NORNICKEL

2022 Sustainability report

Advancing values and priorities

Contents

President's letter 3
Chairman's letter 5
Our highlights 7
About Nornickel Group 11

Strategic vision

Strategy of sustainable growth 22
Nornickel and UN Sustainable Development Goals 31
Nornickel and Russia's National Projects 35

E – Environmental

Enviromental management 41
Climate change and energy efficiency 48
Air 71
Water 74
Tailings and waste 78
Soil protection and responsible mining 83
Biodiversity 88

S – Social

Stakeholder engagement 99
Respect for human rights 104
Occupational health and safety 112
HR management and social partnership 129
Social policy 153
Corporate volunteering 164
Development of local communities 167

G – Governance

Corporate Governance 221
Sustainability Management 230
Internal Control and Risk Management 235
Tax strategy 247
Business Ethics and Anti-Corruption 250
Grievance policy 256
Supply chain responsibility 261
Research and development, digital technologies 271
Corporate security 280

Appendices

About the Report 285
GRI content index 286
Report boundaries 304
Definition of material topics 307
SASB METALS&MINING content index 313
UNCTAD Guidance on core indicators for entity reporting on contribution towards implementation of the UN SDGs 319
TCFD disclosures 324
GRI quantitative indicators disclosure 325
Nornickel's support for initiatives, standards, and participation in associations focused on sustainable development and corporate social responsibility 353
Certification of Corporate Integrated Management System (CIMS) 355
Awards and accolades 357
List of abbreviations 359
Glossary 363
Stakeholder dialogue minutes 366
Stakeholder recommendations 369
Opinion of the RSPP Council on Non-Financial Reporting 370
Independent assurance report 375
Disclaimer 379
Contacts 380

APPROVED
by the Board of Directors
of PJSC MMC Norilsk Nickel
Minutes №. GMK/24-pr-sd
dated 23.05.2023

APPROVED
by the Management Board
of PJSC MMC Norilsk Nickel
Minutes № GMK/11-pr-p
dated 05.05.2023

APPROVED
by the Committee on sustainable development and climate change
of PJSC MMC Norilsk Nickel
Minutes № 1
dated 17.05.2023

President's letter

GRI 2–22

To conclude, I would like to stress that Nornickel remains strongly committed to its sustainability strategy regardless of external factors. In our operations, we continue to prioritise resource and energy efficiency, circular economy, social and labour matters, quality of corporate governance, along with environmental and social programmes for local communities.

Dear colleagues,

I present to you Nornickel's 2022 Sustainability Report.

The past year's geopolitical situation put a great pressure on our operations. Despite the restrictions in international trade and disruptions in logistics chains, Nornickel is on track with its sustainability strategy. We reaffirm our commitment to the UN Global Compact principles seen as a pillar of our business. Our key production, social, and environmental projects are ongoing, which is proven by this Report.

As part of consistent efforts to perfect its health and safety system, the Company is implementing programmes to prevent injury. In 2022, we forged ahead, with fatalities down almost threefold to four. All cases were subject to thorough investigation followed by reports to the Board of Directors and mitigation plans. I would like to reiterate that zero fatalities remains our top strategic priority.

In 2022, the Sulphur Programme at Nadezhda Metallurgical Plant reached its final phase. We are installing the equipment and getting the site ready for the start-up expected in less than a year. The project is set to reduce sulphur dioxide emissions at the Norilsk Division by 45% from 2015, our baseline.

In October 2022, we finished the rehabilitation of the fertile soil layer in the vicinity of the Ambarnaya River. The restoration of land contaminated by the diesel fuel spill in 2020 is virtually completed.

At the same time, we are fostering cooperation with research organisations to monitor the environment in the regions where our sites are located. In 2022, Nornickel and the Siberian Branch of the Russian Academy of Sciences made an extensive research of biodiversity in the regions of our operation. This work called the Big Scientific Expedition was yet another step in our fruitful collaboration with the Russian Academy of Sciences, which had started back in 2020. Last year, our efforts covered three regions of Nornickel's operation. The study goals were to identify the areas of the Company's environmental impact and assess the current biodiversity status locally.

