metal sales to external customers in 2021-2023 were base metal sales, the rest of the metal sales included an approximately equal portion of precious and other metals sales in 2022-2023 and mainly precious metal sales in 2021;
- Other mining segment includes certain other mining and exploration activities located in Russia and abroad;
- Other non-metallurgical segment includes other trading operations, transport services, supply chain management, energy and utility, research and other activities located in Russia and abroad and resale of third-party refined metal products. Metal sales to external customers include mainly base metals sales in 2023 and 2022 and approximately equal portion of base and precious metals sales in 2021. In 2021 the Other non-metallurgical segment also included resale of 50% of metal semi-products produced by Nkomati. Other sales of the Other non-metallurgical segment primarily

included revenue from fuel sales, freight sea transportation services and airport services for 2023 (revenue from passenger and freight air transportation services and fuel sales for 2022 and 2021).

Corporate activities of the Group do not represent an operating segment, include primarily the 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;
- balances of 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 2023, 2022 and 2021, respectively.

For the year ended 31 December 2023	GMK Group	South cluster	Kola division	GRK Bystrinskoye	Other mining	Other non-metal-lurgical	Elimi nations	Total
REVENUE FROM EXTERNAL CUSTOMERS								
Metal sales	5,171	–	7,354	1,160	–	17	–	13,702
Other sales	250	4	31	2	–	420	–	707
INTERSEGMENT REVENUE								
Metal sales	4,742	916	1,009	128	–	47	(6,842)	–
Other sales	325	146	2	50	–	580	(1,103)	–
TOTAL REVENUE	**10,488**	**1,066**	**8,396**	**1,340**	**–**	**1,064**	**(7,945)**	**14,409**
Segment EBITDA	3,641	484	2,254	963	(12)	(13)	343	7,660
Unallocated								(776)
CONSOLIDATED EBITDA								**6,884**
Depreciation and amortisation								(1,165)
Impairment of non-financial assets, net								(179)
Finance costs, net								(567)
Foreign exchange loss, net								(1,512)
Income from investments and gain from disposal of subsidiaries								73
PROFIT BEFORE TAX								**3,534**
OTHER MATERIAL CASH AND NON-CASH ITEMS								
Purchase of property, plant and equipment and intangible assets	2,303	248	248	65	9	165	–	3,038
Depreciation and amortisation	739	56	162	118	–	90	–	1,165
Impairment of non-financial assets/ (reversal of impairment)	67	9	28	1	(1)	75	–	179
Change in provisions and allowances	11	(1)	10	–	5	1	51	77

For the year ended 31 December 2022	GMK Group	South cluster	Kola division	GRK Bystrinskoye	Other mining	Other non-metal-lurgical	Elimi nations	Total
REVENUE FROM EXTERNAL CUSTOMERS								
Metal sales	5,213	–	9,297	1,160	–	403	–	16,073
Other sales	246	5	52	1	–	499	–	803
INTERSEGMENT REVENUE								
Metal sales	6,405	728	1,538	135	–	3	(8,809)	–
Other sales	378	239	2	29	1	651	(1,300)	–
TOTAL REVENUE	**12,242**	**972**	**10,889**	**1,325**	**1**	**1,556**	**(10,109)**	**16,876**
Segment EBITDA	4,316	450	4,071	934	(11)	8	(7)	9,761
Unallocated								(1,064)
CONSOLIDATED EBITDA								**8,697**
Depreciation and amortisation								(1,026)
Impairment of non-financial assets, net								(90)
Finance costs, net								(493)
Foreign exchange gain, net								251
Income from investments and loss from disposal of subsidiaries								40
PROFIT BEFORE TAX								**7,379**
OTHER MATERIAL CASH AND NON-CASH ITEMS								
Purchase of property, plant and equipment and intangible assets	3,307	298	379	72	10	232	–	4,298
Depreciation and amortisation	741	57	48	148	–	32	–	1,026
Impairment of non-financial assets/(reversal of impairment)	72	4	2	(1)	4	9	–	90
Change in provisions and allowances	198	–	13	2	3	1	19	236

For the year ended 31 December 2021	GMK Group	South cluster	Kola division	GRK Bystrinskoye	Other mining	Other non-metal-lurgical	Elimi nations	Total
REVENUE TO EXTERNAL CUSTOMERS								
Metal sales	6,480	–	8,793	1,200	28	602	–	17,103
Other sales	188	1	34	3	–	523	–	749
INTERSEGMENT REVENUE								
Metal sales	4,852	618	1,188	109	–	–	(6,767)	–
Other sales	316	148	1	34	–	407	(906)	–
TOTAL REVENUE	**11,836**	**767**	**10,016**	**1,346**	**28**	**1,532**	**(7,673)**	**17,852**
Segment EBITDA	5,456	397	3,761	1,076	(16)	11	772	11,457
Unallocated								(945)

For the year ended 31 December 2021	GMK Group	South cluster	Kola division	GRK Bystrinskoye	Other mining	Other non-metal-lurgical	Elimi nations	Total
Consolidated EBITDA								10,512
Depreciation and amortisation								(928)
Impairment of non-financial assets, net								(48)
Finance costs, net								(279)
Foreign exchange loss, net								(53)
Income from investments and gain from disposal of subsidiaries								81
Profit before tax								9,285
OTHER MATERIAL CASH AND NON-CASH ITEMS								
Purchase of property, plant and equipment and intangible assets	2,002	304	232	62	12	152	–	2,764
Depreciation and amortisation	622	30	97	122	1	56	–	928
(Reversal of impairment)/ impairment of non-financial assets	(101)	–	137	2	–	10	–	48
Change in provisions and allowances	760	6	19	1	–	–	110	896

The following tables present assets and liabilities of the Group's reportable segments at 31 December 2023, 2022 and 2021, respectively.

For the year ended 31 December 2023	GMK Group	South cluster	Kola division	GRK Bystrinskoye	Other mining	Other non-metal-lurgical	Elimi nations	Total
Intersegment assets	1,618	196	1,308	173	–	171	(3,466)	–
Segment assets	14,326	965	3,728	1,252	51	1,610	(731)	21,201
TOTAL SEGMENT ASSETS	**15,944**	**1,161**	**5,036**	**1,425**	**51**	**1,781**	**(4,197)**	**21,201**
Unallocated								2,379
TOTAL ASSETS								**23,580**
Intersegment liabilities	552	30	851	32	1	2,000	(3,466)	–
Segment liabilities	2,909	243	415	125	64	364	–	4,120
TOTAL SEGMENT LIABILITIES	**3,461**	**273**	**1,266**	**157**	**65**	**2,364**	**(3,466)**	**4,120**
Unallocated								11,865
TOTAL LIABILITIES								**15,985**

For the year ended 31 December 2022	GMK Group	South cluster	Kola division	GRK Bystrinskoye	Other mining	Other non-metal-lurgical	Elimi nations	Total
Intersegment assets	1,345	143	2,085	133	–	103	(3,809)	–
Segment assets	15,446	1,117	4,869	1,546	55	1,786	(1,092)	23,727
TOTAL SEGMENT ASSETS	**16,791**	**1,260**	**6,954**	**1,679**	**55**	**1,889**	**(4,901)**	**23,727**
Unallocated								2,068

For the year ended 31 December 2022	GMK Group	South cluster	Kola division	GRK Bystrinskoye	Other mining	Other non-metal-lurgical	Elimi nations	Total
TOTAL ASSETS								**25,795**
Intersegment liabilities	503	25	715	4	1	2,561	(3,809)	–
Segment liabilities	3,606	352	568	161	65	320	–	5,072
TOTAL SEGMENT LIABILITIES	**4,109**	**377**	**1,283**	**165**	**66**	**2,881**	**(3,809)**	**5,072**
Unallocated								12,156
TOTAL LIABILITIES								**17,228**

For the year ended 31 December 2021	GMK Group	South cluster	Kola division	GRK Bystrinskoye	Other mining	Other non-metal-lurgical	Elimi nations	Total
Intersegment assets	804	60	316	39	–	60	(1,279)	–
Segment assets	11,605	827	3,700	1,508	98	1,262	(1,299)	17,701
TOTAL SEGMENT ASSETS	**12,409**	**887**	**4,016**	**1,547**	**98**	**1,322**	**(2,578)**	**17,701**
Unallocated								5,734
TOTAL ASSETS								**23,435**
Intersegment liabilities	205	32	740	7	1	294	(1,279)	–
Segment liabilities	2,676	250	643	135	72	1,318	–	5,094
TOTAL SEGMENT LIABILITIES	**2,881**	**282**	**1,383**	**142**	**73**	**1,612**	**(1,279)**	**5,094**
Unallocated								13,553
TOTAL LIABILITIES								**18,647**

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		
	2021	2022	2023
Asia	4,688	4,966	7,318
Europe	9,036	7,522	3,312
Russian Federation and CIS	732	1,250	1,680
North and South America	2,647	2,335	1,392
	17,103	**16,073**	**13,702**

Revenue from metal sales for the year ended 31 December 2023 included net gain of USD0.2 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 2022: net loss in the amount of USD (64) million and for the year ended 31 December 2021: net loss in the amount of USD (41) million).

For the year ended 31 December 2023 metal revenue included net loss of USD (47) million from price adjustments in respect of certain provisionally priced contracts, primarily for sale of nickel and palladium (for the year ended 31 December

2022 primarily for sale of nickel: net gain in the amount of USD35 million and for the year ended 31 December 2021 primarily for sale of rhodium and other metals: net gain in the amount of USD25 million).

8. Cost of metal sales

	For the year ended 31 December		
	2021	2022	2023
CASH OPERATING COSTS			
Labour	1,406	2,123	1,857
Materials and supplies	715	1,069	971
Mineral extraction tax and other levies	627	1,192	873
Third party services	410	784	659
Transportation expenses	130	257	216
Fuel	122	166	157
Export customs duties	442	–	121
Electricity and heat energy	118	136	115
Purchases of raw materials and semi-products	95	33	33
Purchases of refined metals for resale	581	437	5
Other costs	228	326	282
Total cash operating costs	**4,874**	**6,523**	**5,289**
Depreciation and amortisation	843	1,015	939
Decrease/(increase) in metal inventories	(660)	(1,448)	94
TOTAL	**5,057**	**6,090**	**6,322**

9. General and administrative expenses

	For the year ended 31 December		
	2021	2022	2023
Staff costs	577	833	684
Third party services	191	230	147
Depreciation and amortisation	83	107	110
Property tax and other miscellaneous taxes	76	94	75
Transportation expenses	18	9	6
Other	44	80	71
TOTAL	**989**	**1,353**	**1,093**

10. Selling and distribution expenses

	For the year ended 31 December		
	2021	2022	2023
Transportation expenses	81	118	132
Export customs duties	–	–	43
Marketing expenses	48	52	29
Staff costs	23	29	27
Other	39	56	54
TOTAL	**191**	**255**	**285**

11. Other operating expenses, net

	For the year ended 31 December		
	2021	2022	2023
Social expenses (Note 27)	1,048	407	205
Change in decommissioning obligations (Note 26)	(5)	12	53
Change in other allowances	(3)	43	40
Loss on disposal of property, plant and equipment	35	70	36
Expenses on industrial incidents response	69	35	10
Change in provision on production and mining facilities shut down (Note 26)	(3)	14	(1)
Change in environmental provisions (Note 26)	176	93	(32)
Other, net	(32)	4	(42)
TOTAL	**1,285**	**678**	**269**

12. Finance costs, net

	For the year ended 31 December		
	2021	2022	2023
Interest expense, net of amounts capitalised	225	330	337
Unwinding of discount on provisions	59	185	147
Fair value loss/ (gain) on the cross-currency interest rate swap contracts	(68)	18	60
Interest expense on lease liabilities	15	16	35
Changes in fair value of other current liabilities	66	–	–
Income received as a result of early debt repayment	–	(172)	–
(Gain)/loss from currency conversion operations	(24)	111	(5)
Other, net	6	5	(7)
TOTAL	**279**	**493**	**567**

13. Income tax expense

	For the year ended 31 December		
	2021	2022	2023
Current income tax expense	1,695	1,306	966
Deferred tax (benefit)/expense	616	219	(302)
TOTAL INCOME TAX EXPENSE	**2,311**	**1,525**	**664**

Current income tax expense for the year ended 31 December 2023 includes USD (8) million related to previous tax periods (31 December 2022: USD (15) million and 31 December 2021: USD (2) million).

In August 2023 Federal Law No. 414-FZ introduced a windfall tax on excess profits. The base windfall tax rate is 10% of the difference between average taxable profits for 2021-2022 and taxable profits for 2018-2019. The amount of tax expense can be reduced to an effective rate of 5% subject to the conditions provided by the Federal Law No. 414-FZ (if the payment is made during the period from 1 October 2023 to 30 November 2023 and it is not subsequently claimed back by a taxpayer). In October 2023 the Group paid using an early payment option and recognised in Current income tax expense a windfall tax on excess profits in the amount of RUB8 198 million (USD84 million at the exchange rate on the date of payment).

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 recognised in the consolidated income statement is as follows:

	For the year ended 31 December		
	2021	2022	2023
Profit before tax	**9,285**	**7,379**	**3,534**
Income tax at statutory rate of 20%	1,857	1,476	707
Non-deductible social expenses	177	67	48
Changes in unrecognised deferred tax assets	15	36	28
Effect of different tax rates of subsidiaries	(45)	(13)	(1)
Income tax provision related to the compensation of environmental damages	460	–	–
Tax effect of other provisions and liabilities	–	40	–
Tax effect of other permanent differences	(153)	(81)	(202)
Windfall tax	–	–	84
TOTAL INCOME TAX EXPENSE	**2,311**	**1,525**	**664**

In 2023 tax effect of other permanent differences was mailnly represented by an income tax rate credit applicable to Group's subsidiaries (in 2022: was mainly represented by an income tax rate credit applicable to a Group's subsidiary and was partially offset, in approximately equal parts, by non-deductible expenses of Group's foreign subsidiaries and non-deductible loss on disposal of investments in subsidiaries in the total amount of USD100 million and in 2021: was represented mainly by the income tax rate credit applicable to a Group's subsidiary).

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 2022	Recognised in income statement	Recognised in other compre-hensive income	Disposed on disposal of subsidiaries	Effect of translation to presentation currency	At 31 December 2023
Property, plant and equipment,right-of use assets	**593**	170	–	(3)	(147)	**613**
Inventories	**(203)**	94	–	9	(9)	**(109)**
Trade and other receivables	**(4)**	(91)	–	–	62	**(33)**
Decommissioning obligations	**(101)**	(5)	–	–	23	**(83)**
Environmental provisions	**(3)**	2	–	–	1	**–**
Other provisions	**(58)**	–	–	–	12	**(46)**
Loans and borrowings, trade and other payables,lease liabilities	**(117)**	(491)	–	–	82	**(526)**
Other assets	**24**	6	–	3	3	**36**
Other liabilities	**59**	7	(8)	–	(10)	**48**
Tax loss carry-forwards	**(115)**	6	–	–	16	**(93)**
NET DEFERRED TAX LIABILITIES/(ASSETS)	**75**	**(302)**	**(8)**	**9**	**33**	**(193)**

	At 31 December 2021	Recognised in income statement	Recognised in other compre-hensive income	Disposed on disposal of subsidiaries	Effect of translation to presentation currency	At 31 December 2022
Property, plant and equipment, right-of use assets	**490**	110	–	(15)	8	**593**
Inventories	**(174)**	15	–	–	(44)	**(203)**
Trade and other receivables	**3**	(28)	–	–	21	**(4)**
Decommissioning obligations	**(115)**	16	–	–	(2)	**(101)**
Environmental provisions	**(6)**	5	–	–	(2)	**(3)**
Other provisions	**(89)**	30	–	–	1	**(58)**
Loans and borrowings, trade and other payables, lease liabilities	**(145)**	58	–	21	(51)	**(117)**
Other assets	**15**	8	–	–	1	**24**
Other liabilities	**33**	24	7	(5)	–	**59**
Tax loss carry-forwards	**(106)**	(19)	–	(1)	11	**(115)**
NET DEFERRED TAX (ASSETS)/ LIABILITIES	**(94)**	**219**	**7**	**–**	**(57)**	**75**

	At 1 January 2021	Recognised in income statement	Recognised in other compre-hensive income	Effect of translation to presentation currency	At 31 December 2021
Property, plant and equipment, right-of use assets	**389**	104	–	(3)	**490**
Inventories	**(448)**	285	–	(11)	**(174)**
Trade and other receivables	**6**	(3)	–	–	**3**
Decommissioning obligations	**(94)**	(22)	–	1	**(115)**
Environmental provisions	**(416)**	407	–	3	**(6)**
Other provisions	**(51)**	(38)	–	–	**(89)**
Loans and borrowings, trade and other payables, lease liabilities	**(117)**	(37)	–	9	**(145)**
Other assets	**21**	6	–	(12)	**15**
Other liabilities	**21**	11	2	(1)	**33**
Tax loss carry-forwards	**(23)**	(97)	–	14	**(106)**
NET DEFERRED TAX (ASSETS)/ LIABILITIES	**(712)**	**616**	**2**	**–**	**(94)**

Accounting for foreign exchange differences for tax purposes due to changes in legislation is disclosed in Note 33.

Certain deferred tax assets and liabilities were offset as at 31 December 2021 to the extent they related to Group entities which were part of the consolidated taxpayers group in 2021. At 31 December 2022 and 2023 deferred tax assets and liabilities are offset only to the extent they relate to the same legal entity within the Group following the expiry of the agreement on the consolidated taxpayers group on 1 January 2023.

Deferred tax balances presented in the consolidated statement of financial position were as follows:

	At 31 December		
	2021	2022	2023
Deferred tax liabilities	73	415	142
Deferred tax assets	(167)	(340)	(335)
NET DEFERRED TAX (ASSETS)/LIABILITIES	**(94)**	**75**	**(193)**

Unrecognised deferred tax assets

Deferred tax assets that have not been recognised were as follows:

	At 31 December		
	2021	2022	2023
Deductible temporary differences	194	150	144
Tax loss carry-forwards	201	124	93
TOTAL	**395**	**274**	**237**

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 2021 a deferred tax asset of USD135 million related to the previous years tax losses on disposal of shares of OJSC "Third Generation Company of the Wholesale Electricity Market" was not recognised as it had occurred before the Company joined the consolidated taxpayers group. As the agreement that established the consolidated taxpayers group expired on 1 January 2023 and taking into account the amount of available tax losses potentially recoverable by 1 January 2025, the Group estimated this unrecognised deferred tax asset in the amount of USD38 million at 31 December 2022.

As of 31 December 2023, the Group has reassessed the probability for recovery of the above deferred tax asset taking into account the conditions stipulated by Federal Law No. 420-FZ dated 28 December 2013 and recognised it in full.

At 31 December 2023 unrecognised deferred tax assets in the amount of USD93 million related to other tax loss carry-forwards may be carried forward indefintely without expiry due to specific rules stated by art. 283 "Carry-Forward Of Losses" of the Tax code of the Russian Federation (31 December 2022: USD86 million and31 December 2021: USD66 million).

At 31 December 2023, the Group did not recognise a deferred tax liability in respect of taxable temporary differences of USD3,382 million (31 December 2022: USD6,611 million and 31 December 2021: USD3,499 million) associated with investments in subsidiaries, because management believes that it is able to control the timing of reversal of such differences and does not expect their reversal in foreseeable future.

On 20 December 2021, OECD has published Model rules for implementation of global minimum top-up tax for multinational enterprises (GloBE\Pillar Two), aimed to resolve challenges with global tax base erosion, arising from digitalization and globalization of the economy. Under these rules, multinational enterprises will have to pay additional income tax arising in the jurisdictions in which they operate, if income in those jurisdictions is taxed at an effective tax rate below 15%. To this end, Pillar Two rules need to be adopted at the level of national tax legislation.

In 2023, the International Accounting Standards Board (IASB) published International Tax Reform – Pillar Two Model Rules (Amendments to IAS 12 Income Taxes). The Group applies a temporary exeption from recognising and disclosing deferred tax relating to Pillar Two under the Amendments to IAS 12 Income Taxes.

The Group operates in a number of jurisdictions where the new tax legislation pertaining to the global minimum tax (Pillar Two) was enacted in 2023 and applies for tax periods beginning on 1 January 2024. As the global minimum tax (Pillar Two) rules are not applicable to transactions in 2023, there is no impact on the Group's consolidated financial statements for the year ended 31 December 2023.

The Group is currently assessing the potential impact of the new Pillar Two tax legislation on its operations.

14. Property, plant and equipment

		Non-mining assets and right-of-use assets				
	Mining assets and mine development cost	Buildings, facilities and infrastructure	Machinery, equipment and transport	Other	Capital construction-in-progress	Total
COST						
Balance at 1 January 2021	**9,273**	**3,188**	**3,883**	**272**	**1,663**	**18,279**
Additions	1,237	–	–	–	1,750	2,987
Transfers	–	302	465	26	(793)	–
Change in decommissioning provision	134	21	–	–	–	155
Additions of right-of-use assets and remeasurement of the lease liability	–	7	18	8	–	33
Disposals	(68)	(55)	(107)	(51)	(17)	(298)
Other	(3)	(6)	(2)	(1)	–	(12)
Effect of translation to presentation currency	(82)	(21)	(22)	(2)	(21)	(148)
BALANCE AT 31 DECEMBER 2021	**10,491**	**3,436**	**4,235**	**252**	**2,582**	**20,996**
Additions	1,703	–	–	–	2,756	4,459
Transfers	–	437	787	160	(1,384)	–
Change in decommissioning provision	(34)	(27)	–	–	–	(61)
Additions of right-of-use assets and remeasurement of the lease liability	–	125	27	15	–	167
Disposals	(87)	(79)	(179)	(11)	(22)	(378)
Other	21	4	16	(28)	(13)	–
Effect of translation to presentation currency	410	140	135	6	129	820
BALANCE AT 31 DECEMBER 2022	**12,504**	**4,036**	**5,021**	**394**	**4,048**	**26,003**
Additions	1,556	–	–	–	2,102	3,658
Transfers	–	376	484	98	(958)	–
Change in decommissioning provision	(140)	17	–	–	–	(123)
Additions of right-of-use assets and remeasurement of the lease liability	–	368	27	10	–	405
Disposals	(99)	(22)	(142)	(8)	(23)	(294)
Other	(1)	14	14	(42)	12	(3)
Effect of translation to presentation currency	(2,796)	(894)	(1,025)	(91)	(913)	(5,719)
BALANCE AT 31 DECEMBER 2023	**11,024**	**3,895**	**4,379**	**361**	**4,268**	**23,927**

	Mining assets and mine development cost	Non-mining assets and right-of-use assets: Buildings, facilities and infrastructure	Machinery, equipment and transport	Other	Capital construction-in-progress	Total
ACCUMULATED DEPRECIATION AND IMPAIRMENT						
BALANCE AT 1 JANUARY 2021	**(3,304)**	**(1,678)**	**(2,268)**	**(139)**	**(128)**	**(7,517)**
Charge for the year	(479)	(179)	(357)	(24)	–	(1,039)
Disposals	57	51	89	32	5	234
Impairment loss, net	(123)	75	13	(2)	(11)	(48)
Other	3	4	1	2	–	10
Effect of translation to presentation currency	40	8	12	1	2	63
BALANCE AT 31 DECEMBER 2021	**(3,806)**	**(1,719)**	**(2,510)**	**(130)**	**(132)**	**(8,297)**
Charge for the year	(582)	(183)	(424)	(48)	–	(1,237)
Disposals	77	65	91	7	9	249
Impairment loss, net	(50)	(17)	(12)	2	(13)	(90)
Other	(2)	(2)	(5)	7	–	(2)
Effect of translation to presentation currency	(172)	(93)	(91)	(4)	(2)	(362)
BALANCE AT 31 DECEMBER 2022	**(4,535)**	**(1,949)**	**(2,951)**	**(166)**	**(138)**	**(9,739)**
Charge for the year	(498)	(214)	(390)	(65)	–	(1,167)
Disposals	90	19	107	8	19	243
Impairment loss, net	(48)	(22)	(46)	(1)	(60)	(177)
Other	1	–	(3)	3	–	1
Effect of translation to presentation currency	1,002	418	604	38	31	2,093
BALANCE AT 31 DECEMBER 2023	**(3,988)**	**(1,748)**	**(2,679)**	**(183)**	**(148)**	**(8,746)**
CARRYING VALUE						
AT 31 DECEMBER 2021	**6,685**	**1,717**	**1,725**	**122**	**2,450**	**12,699**
AT 31 DECEMBER 2022	**7,969**	**2,087**	**2,070**	**228**	**3,910**	**16,264**
AT 31 DECEMBER 2023	**7,036**	**2,147**	**1,700**	**178**	**4,120**	**15,181**

Capitalised borrowing costs for the year ended 31 December 2023 amounted to USD 439 million (for the year ended 31 December 2022: USD277 million and for the year ended 31 December 2021: USD95 million). The capitalisation rate used to determine the amount of borrowing costs was 7.26% per annum for the year ended 31 December 2023 (for the year ended 31 December 2022: 5.05% and for the year ended 31 December 2021: 3.12%).

At 31 December 2023 mining assets and mine development cost included USD3,097 million of mining assets under development (31 December 2022: USD3,738 million and 31 December 2021: USD2,560 million).

At 31 December 2023 non-mining assets included USD29 million of investment property (31 December 2022: USD39 million and 31 December 2021: USD38 million).

Impairment

As at 31 December 2023, the Group performed impairment analysis of its assets and did not identify any indicators of economic impairment of assets, except for the assets described below.