We are also taking consistent steps to reduce our environmental footprint using state-of-the-art solutions. In particular, NTEC, part of Nornickel Group, commissioned new local facilities for wastewater treatment. These are modern plants which will enable continuous automatic monitoring of discharges. In 2023, we plan to launch one more facility of this kind, with another dozen plus projects currently at the design and construction stages.

Waste management remains another focus area for us. In 2022, we accelerated our large-scale Clean Norilsk environmental programme launched a year earlier. It pursues ambitious, but important goals of cleaning the Norilsk Industrial District. Since the start of the programme, we have cleaned 2.6 million m² and removed 71 kt of scrap metal and 814 kt of rubbish.

To make its environmental strategy as effective as possible, in 2022, Nornickel and the Federal Service for Supervision of Natural Resources (Rosprirodnadzor) signed two agreements set to preserve the environment and ensure environmental safety. The first agreement provides for the exchange of information and joint implementation of environmental initiatives. The second one is the first of its kind pilot project requesting and receiving advice from Rosprirodnadzor on Nornickel's high-potential investment projects.

Climate change is yet another key theme of our sustainability strategy. Speaking about risks, we pay special attention to the thawing of permafrost on top of which a great many our production sites and infrastructure in the Norilsk Industrial District are built. We focus on analysing ongoing changes and developing relevant adaptation measures to maintain business continuity and enhance occupational safety. The ongoing initiatives include an automated monitoring system for the foundations of buildings and structures we are rolling out in the Norilsk Industrial District. As for new opportunities, we rely on our green metal basket. We have already done a lot to decarbonise the global economy, and we expect the demand for our products to steadily rise, which will contribute to our sustainable and well-balanced growth.

Traditionally, our major focus is support to the indigenous peoples in the regions of operation. Nornickel is on track with its 2020–2024 programme to aid and develop Taimyr indigenous minorities. The Company's total investment in the programme exceeded RUB 2 bn. In 2022, in response to requests from local communities, we expanded the initiative and allocated around RUB 100 mln for additional measures.

In 2022 we also held prior task force consultations with the representatives of indigenous minorities in the villages of Lovozero and Krasnoshchelye as regards the prospective development of the Kolmozerskoye lithium deposit. As part of the dialogue with the local Sámi people, we leverage our prior experience of engaging with Taimyr indigenous minorities, including the process of obtaining Tukhard residents' free, prior, and informed consent, the first ever in the Russian Arctic history.

To conclude, I would like to stress that Nornickel remains strongly committed to its sustainability strategy regardless of external factors. In our operations, we continue to prioritise resource and energy efficiency, circular economy, social and labour matters, quality of corporate governance, along with environmental and social programmes for local communities.

Vladimir Potanin,

President and Chairman of MMC Norilsk Nickel's Management Board

Chairman's letter

GRI 2–22

In 2022, Nornickel invested considerable effort across various areas of sustainable development, including in its Environmental and Climate Change Strategy. The Board of Directors, including the dedicated Sustainable Development and Climate Change Committee, is involved in regular monitoring and supervision of relevant programmes and initiatives.

Nornickel seeks to apply a balanced ESG approach, with equal attention paid to achieving financial stability, economic growth, better corporate governance, social welfare of all stakeholders, environmental safety, and adaptation to climate challenges. We believe we can adapt to change better by promoting the sustainability agenda.

In 2022, our funding of major projects rose by 55% to a record USD 4.3 bn as we focus on improving industrial and environmental safety. We also invest heavily in digitisation and automation of production processes. The use of drones, digital twins, machine vision and remote process control has already proved to be effective. This is not only about streamlining production and cost cuts, but, most importantly, about enhancing safety and creating a comfortable workplace environment for our people.