In 2020 a federal law set a 3.5 times increase of mineral extraction tax on the types of ores mined by the Group. The Group assessed this change in the tax legislation as an indicator for impairment of KGMK ore mining and processing operation. The recoverable amount of this cash-generating unit (CGU) was determined based on the value-in-use calculations. As a result, KGMK ore mining and processing assets in the amount of USD264 million were fully impaired at 31 December 2020.

Since 2021 the Group developed and continues to implement optimization plans in order to increase KGMK ore mining and processing operations' cash flows and mitigate the negative impact of higher mineral extraction tax.

In April 2023, the Group announced reconfiguration of its mining operations in Kola peninsula in order to increase efficiency and accelerate the development of mining capacities, as well as termination of a certain outdated mining facility till 2024. As a result, the Group revised the amount of the decommissioning obligations and recognised an increase in the provisions for the reconfiguration of mining facilities (included in Other provisions – See Note 26).

At 31 December 2023, 2022 and 2021, the Group did not identify indicators of an increase of the recoverable amount of this CGU. For the year ended 31 December 2023 the Group recognised further impairment of additions to non-current assets in the amount of USD28 million within Impairment of non-financial assets in the consolidated income statement (for the year ended 31 December 2022: USD2 million and for the year ended 31 December 2021: USD137 million).

The most significant estimates and assumptions used in determination of value in use at 31 December 2023, 2022 and 2021 were 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 2048. Measurements were performed based on discounted cash flows expected to be generated by a separate cash-generating unit;
- Management used adjusted commodities prices 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 are in general consistent with external sources of information. As of December 2023, forecast inflation rate was within 2.1-5.1% (31 December 2022: 2.5-6.9% and 31 December 2021: 3.0-4.6%), USD/RUB exchange rates were within the range of 92.00-114.76 (31 December 2022: 76.68-89.79 and 31 December 2021: 72.23-84.76);
- A pre-tax nominal discount rate of 22.3% (31 December 2022: 19.1% and 31 December 2021: 12.2%) was calculated based on weighted average cost of capital and reflects management's estimates of the risks specific to the cash-generating unit.

In 2015 the Group recognised the gas extraction assets as a separate cash-generating unit, with its value in use determined using a discounted cash flow model at each subsequent reporting date. During the year ended 31 December 2021 due to change in circumstances and changes in the operating environment the Group reviewed the aggregation of gas extraction assets into a separate cash-generating unit. As a result, these assets were included in a cash-generating unit, which includes operations of the core production assets in Norilsk. The Group did not identify indicators of impairment in respect of the above cash-generating unit and reversed the previously recognised impairment losses from the gas extraction assets, net of respective accumulated depreciation that would have been accrued had no impairment been recognised, included in reversal of impairment of non-financial assets, in the consolidated income statement in the amount of USD115 million for the year ended 31 December 2021.

During the year ended 31 December 2023, the Group identified indicators of impairment and performed the impairment analysis of assets related to tourism and sports development projects in the regions where the Group operates. As a result, the recoverable amount of these assets was revised and the impairment loss in the amount of USD53 million was recognised in Impairment of non-financial assets in the consolidated income statement for the year ended 31 December 2023.

For the year ended 31 December 2023, the Group recognised impairment loss in respect of certain individual assets in the amount of USD98 million (for the year ended 31 December 2022: impairment loss USD88 million and for the year ended 31 December 2021: impairment loss USD26 million).

Right-of-use assets

	Buildings, facilities and infrastructure	Machinery, equipment and transport	Other	Total
Balance at 1 January 2021	**115**	**111**	**8**	**234**
Additions of right-of-use assets and remeasurement of the lease liability	7	18	8	33
Depreciation	(30)	(21)	(2)	(53)
BALANCE AT 31 DECEMBER 2021	**92**	**108**	**14**	**214**
Additions of right-of-use assets and remeasurement of the lease liability	125	27	15	167
Disposals (Note 21)	(4)	(69)	(3)	(76)
Depreciation	(34)	(8)	(4)	(46)
Effect of translation to presentation currency	(9)	(22)	(2)	(33)
BALANCE AT 31 DECEMBER 2022	**170**	**36**	**20**	**226**
Additions of right-of-use assets and remeasurement of the lease liability	368	27	10	405
Disposals	(1)	–	–	(1)
Impairment loss, net	(2)	–	–	(2)
Depreciation	(36)	(6)	(6)	(48)
Effect of translation to presentation currency	(74)	(8)	(5)	(87)
BALANCE AT 31 DECEMBER 2023	**425**	**49**	**19**	**493**

15. Investments in significant subsidiaries

Subsidiaries by operating segments	Country	Nature of business	Effective % held		
			31 December 2021	31 December 2022	31 December 2023
GMK GROUP					
JSC “Norilsky Kombinat”	Russian Federation	Rental of property	100	100	100
JSC “Norilskgazprom”	Russian Federation	Gas extraction	100	100	100
JSC “Norilsktransgaz”	Russian Federation	Gas transportation	100	100	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
SOUTH CLUSTER					
LLC “Medvezhyi ruchey”	Russian Federation	Ore mining and processing	100	100	100
KOLA DIVISION					
JSC “Kolskaya GMK”	Russian Federation	Mining and metallurgy	100	100	100
LLC “Pechengastroy”	Russian Federation	Repairs	100	100	100
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 Metal Trade (Shanghai)	China	Distribution	100	100	100
Norilsk Nickel USA, Inc.	USA	Distribution	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	Air company	100	-	-
OTHER MINING					
Nkomati Nickel Mine	Republic of South Africa	Ore mining and processing	50	50	50

16. Investments in associates and joint ventures

On 18 December 2023, the Group acquired 50% in Russian Stainless Company (“RSC”) which is implementing a project for the production of flat rolled products from stainless steel in the Russian Federation.

On 28 September 2023, the Group cofounded joint venture Vareyneftegaz LLC with a 50% interest. The company engages in geological survey, exploration and production of hydrocarbons in the Russian Federation.

On 11 July 2022, the Group cofounded joint venture Polar Lithium LLC with a 50% interest. The company develops the Kolmozerskoye lithium deposit in the Russian Federation.

The carrying amount of investments in associates and joint ventures is presented in the table below:

	Investments in joint ventures				
	RSC (50%)	Polar Lithium LLC (50%)	Vareynefte-gaz LLC (50%)	Investments in associates	Total
AT 1 JANUARY 2021	**–**	**–**	**–**	**14**	**14**
Investments in associates and joint ventures	–	–	–	21	21
Share of profits/(losses) of associates and joint ventures	–	–	–	(18)	(18)
AT 31 DECEMBER 2021	**–**	**–**	**–**	**17**	**17**
Investments in associates and joint ventures	–	–	–	12	12
Share of profits/(losses) of associates and joint ventures	–	–	–	(17)	(17)
Disposals	–	–	–	(8)	(8)
Effect of translation to presentation currency	–	–	–	4	4
AT 31 DECEMBER 2022	**–**	**–**	**–**	**8**	**8**
Investments in associates and joint ventures	55	15	1	–	71
Share of profits/(losses) of associates and joint ventures	–	–	–	(1)	(1)
Effect of translation to presentation currency	–	–	–	(2)	(2)
AT 31 DECEMBER 2023	**55**	**15**	**1**	**5**	**76**

17. Other taxes

	At 31 December		
	2021	2022	2023
TAXES RECEIVABLE			
Value added tax recoverable	410	584	392
Advance payments of other taxes	9	10	17
	419	**594**	**409**
Less: impairment of value added tax recoverable	(7)	(8)	(5)
Other taxes receivable and other taxes payable subject to offset on a unified taxpayer account	–	(109)	(60)
OTHER TAXES RECEIVABLE	**412**	**477**	**344**
TAXES PAYABLE			
Social security contributions	51	135	96
Value added tax	75	112	82
Mineral extraction tax	50	78	67
Property tax	19	18	20
Other	74	105	67
Other taxes receivable and other taxes payable subject to offset on a unified taxpayer account	–	(109)	(60)
OTHER TAXES PAYABLE	**269**	**339**	**272**

Each subsidiary of the Group in the Russian Federation calculates the amount of a single tax payment payable to the budget taking into account the offset of taxes receivable and taxes payable. Other taxes receivable and other taxes payable are presented on a net basis for each Russian subsidiary of the Group in the consolidated statement of financial position. Income tax payable or income tax receivable of each subsidiary of the Group are presented separately in the consolidated statement of financial position in accordance with IFRS.

Taxes receivable and taxes payable including income tax after offset on a unified taxpayer account of each subsidiary of the Group registered in the Russian Federation, are presented below.

	At 31 December		
	2021	2022	2023
OTHER TAXES RECEIVABLE	**412**	**477**	**344**
INCOME TAX RECEIVABLE	**203**	**17**	**100**
Income tax and taxes other than income tax receivable/payable subject to offset on a unified taxpayer account	–	(9)	(42)
TAXES RECEIVABLE (INCLUDING INCOME TAX) AFTER OFFSET OF TAXES PAYABLE ON A UNIFIED TAXPAYER ACCOUNT	**615**	**485**	**402**
OTHER TAXES PAYABLE	**269**	**339**	**272**
INCOME TAX PAYABLE	**41**	**169**	**6**
Income tax and taxes other than income tax receivable/payable subject to offset on a unified taxpayer account	–	(9)	(42)
TAXES PAYABLE (INCLUDING INCOME TAX) AFTER OFFSET OF TAXES RECEIVABLE ON A UNIFIED TAXPAYER ACCOUNT	**310**	**499**	**236**

18. Inventories

	At 31 December		
	2021	2022	2023
Work-in-process and semi-products	1,572	1,870	1,640
Refined metals and other metal products	767	1,967	1,194
Less: allowance to net realisable value for finished goods and work-in-process	(78)	(81)	(79)
Total metal inventories	**2,261**	**3,756**	**2,755**
Materials and supplies	823	1,257	1,123
Less: allowance for obsolete and slow-moving items	(58)	(68)	(61)
Materials and supplies, net	**765**	**1,189**	**1,062**
INVENTORIES	**3,026**	**4,945**	**3,817**

At 31 December 2023 a part of the metal semi-product stock in the amount of USD183 million net of impairment in the amount of USD101 million was presented in other non-current assets in line with the Group's production plans (31 December 2022: USD163 million net of impairment of USD92 million and 31 December 2021: USD121 million net of impairment of USD69 million).

At 31 December 2023 the Group recognised an allowance to net realisable value in respect of metal by-products in stock in the amount of USD17 million (31 December 2022 and 31 December 2021: none).

19. Trade and other receivables

	At 31 December		
	2021	2022	2023
Trade receivables	345	675	666
Other receivables	171	250	207
	516	**925**	**873**
Less: allowance for expected credit losses	(48)	(79)	(109)
TRADE AND OTHER RECEIVABLES, NET	**468**	**846**	**764**

In 2023, 2022 and 2021, the average credit period on metal sales varied from 0 to 30 days. Trade receivables are generally non-interest bearing.

At 31 December 2023 trade and other receivables include USD500 million of accounts receivable measured at fair value through profit or loss, Level 2 of fair value hierarchy (31 December 2022: USD563 million and 31 December 2021: USD248 million). The fair value is measured using the forward market price at the reporting date corresponding to the quotation period specified in the contract.

At 31 December 2023, 2021 and 2021 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 2023 was 37 days (for the year ended 31 December 2022: 39 days and for the year ended 31 December 2021: 42 days). No interest was charged on these receivables.

At 31 December 2023 debtors with a carrying value of USD31 million (31 December 2022: USD65 million and 31 December 2021: USD109 million), were included in the Group's other receivables 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		
	2021	2022	2023
Less than 180 days	97	54	26
180-365 days	12	11	5
	109	**65**	**31**

Movement in the allowance for expected credit losses was as follows:

	At 31 December		
	2021	2022	2023
Balance at the beginning of the year	**56**	**48**	**79**
Change in allowance	2	22	54
Accounts receivable written-off	(10)	(2)	(1)
Effect of translation to presentation currency	–	11	(23)
BALANCE AT THE END OF THE YEAR	**48**	**79**	**109**

During the year ended 31 December 2023, the Group recognised allowance for expected credit losses under certain contracts with foreign equipment suppliers for the total amount of USD37 million due to low probability of recovery caused by the failure of both suppliers and guarantor banks to meet their obligations (during the year ended 31 December 2022: USD35 million).

20. Cash and cash equivalents

	At 31 December		
	2021	2022	2023
Current accounts			
• RUB	249	266	71
• USD	1,691	591	659
• CNY	14	209	653
• other	41	70	178
Bank deposits			
• RUB	2,402	74	134
• USD	1,132	584	283
• CNY	5	57	102
• other	–	–	48
Other cash and cash equivalents			
• RUB	6	3	2
• USD	7	28	5
• CNY	–	–	4
TOTAL	**5,547**	**1,882**	**2,139**

21. Disposal of subsidiaries and foreign joint operations

On 6 July 2023, the Group sold its interest in the trading subsidiary Norilsk Nickel USA, Inc. for a consideration in the amount of USD8 million. The net assets of the disposed subsidiary in the amount of USD44 million at the date of disposal primarily included refined metals stock recognised at production cost in the amount of USD29 million, as well as other assets in the amount of USD15 million. Income from disposal in the amount of USD30 million was recognised in Gain/(loss) from disposal of subsidiaries in the consolidated income statement, including the recognition of receivables for the supply of refined metals from Norilsk Nickel USA, Inc. in the amount of USD66 million. Net cash inflow from disposal of the subsidiary was recognised in the consolidated statement of cash flows.

On 25 March 2022, the Group sold its interest in the subsidiary JSC "AK "Nordstar" engaged in transportation services for a consideration of RUB1 million (USD0.02 million) resulting in a net cash outflow from disposal of the subsidiary recognised in the consolidated statement of cash flows in the line Net cash (outflow)/inflow from disposal of subsidiaries. Loss on disposal in the amount of USD110 million was recognised in the consolidated income statement for the year ended 31 December 2022.

Discontinued suspended production of the joint operations of Nkomati, the Group reclassified the foreign currency translation reserve of foreign operations to the profit or loss for the year ended 31 December 2021 in the amount of USD20 million. In October 2021, the Group received cash consideration in the amount of USD51 million and incurred associated costs in the amount of USD2 million under the settlement agreement in relation to the cancelled sale of Nkomati. The amount was presented in Disposal of foreign joint operations in the consolidated income statement and consolidated statement of cash flows for the year ended 31 December 2021

22. Share capital

Authorised and issued ordinary shares

At 31 December 2023 and 2022 the number of the Group's authorized and issued shares taking into account cancellation occurred in October 2022 amounts to 152,863,397. At 31 December 2021 the number of the Group's authorised and issued ordinary shares taking into account cancellation occurred in October 2021 was 153,654,624.

In December 2023, an extraordinary General meeting of shareholders of the Company decided to implement a 100-for-1 split of the Company's ordinary shares in order to increase their attractiveness to investors and their liquidity on the Moscow Stock Exchange.

The stock split is expected to be completed within 6 months from the date of the decision of the extraordinary General meeting of shareholders. An application for the state registration of changes to the resolution on the issue of the Company's shares will be filed with the Bank of Russia after these consolidated financial statements are issued.

On 11 August 2022, the extraordinary General meeting of shareholders of the Company decided to reduce the Company's share capital by cancelling 791,227 ordinary shares. The state registration of the amendments to the Company's Charter related to the reduction of the Company's share capital was carried out on 17 October 2022. The cancellation of treasury shares was recognised in the consolidated statement of changes in equity for the year ended 31 December 2022.

On 19 August 2021, the extraordinary General meeting of shareholders of the Company decided to reduce the Company's share capital by cancelling 4,590,852 ordinary shares. The state registration of the amendments to the Company's Charter related to the reduction of the Company's share capital was carried out on 14 October 2021. The cancellation of treasury shares was recognised in the consolidated statement of changes in equity for the year ended 31 December 2021.

On 27 April 2021, the Board of Directors of the Company decided to acquire the Company's own outstanding shares. The Company completed acquisition of 5,382,079 ordinary shares on 29 June 2021 and presented the purchase of treasury shares in the consolidated statement of changes in equity in the amount of USD2,075 million (RUB149,630 million). Cash consideration was fully paid and recognised in the consolidated statement of cash flows in the amount of USD2,068 million (RUB149,630 million) at the USD/RUB exchange rates effective on payment dates.

Earnings per share

	For the year ended 31 December		
	2021	2022	2023
BASIC AND DILUTED EARNINGS PER SHARE (US DOLLARS PER SHARE):	**41.9**	**35.7**	**15.6**

The earnings and weighted average number of outstanding shares used in the calculation of basic and diluted earnings per share are as follows:

	For the year ended 31 December		
	2021	2022	2023
PROFIT FOR THE PERIOD ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT COMPANY	**6,512**	**5,458**	**2,384**

Weighted average number of shares outstanding

	For the year ended 31 December		
	2021	2022	2023
Shares outstanding at 1 January	158,245,476	152,863,397	152,863,397
June 2021: acquisition of own shares from shareholders	(5,382,079)	–	–
Shares outstanding at 31 December	152,863,397	152,863,397	152,863,397
WEIGHTED AVERAGE NUMBER OF OUTSTANDING SHARES USED IN THE CALCULATION OF BASIC AND DILUTED EARNINGS PER SHARE	**155,502,830**	**152,863,397**	**152,863,397**

23. Non-controlling interest

At 31 December 2023, 31 December 2022 and 2021 aggregated 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		
	2021	2022	2023
Non-current assets	1,254	1,268	981
Current assets	1,061	1,774	1,537
Non-current liabilities	(66)	(88)	(72)
Current liabilities	(65)	(86)	(68)
Net assets	**2,184**	**2,868**	**2,378**
NET ASSETS ATTRIBUTABLE TO NON-CONTROLLING INTEREST	**1,093**	**1,434**	**1,189**

	For the year ended 31 December		
	2021	2022	2023
Net profit for the year	924	793	971
Other comprehensive (loss)/income for the year	(15)	90	(494)
Total comprehensive income for the year	**909**	**883**	**477**
Profit attributable to non-controlling interest	462	396	486
OTHER COMPREHENSIVE (LOSS)/INCOME ATTRIBUTABLE TO NON-CONTROLLING INTEREST	**(7)**	**45**	**(247)**

	For the year ended 31 December		
	2021	2022	2023
Cash flows from operating activities	1,083	783	737
Cash flows from/(used in) investing activities	(407)	(650)	310
Cash flows used in financing activities	(675)	(177)	(977)
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	**1**	**(44)**	**70**

24. Loans and borrowings

	Currency	Fixed or floating interest rate	Average nominal % rate During the year ended 31 December			Maturity	At 31 December		
			2021	2022	2023		2021	2022	2023
UNSECURED LOANS									
Loan agreements with contractual maturity of less than 12 months									
	RUB	floating	–	12.67%	11.14%	2024	–	995	1,226
	RUB	fixed	–	–	12.00%	2024	–	–	3
Loan agreements with contractual maturity of more than 12 months									
	USD	floating	1.53%	3.17%	6.44%	2024-2028	5,624	5,055	2,679
	RUB	floating	–	13.31%	11.92%	2026-2028	–	697	1,558
	EUR	floating	.85%	.99%	4.14%	2024-2028	24	19	17
Secured loans	RUB	fixed	9.75%	–	–	2022	4	–	–
TOTAL LOANS							**5,652**	**6,766**	**5,483**
Bonds	USD	fixed	4.20%	3.38%	2.98%	2024-2026	4,238	2,743	1,746
	CNY	floating	–	3.75%	3.69%	2025	–	703	700
	CNY	fixed	–	3.95%	3.95%	2025	–	562	560
	RUB	fixed	7.20%	8.48%	8.48%	2024-2025	336	710	556
	RUB	floating	–	–	12.41%	2028	–	–	667
Total bonds							4,574	4,718	4,229
TOTAL LOANS AND BORROWINGS							**10,226**	**11,484**	**9,712**
Less: current portion due within twelve months							(1,610)	(4,295)	(4,335)
NON-CURRENT LOANS AND BORROWINGS							**8,616**	**7,189**	**5,377**

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. At 31 December 2023, 2022 and 2021 the Group fulfills its obligations on loans and borrowings in accordance with loans and bonds transactional documentation and the requirements of current legislation.

At 31 December 2023 and 31 December 2022 loans and borrowings were not secured by any collateral (31 December 2021: USD8 million).

In 2021 – 2023 all loans were raised on market terms existing at the drawdown dates reflecting such factors as the currency of the debt, expected maturities, changes in the key rate and credit risks inherent to the Group. The Group did not use collateral and did not assume any financial obligations to lenders other than servicing the debt.

In 2023 the Group received floating rate rouble loans from unrelated parties in the amounts of USD1 699 million and USD1 092 million (at the USD/RUB exchange rates effective as of drawdown dates) with maturity in 2028 and 2024, respectively. The lenders can use various instruments to fund their own activities, including issuing bonds to an unlimited range of qualified investors.

In May 2023 the Group issued rouble-denominated exchange-traded bonds on the Moscow Exchange (MOEX) in the amount of USD748 million at the USD/RUB exchange rates effective as of the issuance date.

In accordance with the requirements of Presidential Decree No. 430 dated 5 July 2022 (as amended on 22 May 2023) «On repatriation of foreign and Russian currency by the residents who participate in international economic activity», on 20 and 22 December 2023 the Company placed two issues of replacement bonds, which were paid for on issue by transfer of Eurobonds or in cash with proceeds intended for the purchase of Eurobonds. Replacement bonds were placed in the amount of USD316 million and USD338 million in respect of Eurobond issues maturing in 2025 and 2026, respectively. The coupon rate, payment schedule, currency and maturity of the replacement bonds are identical to the Eurobond issues in respect of which they were placed. The amount of the Group's debt as a result of the placement of replacement bonds has not changed.

25. Lease liabilities

	Currency	Average borrowing rate during the year ended 31 December, %			Maturity	At 31 December		
		2021	2022	2023		2021	2022	2023
LEASE LIABILITIES								
	RUB	7.23%	9.52%	10.07%	2024-2072	113	210	496
	USD	4.10%	2.81%	3.37%	2024-2033	107	12	13
	EUR	6.31%	6.88%	6.80%	2024-2050	15	11	11
Total lease liabilities						**235**	**233**	**520**
Less: current portion of lease liabilities						(57)	(43)	(54)
NON-CURRENT LEASE LIABILITIES						**178**	**190**	**466**

At 31 December 2023 lease liabilities with original term of lease payments in excess of 15 years amounted to USD85 million (31 December 2022: USD67 million and 31 December 2021: USD13 million).

In May 2023, the Group received the railway infrastructure in Norilsk region for free use for a period of 49 years under the agreement with the Federal Property Management Agency with a corresponding obligation to incur expenditure in order to comply with the regulatory requirements for non-public railways in the Russian Federation. The Group recognised this agreement in accordance with IFRS 16 Leases, therefore, the Group recognised a liability at the discounted value of cash outflows in the amount of USD322 million and a corresponding right-of-use asset.

26. Provisions

	Decommissioning	Environmental	Tax	Other	Total
Balance at 1 January 2021	**615**	**2,081**	**5**	**21**	**2,722**
Accruals	146	–	2	11	159
Utilization	(24)	(1,984)	(1)	(20)	(2,029)
Change in estimates	1	176	(1)	(3)	173
Unwinding of discount	39	–	–	–	39
Effect of translation to presentation currency	(9)	(14)	(1)	–	(24)
BALANCE AT 31 DECEMBER 2021	**768**	**259**	**4**	**9**	**1,040**
Accruals	–	–	7	8	15
Utilisation	(32)	(18)	(4)	(4)	(58)
Change in estimates	(36)	93	(4)	(7)	46
Unwinding of discount	73	29	–	–	102
Effect of translation to presentation currency	(37)	(13)	1	–	(49)
BALANCE AT 31 DECEMBER 2022	**736**	**350**	**4**	**6**	**1,096**

	Decommissioning	Environmental	Tax	Other	Total
Accruals	–	–	2	14	16
Utilisation	(50)	(8)	(1)	(6)	(65)
Change in estimate	(75)	(32)	(1)	(3)	(111)
Unwinding of discount	49	29	–	–	78
Effect of translation to presentation currency	(154)	(79)	–	(2)	(235)
BALANCE AT 31 DECEMBER 2023	**506**	**260**	**4**	**9**	**779**
including the current portion:					
At 31 December 2021	**86**	**48**	**4**	**8**	**146**
At 31 December 2022	**146**	**24**	**4**	**6**	**180**
At 31 December 2023	**61**	**16**	**4**	**9**	**90**

Significant event – fuel spill in Norilsk
On 29 May 2020 an incident occurred at the site of heat and power plant No. 3 (HPP-3) in the Kayerkan neighbourhood of Norilsk: diesel fuel storage reservoir was damaged through sudden failure of support posts, which resulted in approximately 21.2 kt of diesel fuel leakage. According to the Group's assessment, the incident was caused by defects in design and construction as well as by unusually hot weather, which led to thawing of permafrost resulting in sinking of support posts.

The incident resulted in contamination of nearby water bodies and land in the area of leakage as well as damage to biological resources. The main stage of clean-up works following the incident was completed in 2020.

On 10 September 2020 Yenisei interregional administration of the Federal Environment Supervision Agency (Rosprirodnadzor) filed a lawsuit to the Arbitration Court of the Krasnoyarsk Territory against Joint Stock Company 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 in the amount of RUB147.78 billion (USD1,943 million at RUB/USD exchange rate at the date of filing).

On 10 March 2021, in accordance with the court decision on the lawsuit filed by Rosprirodnadzor, the Group paid RUB146.177 billion (USD1,968 million) in compensation of damages to water bodies and soil.