Nornickel is expanding cooperation with the R&D community by doing joint research of local nature and developing advanced eco-friendly and adaptation technologies and solutions for Arctic operations. New risks, including climate-related and geocryological, present unprecedented challenges, and the future of our business depends on how effectively we respond to them.

We maintain regular dialogue with our stakeholders to adjust our operations based on public demand and business needs in a timely fashion. Importantly, we forged ahead in promoting sustainability values among our employees, with ESG becoming an integral part of our business philosophy, corporate culture, and mindset of our management teams.

The Company invariably demonstrates strong financial and non-financial disclosure, among other things, in ESG.

The new Board of Directors elected by the Annual General Meeting of Shareholders in 2022, is made of six independent directors in line with requirements set out in the Listing Rules of the Moscow Exchange and the Bank of Russia's Corporate Governance Code.

In 2022, Nornickel saw a surge in the number of retail shareholders, which hit 390,000 by the year end as compared to as little as 62,000 in 2019. This will help gradually reduce our reliance on foreign capital and, hence, flatten out strong fluctuations in the share price. The Company keeps working to expand the pool of retail investors, among other things by holding webinars on the platforms of major retail brokers.

Given the current geopolitical risks, we are doing our best to protect the interest of our investors. Our efforts include redesigning our logistics chains, searching for new partners and unlocking opportunities to stay resilient and bolster performance.

We seek to be as transparent as possible about our achievements, challenges, and exciting sustainability projects by sharing information in our public reports, on the corporate website, and in social media.

Andrei Bougrov,

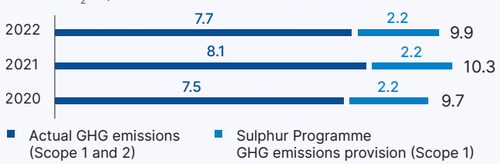
Chairman of the Board of Directors

Our highlights[1]

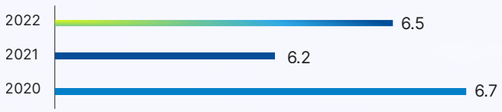
Environment

Climate change

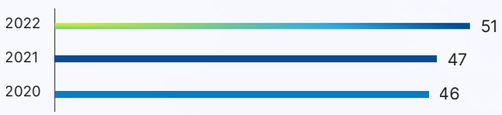
GHG emissions (Scope 1 and 2)[2]
(mt of CO_2 equivalent)



Actual GHG emissions intensity (Scope 1 and 2)
(t of CO_2 equivalent / RUB mln)

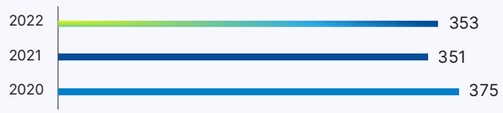


Share of renewables in electricity consumption
(%)



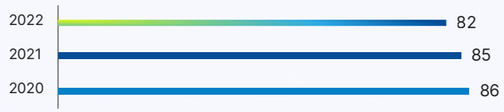
Water use

Total water withdrawal
(m^3)



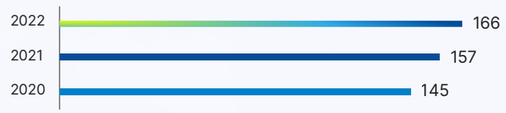
Water withdrawal intensity
('000 m^3 / RUB mln)

Share of water reused and recycled
(%)

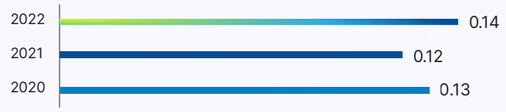


Waste

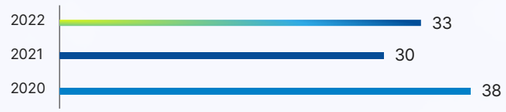
Waste generation
(mt)



Waste generation intensity
(kt / RUB mln)

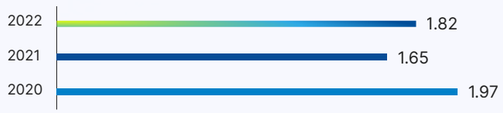


Waste recovery
(mt)



Air

Air pollutant emissions
(mt)



Air pollution intensity
(t / RUB mln)

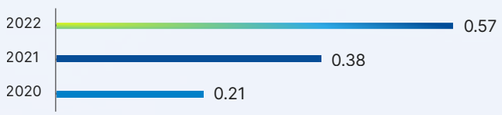
[1] All intensity metrics are per RUB 1 mln of IFRS revenue.
[2] Including a GHG emissions provision for the Sulphur Programme and GHG emissions generated from heat and electricity supply to the public.