In 2021, expenditure for the compensation of damages due to fuel leakage was deducted against taxable profits. On 3 December 2021, the Group received a decision of the off-site tax audit for the consolidated taxpayers group for the first half of 2021 that invalidated income tax deduction of the damages compensation. Taking into consideration all the facts and circumstances and based on an assessment of the probability of economic benefits outflows, the Group recognised an income tax provision in the amount of USD402 million offset against income tax prepayments at 31 December 2021. The Group's appeal filed in the first quarter of 2022 was not satisfied. The provision was utilised during the first quarter of 2022.

In April 2021, the Company's subsidiary, JSC"NTEK", signed a three-party agreement with the Ministry of Environment Protection and Natural Resources of the Krasnoyarsk Territory and the Siberian Federal University in order to develop, approve and implement a set of measures to remediate the damage caused by the oil spill to the wildlife and broader environment of the Krasnoyarsk Territory.

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

On 3 September 2021 during the court hearing, the parties agreed to proceed with the dispute settlement by negotiating an amicable agreement, which would include compensation in kind of the damage caused to aquatic life by artificially reproducing the affected fish species and releasing the fry to the water bodies.

Subsequently on 15 April 2022 the amount of claims was increased by the Federal Agency for Fishery to RUB58.96 billion (USD725 million).

On 22 July 2022, the court confirmed the amicable agreement between the parties. In accordance with the terms of the agreement JSC "NTEK" will fully compensate damage to aquatic bioresources in kind by releasing the fry of different fish species (sturgeon, muksun, broad whitefish, vendace and nelma) to the water bodies of the Norilo-Pyasinskoe lake and river system damaged by the incident in years 2033-2050. Before 2033, JSC "NTEK" plans annual early release of the fry of the Siberian sturgeon to the Yenisei river starting 2023.

In addition, in order to ensure scientific support of recovery measures JSC "NTEK" will provide financing of scientific research from 2023 to 2051 by Russian Federal Research Institute of Fisheries and Oceanography (VNIRO) with respect to assessment of the water bioresources conditions and their environment.

The key assumptions for determining the estimation of liabilities under the amicable agreement inherently contain a high degree of uncertainty, primarily due to the following: fishery research results, the cost of construction and operation of fish-breeding infrastructure, the costs of operation at the water bodies of the Norilo-Pyasinskoe lake and river system, the future fry purchase prices for aquatic bioresources, the possibility of achieving stable recovery of the population of the reproduced water bioresources, macroeconomic assumptions (including applicable inflation rates and risk-free rates), and the material effect of the discount factor for longer terms.

On 2 December 2022, the Russian Supreme Court received a cassation appeal from the Prosecutor General's Office against judgements of lower instance courts that upheld and confirmed the legitimacy of an amicable agreement between the Federal Agency for Fishery (Rosrybolovstvo), JSC "NTEK" and Russian Federal Research Institute of Fisheries and Oceanography (VNIRO) in a lawsuit initiated by Rosrybolovstvo seeking to recover RUB58.96 billion (USD838 million) in compensation for the damage to aquatic biological resources as a result of the HPP-3 incident in Norilsk. On 30 January 2023, a judge of the Supreme Court ruled to reject the submission of the cassation appeal of the Prosecutor General's Office for a court hearing by the Judicial Chamber for Economic Disputes of the Supreme Court. On 13 March 2023, the Deputy Chairman of the Supreme Court of the Russian Federation considered a complaint filed by the Prosecutor General's Office of the Russian Federation on 6 February 2023 and upheld the earlier ruling of the Supreme Court of the Russian Federation.

For the year ended 31 December 2023, the Group incurred clean-up and remediation expenditures amounting to USD3 million (for the year ended 31 December 2022: USD16 million and for the year ended 31 December 2021: USD16 million). The Group finished main rehabilitation measures.

At 31 December 2023, 2022 and 2021 the total discounted amount of the provision in relation to the diesel fuel spill at HPP-3 in Norilsk was recognised in the environmental provision in the consolidated statement of financial position.

The amount of the provision is subject to a high degree of uncertainty and will be adjusted in the future reporting periods as new facts and circumstances arise, including the reassessment of forecast cost for environment remediation, changes in macroeconomic and other factors. However, to the best of its knowledge and in accordance with the requirements of law the Group does not expect new significant claims to be filed with respect to the HPP-3 fuel spill in the future periods.

Key assumptions used in estimation of decommissioning obligations and environmental provisions were as follows:

	At 31 December		
	2021	2022	2023
Discount rates Russian entities	8.2% – 8.7%	7.2% – 11.1%	12.0% – 12.7%
Expected closure date of mines	from 2023 to 2054	from 2023 to 2125	from 2024 to 2125
Expected inflation over the period from 2024 to 2043	2.8% – 4.9%	2.7% – 6.9%	2.3% – 6.1%
Expected inflation over the period from 2044 onwards	2.5% – 2.8%	2.4% – 2.7%	2.1% – 2.2%

Present value of expected cost to be incurred for settlement of long-term provisions was as follows:

	At 31 December		
	2021	2022	2023
Due in years 2 – 5	317	412	332
Due in years 6 – 10	231	230	169
Due in years 11 – 15	86	134	84
Due in years 16 – 20	66	23	36
Due thereafter	194	117	68
TOTAL	**894**	**916**	**689**

27. Social liabilities and contingent social commitments

Social liabilities of the Group include social provisions and payables relating to social commitments of the Group.

The table below represents changes in social liabilities of the Group for the years ended 31 December 2023, 2022 and 2021, separately detailing changes in the provision in respect of the Comprehensive Social and Economic Development Plan for Norilsk (see the description below).

	Social liabilities	Incl. Comprehensive plan provision
Balance at 1 January 2021	**180**	**13**
Accruals of provision and payables	1,079	517
Utilisation and payment	(448)	(12)
Change in estimates	(31)	(3)
Unwinding of discount	18	4
Effect of translation to presentation currency	(7)	(1)
BALANCE AT 31 DECEMBER 2021	**791**	**518**
Accruals of provision and payables	475	–
Utilisation and payment	(454)	(23)
Change in estimates	(68)	(14)
Unwinding of discount	78	50
Effect of translation to presentation currency	(8)	(2)
BALANCE AT 31 DECEMBER 2022	**814**	**529**
Accruals of provision and payables	267	–
Utilisation and payment	(304)	(34)
Change in estimate	(62)	(41)
Unwinding of discount	61	41
Effect of translation to presentation currency	(170)	(114)
BALANCE AT 31 DECEMBER 2023	**606**	**381**
including the current portion:		
At 31 December 2021	**158**	**48**
At 31 December 2022	**201**	**100**
At 31 December 2023	**207**	**93**

Present value of expected cost to be incurred for settlement of long-term social provisions was as follows:

	At 31 December		
	2021	2022	2023
Due in years 2 – 5	296	320	188
Due in years 6 – 10	216	213	119
Due in years 11 – 15	117	77	90
Due in years 16 – 20	2	2	1
Due thereafter	2	1	1
TOTAL	**633**	**613**	**399**

Carrying value of social provisions is determined based on the discounted cash flows required to settle the present obligation. The discount rate was between 12.0% and 12.7% at 31 December 2023 (31 December 2022: 7.2% and 10.5%; 31 December 2021: 8.2% and 8.7%).

In 2017–2023, the Group entered into several agreements with the governments of the regions where it operates, namely the Zabaikalsky Territory, the Krasnoyarsk Territory and the Murmansk Region. These agreements imply the Group's financial commitments in respect of the social and economic

development of the regions, including the construction of social infrastructure facilities.

At 31 December 2023 the provision recognised with respect to the above-mentioned agreements in Social liabilities in the consolidated statement of financial position amounted to USD74 million(31 December 2022: USD67 million and 31 December 2021: USD115 million).

Comprehensive Social and Economic Development Plan for Norilsk

In February 2021, the Group entered into a four-party agreement with the Ministry for the Development of the Russian Far East and Arctic, the Krasnoyarsk Territory Government, and the Norilsk Municipality to implement comprehensive social and economic development programmes in Norilsk. In December 2021, the Government of the Russian Federation approved the Comprehensive Social and Economic Development Plan for Norilsk (the "Comprehensive Plan"), which includes a schedule of mutual financial commitments of the Government of the Russian Federation, the Krasnoyarsk Territory Government, and the Group for the social and economic development of the city up to 2035. The Comprehensive Plan covers housing renovation, the overhaul and modernisation of the city's engineering and utilities infrastructure, construction, repair, reconstruction and development of social infrastructure facilities and resettlement of Norilsk and Dudinka citizens to areas with more favourable living conditions. In addition, the Comprehensive Plan provides for the preparation and subsequent update of the Norilsk development strategy setting the city as a core hub for Taimyr development, designing the concept of regional tourism development and implementation of support programmes for small and medium-sized businesses in Norilsk. The financial commitments of the Company for 2021–2035 amount to RUB81.3 billion (USD1,094 million at the USD exchange rate at 31 December 2021).

In line with the Group's accounting policy (Note 4), in respect of the part of its obligations under the four-party agreement and the Comprehensive Plan amounting to RUB69.3 billion, the Group recognised a provision in its consolidated income statement for the year ended 31 December 2021 at the present value of cash outflows in the amount of RUB37.9 billion (USD514 million).

The remaining RUB12 billion (USD162 million at the USD exchange rate at 31 December 2021) of financial commitments under the Comprehensive plan will be recognised in the consolidated statement of financial position as part of property, plant and equipment once the expenditure is incurred.

At 31 December 2023, the Group recognised USD2 million under the Comprehensive Plan within property, plant and equipment in its consolidated statement of financial position (at 31 December 2022: USD2 million).

In case of any changes to the nature, timing or amount of financing of particular measures stipulated by the Comprehensive Plan during its implementation, the Group will update the amount of social provisions in its consolidated financial statements accordingly.

Apart from the financing committed under the four-party partnership agreement and the Comprehensive Plan, in 2021 the Company announced an additional financing programme for the social and economic development of Norilsk for RUB150 billion (USD2,019 million). As of the date the consolidated financial statements are authorised for issue, the schedule, amounts and terms of financing of the programme's individual activities, as well as the mechanism for their implementation, have not been approved. The implementation of the programme is subject to the Company's verification procedures and corporate approval, which have not been received as of the date these consolidated financial statements were authorised for issue.

During the year ended 31 December 2023, the Group also accrued USD25 million (for the year ended31 December 2022: USD121 million; for the year ended 31 December 2021: USD127 million) of social provisions under various social programmes and contributions other than those referred to above.

28. Trade and other payables

	At 31 December		
	2021	2022	2023
FINANCIAL LIABILITIES			
Trade payables	416	614	422
Payables for acquisition of property, plant and equipment	417	546	561
Other creditors	397	171	206
Total financial liabilities			
NON-FINANCIAL LIABILITIES			
Advances received on contracts with customers	994	50	84
Total non-financial liabilities	**994**	**50**	**84**
TOTAL	**2,224**	**1,381**	**1,273**

The maturity profile of the Group's financial liabilities with their remaining contractual maturities was as follows:

	At 31 December		
	2021	2022	2023
FINANCIAL LIABILITIES			
Due within 1 month	854	950	694
Due from 1 to 3 months	312	340	225
Due from 3 to 12 months	64	41	270
TOTAL	**1,230**	**1,331**	**1,189**

29. Employee benefit obligations

	At 31 December		
	2021	2022	2023
Wages, salaries and bonuses	190	302	287
Provision for annual leave	238	341	276
Other	31	35	22
Total obligations	**459**	**678**	**585**
Less: non-current obligations	(42)	(93)	(30)
CURRENT OBLIGATIONS	**417**	**585**	**555**

Amounts recognised in the consolidated income statement in respect of employee benefits were as follows:

	For the year ended 31 December		
	2021	2022	2023
Wages and salaries	1,718	2,586	2,120
Social security costs	368	488	456
Other employee benefits	151	188	207
TOTAL	**2,237**	**3,262**	**2,783**

Wages and salaries in the table above include provisions for employee benefits with related social security costs.

Defined contribution plans

Amounts recognised in the consolidated income statement in respect of defined contribution plans were as follows:

	For the year ended 31 December		
	2021	2022	2023
Social Fund of the Russian Federation	325	454	408
Corporate pension plans (non-state pension fund)	8	11	9
Other	3	–	3
TOTAL	**336**	**465**	**420**

30. Dividends

Dividends declared and paid in Russian roubles were translated to US dollars using prevailing RUB/USD rates at the declaration date and payment date, respectively, as presented in the table below.

Dividends for the period	Declaration period	Dividends declared			Dividends paid		Receipt of dividends not remitted to shareholders and ADR holders
		Per share RUB	Per shareUSD	Total USD million	Payment period	Total SD million	Total USD million
9 months 2023	December 2023	915.33	9.87	1,508	January 2024	1,475	–
Annual 2021	June 2022	1,166.22	18.94	2,895	June 2022	3,146	544
9 months 2021	December 2021	1,523.17	20.81	3,181	January 2022	3,050	–
Annual 2020	May 2021	1,021.22	13.86	2,193	June 2021	2,198	–

At 31 December 2021 dividends payable in the amount of USD3 146 million in the consolidated statement of financial position mainly included dividends for 9 months 2021 in the amount of USD3 134 million.