GHG emissions (Scope 3),
5.7 mt of CO_2 equivalent

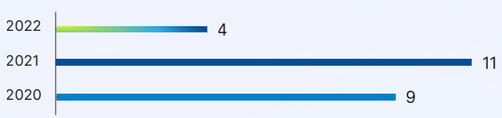
Labour practices

Health and safety

LTIFR



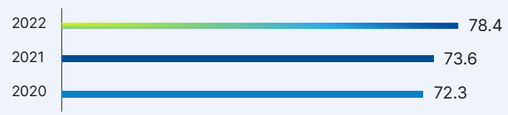
Fatalities



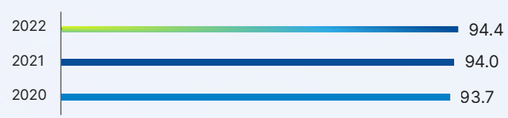
Health and safety expenses per employee (RUB '000)

Employment

Nornickel's average headcount (thousand people)



Nornickel employees covered by collective bargaining agreements (%)

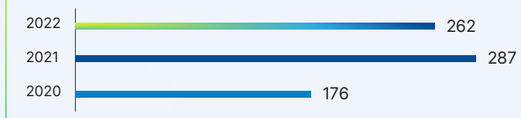


Average monthly salary at Nornickel (RUB '000)

Development of regions and local communities

Spending on social programmes, charity, and social infrastructure[1] (RUB bn)

Tax and non-tax payments to budgets of various levels (RUB bn)



Support for indigenous Northern minorities (RUB mln)

[1] Excluding contingent liabilities in relation to future social projects.

About Nornickel Group

GRI 2–1, 2–6

Nornickel is a leader of the Russian metals and mining industry, ranks No. 1 among the world's producers of high-grade nickel and palladium, and is one of the major producers of platinum, cobalt, other metals and other chemical elements (a total of 13) globally.
Our metals are essential for the low-carbon economy and green transport.

Nornickel's products

28 Ni Nickel	46 Pd Palladium	78 Pt Platinum	27 Co Cobalt	29 Cu Copper	45 Rh Rhodium	79 Au Gold
47 Ag Silver	77 Ir Iridium	16 S Sulphur	52 Te Tellurium	34 Se Selenium	44 Ru Ruthenium	

The Company is a vertically integrated holding boasting a full production cycle, from ore mining to refining, along with its own energy, transportation, and support assets, along with R&D.

Exploration → Mining and processing of minerals → Metals production → Logistics and sales

R&D, energy, repairs, construction (NN Development)

Nornickel is the largest business in the Russian Arctic and a mainstay of local economies.

Position in the industry[1]