At 31 December 2022 dividends payable in the amount of USD496 million in the consolidated statement of financial position mainly included annual dividends for 2021 not remitted primarily to holders of American Depositary Receipts (ADRs) due to restrictions placed by the Decree the President of the Russian Federation No. 95 at 5 March 2022 and the decision of the Board of Directors of the Central Bank of the Russian Federation at 10 June 2022 in the amount of USD460 million. The dividends not received by the ADR holders were transferred to JSC NSD, subsequently returned to the Group and continue to remain on demand by the recipients at 31 December 2023.

At 31 December 2023 dividends payable in the amount of USD1 924 million in the consolidated statement of financial position mainly included annual dividends for 2021 not remitted primarily to holders of American Depositary Receipts (ADRs) as referred above in the amount of USD359 million and dividends for 9 months 2023 in the amount of USD1 560 million. As of the date these consolidated financial statements were authorised for issue, the Company had transferred USD1 475 million to the Company's registrar and JSC NSD for further remittance to the shareholders.

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; non-state pension fund, transactions with which are disclosed in Note 29; 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. Transactions and outstanding balances are included in / excluded from the disclosure starting the date an entity has become / or ceased to be a related party, respectively.

Details of transactions between the Group and other related parties are disclosed below.

	Entities under ownership and control of the Group's major shareholders			Associates, joint ventures and joint operation		
	For the year ended 31 December 2021	For the year ended 31 December 2022	For the year ended 31 December 2023	For the year ended 31 December 2021	For the year ended 31 December 2022	For the year ended 31 December 2023
TRANSACTIONS WITH RELATED PARTIES						
Repayments of loans and borrowings	–	800	225	–	–	–
Interest expense repaid	–	10	11	–	–	–
Interest expense accrued	–	10	11	–	–	–
Purchase of assets and services and other operating expenses	103	116	5	66	36	13
Interest received	–	4	1	–	–	–
Interest income accrued	–	4	1	–	–	–
Sales of goods and services and other income	–	1	–	–	12	12
Proceeds from loans and borrowings	–	1,025	–	–	–	3
Fair value gain on the cross-currency interest rate swap contracts	–	41	–	–	–	–
Loans issued	–	–	–	–	–	30
Repayments of loans issued	–	–	–	–	–	27

	Entities under ownership and control of the Group's major shareholders			Associates, joint ventures and joint operation		
	At 31 December 2021	At 31 December 2022	At 31 December 2023	At 31 December 2021	At 31 December 2022	At 31 December 2023
OUTSTANDING BALANCES WITH RELATED PARTIES						
Accounts payable and lease liabilities	13	26	12	5	–	1
Accounts receivable	1	–	–	10	1	2
Cash and cash equivalents	–	258	–	–	–	–
Loans and borrowings	–	225	–	–	–	3
Derivatives (liabilities)	–	21	–	–	–	–

During the year ended 31 December 2023 the Group declared and paid dividends in the amount of USD349 million to a related party, which is a non-controlling interest owner.

At 31 December 2023 the Group had no guarantees received in respect of advances to its suppliers from a related party (31 December 2022: 42 million USD and 31 December 2021: none).

During the year ended 31 December 2021, the Company acquired own shares from the entities under ownership and control of the Group's major shareholders for a consideration of USD1,421 million (Note 22).

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 2023 remuneration of key management personnel of the Group including salary and performance bonuses amounted to USD90 million (for the year ended31 December 2022: USD80 million and for the year ended 31 December 2021: USD91 million).

32. Commitments

Capital commitments

At 31 December 2023, contractual capital commitments amounted to USD2,292 million (31 December 2022: USD2,299 million and 31 December 2021: USD3,338 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 2023 total future non-discounted variable lease payments under such contracts with the maturity up to 2072 amounted to USD280 million (31 December 2022: USD358 million and 31 December 2021: USD322 million).

33. Contingencies

Legal contingent liabilities

The Group has a number of legal contingent liabilities with the probability of outflow of economic benefits being assessed by the management of the Group as possible, including matters arising from claims and disputes of a civil law and public law nature. At 31 December 2023 these liabilities amounted to USD4 million (31 December 2022: USD14 million and 31 December 2021: USD3 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 to non-budget funds, 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 the management of the Group believes that it 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 a different view with regard to interpretive issues. This uncertainty may expose the Group to additional taxation, fines and penalties.

In March 2022, amendments to the Russian tax legislation were adopted. According to them, foreign exchange gains are accounted for tax purposes in the reporting period, when the underlying asset or liability is settled. Starting from 1 January 2023, the same tax accounting rules apply to foreign exchange losses. In December 2022 amendments to the Russian tax legislation allowed an early adoption of the above tax treatment of foreign exchange losses for the year ended 31 December 2022 at a taxpayer's option. The Group used this option.

In accordance with Article 3 of Federal Law No. 302-FZ dated 3 August 2018, the agreement, which had established the consolidated taxpayers group (CTG), expired on 1 January 2023. Therefore, all entities of the Group that were previously part of the CTG started to accrue and pay income tax on an individual basis from 1 January 2023.

On 1 January 2023, amendments to the Tax code of the Russian Federation were adopted. According to them, each company of the Group located in the Russian Federation pays taxes in a single tax payment (STP) to a unified taxpayer account.

Transfer pricing legislation enacted in the Russian Federation starting 1 January 2012 provides for major modifications making local transfer pricing rules closer to the OECD guidelines, but creating additional uncertainties as regards the actual application of tax legislation.

The impact of any additional taxation in relation to transfer pricing may be material to the financial statements of the Group. Yet, the probability of such additional taxation cannot be reliably assessed.

The transfer pricing rules provide for an obligation for the taxpayers to prepare transfer pricing documentation with respect to controlled transactions and stipulate the principles 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 businesses to conduct transfer pricing analysis for the majority of cross-border and major domestic inter-company transactions. Starting 2019, transfer pricing control, as a general rule, is applied to domestic transactions only if both criteria are met: the parties apply different income tax rates, and the annual turnover of transactions between them exceeds RUB1 billion (USD11 million at RUB/USD rate at 31 December 2023).

In addition to performing transfer pricing audits, Russian tax authorities may also review prices used in intra-group transactions. They may impose additional taxes if they conclude that taxpayers have received unjustified tax benefits as a result of those transactions.

According to Russia's Ministry of Finance, foreign states that take hostile actions against the Russian Federation, its legal entities and individuals have effectively stopped sharing information for tax purposes with the Russian Federation. It complicates tax control of pricing, including identification of the fact that parties to a transaction are related. The list of states and territories providing preferential tax treatment and/or not disclosing and sharing information on financial transactions (offshores) has been amended by including "unfriendly" states. Thereby transactions with counterparties from these countries may be recognised as controlled for tax purposes starting from 1 January 2024.

In August 2023 in accordance with the Presidential Decree No. 585 the core provisions of 38 double taxation agreements between Russia and "unfriendly" countries were suspended. The suspension effectively leads to application of standard withholding income tax rates as opposed to previously applied reduced rates in relation to the main types of passive and other income received by residents of these countries. The Group continues to analyse the impact of the above regulatory changes.

The Russian Government's Regulation No. 988 dated 25 June 2021 introduced temporary export duties on some of the base metals produced by the Group for the period from 1 August 2021 to 31 December 2021.

The Russian Government's Regulation No. 1538 dated 21 September 2023 introduced export customs duties on Group's metal products for the period from 1 October 2023 to 31 December 2024.

In November 2023 amendments to the Tax Code of the Russian Federation introduced a mechanism for secondary adjustment of transfer pricing and providing for additional withholding tax with respect to the tax base transferred outside Russia as a result of non-compliance with established transfer pricing control rules. In addition, the amendments significantly increased tax penalties for transfer pricing offenses.

Environmental matters

The Group is subject to extensive federal, regional and local environmental controls and regulations in the countries where it operates. The Group's operations result in air and water pollutant emissions, as well as generation and disposal of production waste. The Group recognises expenditure on negative environmental impact levies as other levies in Costs of metal sales.

The Group periodically evaluates its environmental provisions pursuant to the environmental legislation in the countries where it operates. Such provisions are recognised in the consolidated financial statements as and when obligating events occur.

The management of the Group believes that there are no material obligations for environmental damage other than those recognised in these consolidated financial statements. However, potential liabilities, which may 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 takes place, may require that the Group modernise its technological processes to meet more stringent statutory requirements.

Russian Federation risk

The Group's operations are primarily located in the Russian Federation. Consequently, the Group is influenced by the economic and financial markets of the Russian Federation, which display the characteristics of an emerging market. The legal, tax and regulatory frameworks continue to develop, which poses a risk of their varying interpretations and frequent change. This, together with other legal and fiscal impediments, creates additional challenges for entities operating in the Russian Federation.

Starting 2014, the United States of America, the European Union and some other countries have imposed and gradually expanded restrictive economic measures against a number of Russian individuals and legal entities. Starting February 2022, the above countries have been imposing additional stringent restricitve measures against the Russian Government, large financial institutions and other legal entities and individuals in Russia. In addition, restrictions were imposed on exports and imports of certain goods and business-relevant services, including accounting, auditing, tax and management consulting and certain legal, engineering, architectural and IT consulting services, as well as aviation and maritime transportation sectors. In light of the imposed restrictive measures, a number of large international companies from the USA, the European Union and some other countries ceased, materially reduced or suspended their activities in the Russian Federation and business relationships with Russian citizens and legal entities. Moreover, there is a risk that further restrictive measures and similar types of pressure will be imposed. In response, the Russian Government has implemented a set of economic measures in order to secure and stabilise the Russian economy, as well as retaliatory restrictive measures, currency control measures, a number of key interest rate changes and other special economic measures.

The imposition and further tightening of the restrictive measures has led to an increased economic uncertainty, including the lowering of liquidity and high volatility in the equity markets, volatility of the Russian rouble exchange rates and key interest rate, a reduction in both local and foreign direct investment inflows, procedural difficulties in currency payments for Russian issuers and significant limitations in the availability of debt financing. In addition, many Russian companies are practically devoid of access to international stock and debt capital markets, thus having to look for alternative ways to raise financing and growing more dependent on the state support. The Russian economy is in the process of adaptation, involving the substitution of export markets that become unavailable, replacement of procurement and technology import markets, as well as changes in the logistics and production chains.

On 28 February 2022, the stock market of the Moscow Exchange discontinued trading in shares and corporate bonds. Trading in shares and corporate bonds on the Moscow Exchange was resumed in late March 2022, while restrictions continue to apply to a number of securities transactions

made by non-residents of Russia. On 3 March 2022, the London Stock Exchange suspended trading in depositary receipts (ADRs) issued for the Company's ordinary shares. In accordance with Federal Law No. 114-FZ On Amendments to the Federal Law On Joint-Stock Companies and Certain Legislative Acts of the Russian Federation an automatic and a forced conversion of ADRs into the Company's shares was implemented in 2022. ADRs the rights to which are recorded by Russian depositories were converted automatically. ADRs the rights to which are recorded by foreign depositaries could have been converted based on an application until 10 November 2022. Before the end of the 2022 as part of the forced conversion, the Company's shares were credited to the applicants that submitted the required documents.

On 28 April 2023, the permit for circulation of the Company ADRs outside Russia lapsed. In accordance with clause 5 of Article 6 of Federal Law No. 114-FZ On Amendments to the Federal Law On Joint-Stock Companies and Certain Legislative Acts of the Russian Federation dated 16 April 2022, starting that date the Company's shares, which remain accounted for on depo accounts of depository programs are not vested with voting rights for holders, not considered for counting votes and no dividends are accrued on them. Under the terms and conditions of the deposit agreement ADR holders retain the right to surrender their ADRs in exchange for obtaining the Company's shares. At the same time, a foreign issuing bank has closed the conversion of ADRs into Company's shares with the date of opening currently being unknown. Unpaid dividends may be claimed by those who were ADR holders as of 28 April 2023 and who received the Company's shares upon conversion of the ADRs belonging to them in accordance with the procedure established by the Federal Law "On Joint Stock Companies" for the unclaimed dividends.

On 23 May 2023, the ADRs were removed from the list of securities admitted to trading on the London Stock Exchange. According to the latest information available to the Group, the percentage of Company's shares remaining on depo accounts of depository programs was 6.7% of the share capital of the Company at 13 November 2023 (the date of drawing up the list of shareholders entitled to participate in the extraordinary General meeting of shareholders of the Company dated 7 December 2023).

On 21 July 2022 and on 26 July 2022 the European Union and Great Britain respectively, introduced a ban against the import of gold of Russian origin on top of other restrictive measures.