34 countries
receive supplies of Nornickel's products

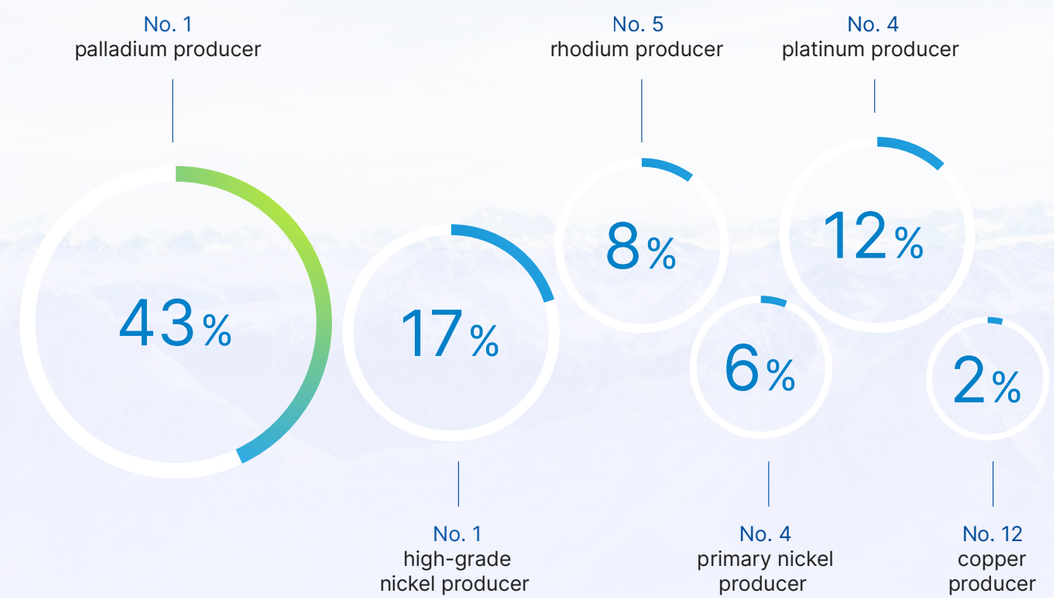
374
customers from across the globe

Proven and probable reserves[2]

1,127 mt
Norilsk and Kola Divisions

274 mt
Trans-Baikal Division

Reserves-to-production ratio at the current production level
> 75 years



[1] For palladium, nickel, platinum, and rhodium markets – in terms of refined metals production (including tolling arrangements), for the copper market – in terms of mining.
[2] A decrease in ore reserves and inferred resources in the Norilsk Industrial District mainly ensued from the impact a change in economic parameters and a new MET rate had had on the feasibility of developing a portion of disseminated ore from the Taimyr Ore Cluster after 2035.

Nornickel's contribution to the International Cooperation and Exports national project

Relevant UN SDGs

Related federal projects

- Industrial exports;
- international trade and logistics.

Nornickel's key business areas

- Metal product exports;
- Development of the ice-breaking fleet and transportation along the Northern Sea Route;
- Transport accessibility in far-flung regions.

For more details, please see the Transport Accessibility in Remote Locations section

Key results for 2022

- 4.88 mt/km freight traffic along the Northern Sea Route.

Production and supply chain

Assets

As at the end of 2022, Nornickel Group comprises over

> 85 companies

with its production assets located in two countries – Russia and Finland.

In 2020, Nornickel Group and MMC Norilsk Nickel units merged into four core divisions – Norilsk, Kola, Trans-Baikal and Energy.

MMC Norilsk Nickel's Head Office is located in Moscow.

Core companies and business units

Norilsk Division

The Norilsk Division is located on the Taimyr Peninsula in the north of the Krasnoyarsk Territory, Russia. It operates the largest deposits in the Company's portfolio and boasts a full metals production cycle from ore mining to the shipment of finished products.

The Norilsk Division mines rich, cupriferous, disseminated copper-nickel sulphide ores. The Talnakhskoye and Oktyabrskoye deposits are developed by Taimyrsky, Oktyabrsky, Komsomolsky, Skalisty and Mayak Mines. Nornickel also holds an exploration licence for the Western flanks of the Oktyabrskoye deposit. Zapolyarny Mine develops the Norilsk-1 disseminated ore deposit through open-pit and underground mining.

The mined ore is processed at Talnakh and Norilsk Concentrators. The resulting thickened concentrates are transported via slurry pipelines to Nadezhda Metallurgical Plant and Copper Plant for further processing. The Norilsk Division's facilities also process copper-nickel concentrate and copper in semi-products from the Kola Division along with gold concentrate from the Trans-Baikal Division. The Norilsk Division produces high-grade nickel matte sent to Kola MMC, copper cathodes, commercial sulphur, selenium, precious metal concentrate and tellurium ingots.

Key facilities

Polar Division

Medvezhy Ruchey

Kola Division

The Kola Division is located on the Kola Peninsula, Murmansk Region, and in Finland. It develops deposits of the Western Ore Cluster located within a 25-kilometre stretch between Nickel and Zapolyarny in the west of the Murmansk Region. The division mines disseminated copper-nickel sulphide ores containing nickel, copper and other valuable metals. The mined ore is processed at Zapolyarny Concentrator, with the resulting sulphide concentrate then supplied to the Norilsk Division and for sale.

Kola MMC's production facilities in Monchegorsk process converter matte from the Polar Division. Kola MMC's end products are nickel cathodes, nickel carbonyl, electrolytic cobalt and cobalt concentrate. The division also produces precious metal concentrates, copper in semi-products to be processed at the Norilsk Division, crushed converter matte, sulphuric acid, and saleable copper and nickel concentrates.

Norilsk Nickel Harjavalta is Nornickel's subsidiary in Finland, Harjavalta, processing the Company's own Russian feedstock and third-party nickel feedstock. Harjavalta is the only nickel refinery in Finland and one of the largest similar facilities in Europe. Norilsk Nickel Harjavalta's end products are nickel cathodes, briquettes, salts, powders and solutions, cobalt sulphate and solution and PGM-bearing copper cake sent for processing to the Norilsk Division.

Key facilities

- Kola MMC
- Norilsk Nickel Harjavalta OY

Trans-Baikal Division

Located in the Gazimuro-Zavodsky District, Trans-Baikal Territory, the Trans-Baikal Division mines gold-iron-copper ores of the Bystrinskoye deposit, 16 km east of Gazimursky Zavod. Nornickel also holds licences to explore the flanks of Bystrinskoye and Bystrinsko-Shirinskoye deposits.

The mined ores are processed at Bystrinsky Concentrator into saleable copper and iron ore concentrates and gold concentrate sent to the Norilsk Division.