On 16 December 2022, the European Union, among other restrictive measures, introduced a ban on investments in the mining industry in Russia and also banned the supply of various equipment, including industrial. At the same time in accordance with the European Union ruling these restrictive measures do not apply to mining and production of palladium, nickel, copper, cobalt, rhodium and iron ore.

On 24 February 2023 the US Department of the Treasury's Office of Foreign Assets Control (OFAC) identified the mining and metallurgical sector of the Russian economy as a sector against which further sanctions may be imposed.

On 29 June 2022, the United Kingdom imposed personal restrictions against Potanin V. O. These restrictions are mandatory within the UK and for all British citizens and legal entities registered in the UK. According to the advice of an external legal counsel and the management's assessment, these restrictions do not expand to the Group and its subsidiaries. On 15 December 2022, OFAC updated Specially Designated Nationals and Blocked Persons List (SDN List) to include Potanin V. O. SDN list also included legal entities associated with one of the major shareholders.

OFAC also stated that the restrictive measures do not apply to the Company. In the current geopolitical circumstances, as each counterparty doing business with the Group independently decides on the application of its own internal restrictions on interaction with Russian legal entities, the management has to assume that some counterparties might reconsider their trade, financial or other operations with the Group.

On 14 December 2023, the United Kingdom adopted amendments to the sanction legislation, which, among other things, establish a ban on trade in a number of metals which originate or are located in Russia. These restrictions are applicable to, among some other metals to nickel, copper and cobalt that are produced by the Group. At the same time, the UK Government published a Trade License authorizing UK persons to purchase warrants for Russian metals on international metal exchanges, provided that such trade does not involve physical delivery of such metals to the territory of the United Kingdom or to UK persons.

The longer-term effects of potential additional restrictive measures are difficult to determine. Still, they may have a significant impact on the Group's business.

Supply and distribution channels reconfiguration

In 2022, a number of suppliers fully withdrew from the Russian market, while others suspended deliveries of goods and services to Russian legal entities. As a result, procurement from these suppliers has become unavailable to the Group. Although the Group has started transition to alternative suppliers, full replacement of suppliers who left the Russian market may take a considerable time and involves additional costs and rescheduling of certain investment projects and capital commitments. Due to the need to replace some of the components, the Group is actively looking for alternative suppliers and substituting imports in order to fulfill the production program for 2024. The Group is also in the process of reconfiguring its distribution channels, which led to extended sales logistics chains and alongside with restrictive measures and time-consuming processes of reengineering the Company's customer base and sales markets significantly increased finished goods inventories. At 31 December 2023 the Group reduced the stocks of finished goods accumulated in 2022 for most metals. The Group's management also expects that the stocks of finished goods accumulated in 2022 will continue to decrease in 2024 in line with the Group's sales plans for 2024.

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 wave-like distributional pattern of the coronaviral infection continues to create uncertainty in business environment.

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.

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.

In May 2023, the World Health Organization declared that COVID-19 was no longer a global health emergency.

Overall impact of risks and uncertainties on the Group's financial position and financial results

These consolidated financial statements provide the management's point of view on the level of impact of the current business environment in the Russian Federation on the Group's operations and financial position. Taking into account the measures taken by the Group in respect of the risks stemming from imposed economic restrictions and overall changes in business environment, Group management does not expect a significant adverse impact on the financial position and financial results of the Group for at least 12 months after 31 December 2023. The actual impact of the future business environment may differ from the management's assessment.

The management will continue to monitor the situation closely and will implement necessary measures to mitigate negative consequences of possible future events and circumstances, 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.

At 31 December 2023, 2022 and 2021 the Company maintains credit ratings from Russian rating agency Expert RA at RUAAA 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 and analysis procedures that enable it to assess, evaluate and monitor the Group's exposure to financial risks, including their change due to the current economic situation and imposition of restrictive economic measures.

Interest rate risk

Interest rate risk relates to changes in interest rates that could adversely impact the financial results of the Group. The Group's interest rate risk arises from borrowings at floating rates.

In order to minimise and manage the risk, the Group maintains the structure of debt portfolio, which includes loans and borrowings with fixed and floating interest rates. The Group also considers impact of this risk factor together with changes in the macroeconomic environment, particularly stage of economic growth and increase in commodity prices, generally accompanying the increase of base rates.

During the year ended 31 December 2023 the key interest rate of the Bank of Russia was increased from 7,5% to 16% by the end of December. During the year ended 31 December 2022, the key interest rate was changed several times following restrictive measures imposed by the USA, the EU and other countries and changes in key macroeconomic parameters, such as inflation rate and rouble exchange rate. The key interest rate was increased to 20% in the end of February 2022, followed by a gradual decrease to 7.5% by the end of December 2022. The negative impact of the increase in the key interest rate in 2023 and 2022 on the amount of the Group's interest expenses was not significant. There were no

significant fluctuations during 2021. At 31 December 2023, the amount of loans and borrowings of the Group with the rate linked to the key interest rate of the Central Bank of the Russian Federation was 29% of the total amount of loans and borrowings and at 31 December 2022: 15% (see Note 24).

Management believes that the Group's exposure to interest rate risk fluctuations is at an acceptable level.

In 2023 a fundamental reform of major interest rate benchmarks was implemented globally, including the replacement of some interbank offered rates (IBORs) with alternative nearly risk-free rates (referred to as 'IBOR reform'). The Group monitors market developments and manages transition to alternative rates. The Group's unsecured US dollar-denominated floating rate loans used USD LIBOR1M rates, which ceased to be published after 30 June 2023. The Group signed amendments to certain loan agreements to replace LIBOR rate with the alternative rate – Term Secured Overnight Financing Rate (Term SOFR) not later than USD LIBOR publication stop date and switched the remaining loan agreements with floating interest rates to the alternative rates in 2023.

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 revenues and related trade accounts receivable are denominated and/or settled in US dollars and Chinese Yuans, while expenditure is primarily denominated in Russian roubles and therefore the Group is exposed to fluctuations of the USD and CNY exchange rate. Currency risk arising from other currencies is assessed by management of the Group as immaterial.

Restrictive measures imposed by the USA, the EU and some other countries with respect to the Central Bank of the Russian Federation and Russia's international reserves as well as the counter-measures of the Russian government and the Central Bank relating to capital flows controls and currency control led to an increased volatility of the rouble exchange rate.

The RUB/USD exchange rate ranged from 67.57 roubles for 1 US Dollar to 101.36 roubles for 1 US Dollar during the year ended 31 December 2023 (during the year ended 31 December 2022: from 51.16 roubles for 1 US Dollar to 120.38 roubles for 1 US Dollar).

There were no significant fluctuations in the exchange rate during 2021. Taking into account the exchange rates at 31 December 2023, 2022 and 2021, the Group preserves its financial stability.

The currency risk is managed by analysis of currency position, efficiency control of currency exchange operations and the best possible matching of cash inflows and cash outflows denominated in the same currency, although the restrictive measures and Russia's respective counter-measures limit the efficiency and availability of the above mentioned instruments of the Group currency risk management.

If necessary, the Group uses derivative financial instruments, primarily cross-currency interest rate swaps to reduce exposure to currency risk by balancing revenue cash flows denominated mostly in US dollars and liabilities denominated in Russian roubles.

At 31 December 2023, 2022 and 2021, the carrying amounts of monetary assets and liabilities, excluding cross-currency interest rate swaps, denominated in foreign currencies other than functional currencies of the individual Group entities were as follows:

	At 31 December 2021			At 31 December 2022			At 31 December 2023		
	USD	CNY	Other currencies	USD	CNY	Other currencies	USD	CNY	Other currencies
Cash and cash equivalents	2,811	18	41	1,169	266	70	879	759	228
Trade and other receivables	792	–	35	1,425	–	134	992	90	66
Other assets	55	–	20	22	–	53	2	–	15
Total assets	**3,658**	**18**	**96**	**2,616**	**266**	**257**	**1,873**	**849**	**309**
Trade and other payables	353	–	122	761	3	63	556	7	95
Loans and borrowings	9,862	–	24	7,798	1,265	20	4,425	1,260	15
Lease liabilities	107	–	15	12	–	11	13	–	11
Other liabilities	23	–	–	7	–	8	2	–	–
Total liabilities	**10,345**	**–**	**161**	**8,578**	**1,268**	**102**	**4,996**	**1,267**	**121**

Given that the Group exposure to the currency risk for the USD- and CNY-denominated monetary liabilities is offset by the revenue from metal sales denominated in respective currencies, as well as the high correlation of the CNY and the USD, management believes that the Group's exposure to the 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		
	2021	2022	2023
INTEREST RATE RISK			
1 p.p. USD rate increase impact	(35)	(45)	(24)
1 p.p. RUB rate increase impact	(8)	(17)	(35)
1 p.p. CNY rate increase impact	–	(7)	(7)
CURRENCY RISK			
USD20% strengthening against RUB	(1,421)	(1,261)	(695)
CNY 20% strengthening against RUB	4	(200)	(84)

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 reporting period.

Credit risk

Credit risk means that a debtor will default on its contractual obligations as they fall due resulting in a financial loss to the Group. Credit risk arises from cash and cash equivalents, bank deposits, uncollateralised trade and other receivables, as well as loans issued.

The Group mitigates the credit risk through its allocation to a large number of counterparties and respective credit limits approval based on counterparties' financial position analysis and uses, if possible, trade financing and insurance instruments, bank guarantees and documentary forms of settlement.

To analyse counterparty solvency, the Group uses information from credit rating agencies about the counterparty's assigned credit ratings and projections for its changes; should such information be lacking, financial stability and overall creditworthiness is assessed by calculating financial indicators and analysing the counterparty's financial statements for several reporting periods.

The outstanding balances of five financial institutions and five largest customers are presented below. In accordance with the conservative liquidity management policy the Group's cash and cash equivalents are placed at Russian and international credit and financial institutions, which mostly had credit rating for Russian banks according to the national scale Expert RA not lower than RUAA and for international banks on the international Fitch scale not lower than A at 31 December 2023 (at 31 December 2022: mostly not lower than RUAAA for Russian banks and on the international Fitch scale mostly not lower than A for international banks and at 31 December 2021: mostly not lower than BB+ on the Fitch scale).

	Outstanding balance at 31 December		
	2021	2022	2023
CASH AND CASH EQUIVALENTS			
Bank A	1,548	510	616
Bank B	902	366	476
Bank C	572	258	183
Bank D			
Bank E	405	88	134
Other	1,579	456	593
TOTAL	**5,547**	**1,882**	**2,139**

	Outstanding balance at 31 December		
TRADE AND OTHER RECEIVABLES			
Customer A	149	163	93
Customer B	24	160	90
Customer C	19	47	86
Customer D	18	38	65
Customer E	13	34	46
Other	245	404	384
TOTAL	**468**	**846**	**764**

Management of the Group believes that the credit risk associated with cash and cash equivalents and trade and other receivables is at an acceptable level due to the high credit rating of the banks where these cash and cash equivalents are placed, as well as the implementation of measures to manage the credit risk associated with counterparties the Group interacts with.

At 31 December 2023, the Group does not expect a significant increase in expected credit losses on trade and other receivables and other financial assets.

The Group is not economically dependent on a limited number of customers because the majority of its products are metals traded on the global commodity markets.

Information on sales to the Group's customers is presented below:

	For the year ended 31 December 2021		For the year ended 31 December 2022		For the year ended 31 December 2023	
	Revenue USD million	%	Revenue USD million	%	Revenue USD million	%
Largest customer	3,431	19	1,950	12	1,292	9
Next 9 largest customers	6,169	35	5,861	35	4,904	34
Total 10 largest customers	**9,600**	**54**	**7,811**	**47**	**6,196**	**43**
Remaining customers	8,252	46	9,065	53	8,213	57
TOTAL	**17,852**	**100**	**16,876**	**100**	**14,409**	**100**

The following table provides information about the exposure to credit risk for financial assets:

		At 31 December		
	Note	2021	2022	2023
Cash and cash equivalents	20			
Loans and other long-term receivables		59	100	46
Trade and other receivables (excluding trade receivables measured	19	220	283	264
Bank deposits not included in cash and cash equivalents		46	11	11

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 regularly monitors forecast and actual cash flows and analyses the repayment schedules to take timely and appropriate measures in order to minimise potential adverse effects, including through liquidity management and proactive loan portfolio management aimed at minimising the amount of short-term debt and maintaining the weighted average term of the loan portfolio at an acceptable level.

Current liquidity management involves detailed budgeting procedures, as well as analysis and structuring of a daily payment position for a 30-day period. The payment position is calculated separately for each currency and bank account. In addition to the continuous analysis of the payment position, at least three times a month the Group updates its rolling cash flow forecast model with a horizon of up to 12 months.

The Group manages liquidity risk by maintenance of liquid funds and a portfolio of committed credit facilities and overdrafts with a number of banks at a level, which is sufficient to cover possible revenue fluctuations taking into account market risks.