Key facilities

- GRK Bystrinskoye

Energy Division

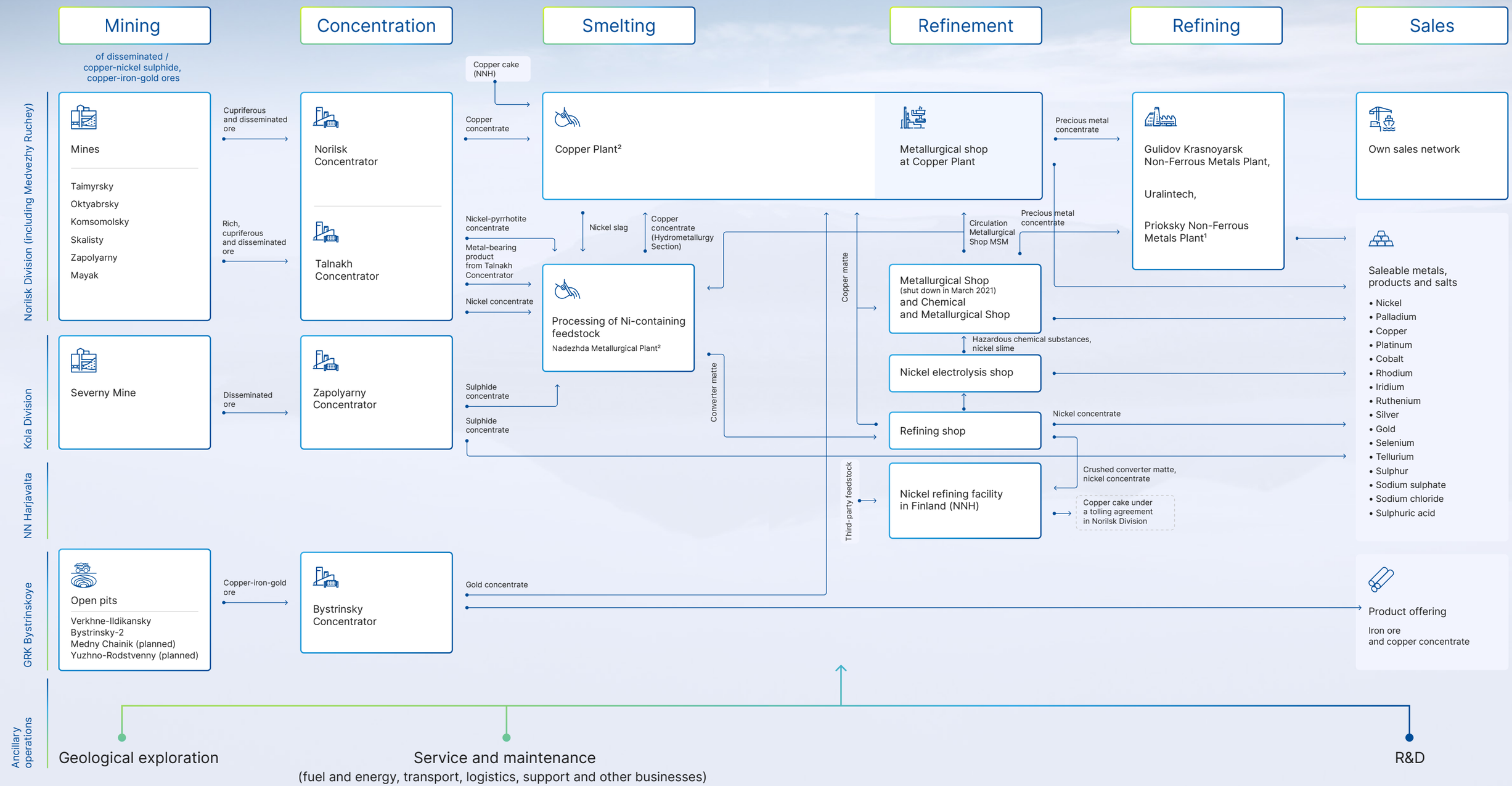
Located in the Norilsk Industrial District, power generating and grid facilities supply heat and electricity to production assets and local consumers.

Gas production and transportation assets produce and transport natural gas and condensate from fields to consumers.

Fuel assets supply light and dark petroleum products to the Far North and store them locally.

Key facilities

- NTEC
- Norilskgazprom
- Norilsktransgaz
- TFC



[1] Precious metals produced by Polar Division are refined at Gulidov Krasnoyarsk Non-Ferrous Metals Plant and Uralintech under tolling agreements. Precious metals produced by Kola MMC are refined at Gulidov Krasnoyarsk Non-Ferrous Metals Plant and Prioksky Non-Ferrous Metals Plant under tolling agreements.

[2] Production facilities implementing flagship projects under the comprehensive environmental programme.

Strategic vision

Strategy of sustainable growth 22

Nornickel and UN Sustainable Development Goals 31

Nornickel and Russia's National Projects 35

Strategic vision

GRI 2-23, 2-24

Our mission

Supply the world with non-ferrous metals, efficiently and safely using natural resources and equity to realise people's aspirations for development and technological progress.

Our values

People is our Company's key value. Over the eight decades of working in the Far North, Nornickel has developed unique infrastructure and professional competencies that enable the Company to leverage its mineral resources as efficiently as possible and to maintain the impeccable quality of products. Our employees rely on values that the Company has cherished over the years of its operations.

Reliability

The ability to face any challenges while keeping the business successful and prosperous

Responsibility

The willingness to deliver on commitments, take decisions and assume the responsibility for their outcomes

Efficiency

The ability to achieve results with a minimum expenditure of time and effort

Development

The rational expansion and modernisation of production assets, implementation of the leading-edge technologies and improvement of employees' professional skills

Professional excellence

The ability to achieve results in any conditions or environment

Teamwork

The Company's employees are ready, willing and able to achieve goals by joining their efforts

Strategy of sustainable growth

GRI 2-6

A low-carbon pathway of the global economy and actions to curb rising average temperatures present unique opportunities for Nornickel to become a leading producer of green metals essential for the energy transition. In the long run, our rapid growth will be driven by increasing demand for our key products needed to improve energy efficiency of transportation and develop renewable energy.