In particular, the Group had available committed debt facilities and overdrafts to finance its day-to-day liquidity requirements of USD3,819 million at 31 December 2023 (31 December 2022: USD2,788 million and 31 December 2021: USD3,500 million).

The Group continues its activities on expansion of credit limits capacity of its portfolio of confirmed and treasury credit lines. In order to optimise the average duration of liabilities and minimise risk of excess concentration of debt payments the Group considers all available options for arranging financing on the Russian market and holds negotiations with international financial institutions pursuing proactive debt portfolio management.

In accordance with the permissions received on a regular basis from government agencies on foreign currency payments of debt and interest to foreign creditors, the Group continues to service its debt in compliance with the terms of respective loan or bond facilities, including timing and currency of payments.

In September 2022, the consent of the holders of all 5 Eurobond issues of the Group was obtained to amend the transaction documentation, according to which the Company received the right to make payments to holders of Eurobonds in Russian depositories, bypassing a foreign paying agent, which allowed to (a) ensure compliance with the requirements of Russian legislation and (b) continue payments to foreign depositories through a payment agent.

The following table shows the maturity profile of the Group's borrowings, lease liabilities and derivative instruments (maturity profiles for trade and other payables are presented in Note 28) based on contractual undiscounted payments, including interest, in accordance with management's plans and contractual terms regarding the maturity profile:

At 31 December 2023	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 thereafter
FIXED RATE BANK LOANS AND BORROWINGS							
Principal	2,872	1,032	1,340	500	–	–	–
Interest	211	121	76	14	–	–	–
	3,083	**1,153**	**1,416**	**514**	**–**	**–**	**–**
FLOATING RATE BANK LOANS AND BORROWINGS							
Principal	6,859	3,310	1,100	597	788	1,064	–
Interest	1,476	548	353	308	204	63	–
	8,335	**3,858**	**1,453**	**905**	**992**	**1,127**	**–**
LEASE LIABILITIES							
Lease liabilities	**868**	**98**	**107**	**101**	**92**	**87**	**383**

At 31 December 2023	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 thereafter
CROSS-CURRENCY INTEREST RATE SWAP							
Payable	364	364	–	–	–	–	–
Receivable	(271)	(271)	–	–	–	–	–
	93	**93**	**–**	**–**	**–**	**–**	**–**
TOTAL	**12,379**	**5,202**	**2,976**	**1,520**	**1,084**	**1,214**	**383**

At 31 December 2022	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	4,022	1,000	1,105	1,417	500	–	–
Interest	387	155	134	84	14	–	–
	4,409	**1,155**	**1,239**	**1,501**	**514**	**–**	**–**
FLOATING RATE BANK LOANS AND BORROWINGS							
Principal	7,488	3,303	2,084	1,675	414	7	5
Interest	480	240	147	80	13	–	–
	7,968	**3,543**	**2,231**	**1,755**	**427**	**7**	**5**
LEASE LIABILITIES							
Lease liabilities	522	63	54	34	23	21	327
CROSS-CURRENCY INTEREST RATE SWAP							
Payable	375	11	364	–	–	–	–
Receivable	(368)	(23)	(345)	–	–	–	–
	7	**(12)**	**19**	**–**	**–**	**–**	**–**
TOTAL	**12,906**	**4,749**	**3,543**	**3,290**	**964**	**28**	**332**

At 31 December 2021	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	4,591	1,504	1,000	1,087	500	500	–
Interest	407	193	97	76	27	14	–
	4,998	**1,697**	**1,097**	**1,163**	**527**	**514**	**–**
FLOATING RATE BANK LOANS AND BORROWINGS							
Principal	5,676	107	2,166	2,100	614	676	13
Interest	221	88	71	40	14	8	–
	5,897	**195**	**2,237**	**2,140**	**628**	**684**	**13**
LEASE LIABILITIES							
Lease liabilities	**279**	**65**	**50**	**45**	**31**	**20**	**68**
CROSS-CURRENCY INTEREST RATE SWAP							
Payable	426	12	12	402	–	–	–
Receivable	(409)	(24)	(24)	(361)	–	–	–
	17	**(12)**	**(12)**	**41**	**–**	**–**	**–**
TOTAL	**11,191**	**1,945**	**3,372**	**3,389**	**1,186**	**1,218**	**81**

Reconciliation of changes in liabilities and cash flows from financing activities:

	Loans and borrowings	Lease liabilities	Derivatives financial instruments (liabilities)	Total
Balance at 1 January 2021	**9,634**	**262**	**136**	**10,032**
Proceeds from loans and borrowings	1,000	–	–	1,000
Repayments of loans and borrowings	(415)	–	–	(415)
Payments of lease liabilities	–	(55)	–	(55)
Proceeds on exchange of flows under cross-currency interest rate swaps	–	–	4	4
Changes from financing cash flows	**585**	**(55)**	**4**	**534**
Other non-cash changes:				
Recognition of lease liabilities	–	37	–	37
Changes in fair value of the cross-currency interest rate swap	–	–	(68)	(68)
Effect of changes in foreign exchange rates	(4)	(9)	–	(13)
Borrowing costs and amortisation of loans at effective interest rate	11	–	–	11
BALANCE AT 31 DECEMBER 2021	**10,226**	**235**	**72**	**10,533**
Proceeds from loans and borrowings	9,104	–	–	9,104
Repayments of loans and borrowings	(7,775)	–	–	(7,775)
Payments of lease liabilities	–	(50)	–	(50)
Payments on exchange of flows under cross-currency interest rate swaps	–	–	(19)	(19)
Changes from financing cash flows	**1,329**	**(50)**	**(19)**	**1,260**
Other non-cash changes:				
Recognition of lease liabilities	–	169	–	169
Changes in fair value of the cross-currency interest rate swap	–	–	18	18
Effect of changes in foreign exchange rates	153	(17)	(4)	132
Changes arising from disposal of subsidiaries	–	(96)	–	(96)
Borrowing costs and amortisation of loans at effective interest rate	(224)	–	–	(224)
Other	–	(8)	–	(8)
BALANCE AT 31 DECEMBER 2022	**11,484**	**233**	**67**	**11,784**
Proceeds from loans and borrowings	5,569	–	–	5,569
Repayments of loans and borrowings	(6,642)	–	–	(6,642)
Payments of lease liabilities	–	(45)	–	(45)

	Loans and borrowings	Lease liabilities	Derivatives financial instruments (liabilities)	Total
Proceeds on exchange of flows under cross-currency interest rate swaps	–	–	8	8
Changes from financing cash flows	**(1,073)**	**(45)**	**8**	**(1,110)**
Other non-cash changes:				
Recognition of lease liabilities	–	417	–	417
Changes in fair value of the cross-currency interest rate swap	–	–	60	60
Effect of changes in foreign exchange rates	(705)	(85)	(19)	(809)
Borrowing costs and amortisation of loans at effective interest rate	6	–	–	6
BALANCE AT 31 DECEMBER 2023	**9,712**	**520**	**116**	**10,348**

Interest payable on loans and borrowings and lease liabilities (Notes 24 and 25) arising from financing activities is short-term and is paid within 12 months from the date of accrual.

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 liabilities, either directly or indirectly; and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the assets or liabilities that are not based on observable market data.

The fair value of financial liabilities is determined as follows:

- the fair value of fixed and floating rate corporate bonds (Level 1 of fair value hierarchy) was determined as their market price at the reporting dates;
- the fair value of loans and borrowings and fixed rate corporate bonds (Level 2 of fair value hierarchy) at 31 December 2023, 2022 and 2021 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 or a bond, its expected maturity and credit risks attributable to the Group;
- the fair value of trade and other long-term payables (Level 3) at 31 December 2023, 2022 and 2021 was determined as the present value of future cash flows, discounted at the best management estimate of market interest rates.

The management believes that the carrying value of financial instruments such as cash and cash equivalents (Note 20), other financial assets, trade and other receivables except for trade and other receivables at fair value through profit or loss (Note 19) and current accounts payable (Note 28) either approximates to their fair value or may not significantly differ from it. The fair value of trade and other receivables at fair value through profit or loss, as well as the level of the fair value hierarchy and the method of measuring are disclosed in Note 19.

The information below presents financial instruments not measured at fair value, including loans and borrowings (Note 24), trade and other long-term payables (Note 28).

	At 31 December 2021		At 31 December 2022		At 31 December 2023	
	Carrying value	Fair value	Carrying value	Fair value	Carrying value	Fair value
Fixed and floating rate bonds (Level 1)	4,574	4,639	4,156	3,323	3,668	3,155
Floating rate loans and borrowings (Level 2)	5,648	5,439	6,766	6,535	5,480	5,183
Fixed rate bonds (Level 2)	–	–	562	562	561	557
Fixed rate loans (Level 2)	4	4	–	–	3	3
Trade and other long-term payables (Level 2)	55	55	56	56	51	50
TOTAL	**10,281**	**10,137**	**11,540**	**10,476**	**9,763**	**8,948**

At 31 December 2020 other current liabilities measured at fair value through profit or loss included a liability on the execution of a put option held by owners of 13.3% non-controlling interest in the share capital in LLC “GRK “Bystrinskoye” in the amount of USD428 million. Since the non-controllling interest owners did not exercise their right under the put option before its expiry date of 31 December 2021, the Group derecognised the liability on the execution of the put option as at 31 December 2021. The Group presented derecognition of the liability directly in the consolidated statement of changes in equity as Other effects related to transactions with non-controlling interest owners in the amount of USD490 million, which was its fair value at 31 December 2021 immediately before derecognition. The fair value of the liability at all applicable dates was determined based on the discounted cash flows of LLC “GRK “Bystrinskoye” less its net debt taking into account the amount of working capital at the reporting date and with the relevant discount reflecting the non-controlling 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 were as follows:

- Future cash flows were 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 and iron ore were estimated by the Group’s management using consensus forecasts for commodity prices;
- Metals concentrate (copper and iron ore concentrate) production and sales forecast was 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 were based on Oxford Economics data consistent with a consensus forecast of investment banks. Forecast for exchange rate was made based on expected RUB and USD inflation indices;
- An after-tax nominal RUB discount rate of 13.9% at 31 December 2021 was estimated by reference to the weighted average cost of capital and the 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 2021 till the date of derecognition amounted to USD66 million included in the finance costs of the consolidated income statement.

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.

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 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.

Measurement units

LENGTH	
1 lb	.4535924 kg
1 g	.03215075 oz t

Currency exchange rates in 2021–2023

Index	2021	2022	2023
Average rate Russian Rouble / US Dollar	73.65	68.55	85.25
Average effective rate Russian Rouble / US Dollar (for CAPEX)	73.42	66.96	84.86

LENGTH	
1 km	.6214 mi
1 m	3.2808 ft
1 cm	.3937 in
1 mi	1.609344 km
1 foot	.3048 m
1 in	2.54 cm
AREA	
1 sq m	10.7639 sq ft
1 sq km	.3861 sq mi
1 ha	2.4710 acres
1 sq ft	.09290304 sq m
1 sq m	2.589988 sq km
1 acre	.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

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Disclaimer

The information herein relies on the data available to MMC Norilsk Nickel as at the date of this Annual Report. After this Annual Report was prepared, the Company's operations as well as forecasts and overview of the current situation contained herein may have been affected by external or other factors, including the escalation of the geopolitical conflict in Ukraine, sanctions imposed by the United States of America, the European Union, the United Kingdom, and other nations against the Russian Federation, Russian individuals and legal entities, Russian Federation's response to sanctions, economic and other measures introduced to maintain the economic and financial stability of the Russian Federation, and other factors beyond the Company's control. In particular, the United States of America, the European Union, the United Kingdom, and other nations have imposed export controls against the Russian Federation that restrict, among other things, supply of industrial equipment to the Russian Federation. These export controls may have a negative impact on the manufacturing capabilities of MMC Norilsk Nickel should it be unable to purchase and deliver equipment to the Russian Federation.

The Annual Report discloses the Company's short-, medium-, and long-term goals and plans. All plans and intentions outlined in this Annual Report are provisional and subject, among other things, to a number of economic, political, and legal factors, including the factors mentioned above, beyond Company's control. Forward-looking statements are subject to risks and uncertainties as they refer to events and depend on circumstances that may or may not occur in the future. Forward-looking statements are not guarantees of the Company's future operational and financial performance, and actual results of the Company's operations, its financial position, liquidity, prospects, growth, strategy, and the development of the industry in which MMC Norilsk Nickel operates may differ materially from those expressed or implied by the forward-looking statements contained in this Annual Report. MMC Norilsk Nickel hereby disclaims any liability for any loss resulting from the use of this Annual Report and assumes no obligation to update any forward-looking statements contained herein.

Information about market share and other statements regarding the industry in which MMC Norilsk Nickel operates, as well as the Company's position relative to its competitors are based on publicly available information published by other metals and mining companies or obtained from trade and business organisations and associations. Such data and statements have not been independently verified, and the financial and operational performance metrics of MMC Norilsk Nickel's competitors used to assess and compare positions may have been calculated differently from the method used by MMC Norilsk Nickel.

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