We are aware that sustainable development is impossible without a holistic approach to managing natural resources that would respect the interests of all stakeholders. In particular, our customers set the bar high for our products as regards their compliance with the sustainability principles. Our success also depends on how effectively we cooperate with our shareholders, NGOs, local communities and other stakeholders. Thus, the ESG agenda is set to become the main driver and the cornerstone of Nornickel's strategic initiatives and investment projects.

Our approved strategic priorities through 2030 include a dramatic environmental uplift in the regions of operation, capacity upgrade, construction of new capacities to build up production of key metals, and maintaining financial strength.

As regards the resource base, our strategy envisages stripping of new deposits within the existing license blocks, comprehensive development of deposits to mine all types of ores, large-scale upgrade of production capacities, and maximum utilisation and expansion of production capacity at existing mines, including output ramp-up as a result of the South Cluster development. This will help us considerably increase the output saleable products by 2030 and meet the growing demand.[1]

Strategic plans to increase ore mining and metals production by 2030

Ore mining in the NID (mtpa)

Metals production
(mtpa of Ni equivalent)

To reduce our environmental footprint, we carry on with our Sulphur Programme. After we finished its stage on the Kola Peninsula in 2021, sulphur dioxide emissions went down 90% in 2022 compared to the 2015 baseline. In 2023, the Company plans to complete the first stage at Nadezhda Metallurgical Plant in the Norilsk Industrial District, which will reduce emissions in the Polar Division by 45% vs 2015.

[1] For more details on our strategic projects to increase and upgrade production, please see our Annual Report 2022.

Sulphur Programme roadmap

KOLA DIVISION

- Smelting shop
  Nickel
  (shut down in December 2020)
- Copper line (refining)
  Monchegorsk
  (shut down in March 2021)

NORILSK DIVISION

- NMP
- Copper Plant
- Nickel Plant (shut down in 2016)

71%
Cross-border SO_2 emissions down in 2020[1]

2020

Optimisation of smelting operations to cut SO_2 emissions in the Russia-Norway border zone

Shutdown of the obsolete smelting shop in Nickel in December 2020

Reduction of SO_2 emissions in Nickel and Zapolyarny

-50%[1] → 2x

90%
Total SO_2 emissions at Kola MMC down[1]

2021

Full shutdown of the obsolete copper line at the refining shop on the Kola Peninsula

Metallurgical shop shut down on 20 March 2021

reduction of total SO_2 emissions at the Kola Division

-90%[1] → 7x

Implementation 2023

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

reduction of SO_2 emissions from the ramp-up to design capacity. Ramp-up to design capacity in 2024

-45%[1] → ~2x

Redesign and implementation 2027

Launch of Sulphur Programme 2.0 at Copper Plant to recover furnace and converter gases[2]

reduction of SO_2 emissions at the Norilsk Division after the ramp-up to design capacity

up to 90%[1] → ~10x

On top of that, our plans include the modernisation of the energy infrastructure enabling adaptation to physical risks with a climate factor and better reliability of power supply to our production assets in the long run.

[1] Vs the baseline year (2015).
[2] The period of programme implementation at Copper Plant is specified in accordance with Polar Division's Environmental Performance Enhancement Programme (2020) subject to clause 6 of Appendix No. 8 to Russian Government Resolution No. 353 dated 12 March 2022.

Power infrastructure modernisation through 2030

Programme objective:

modernise generating capacities and the grid infrastructure to replace the retiring equipment and grids, reduce physical risks and enhance long-term reliability.

Gas and gas condensate upstream and transportation

- Upgrade of over 150 km of gas and condensate pipelines;
- Ramp-up of gas well drilling at the Pelyatkinskoye deposit post 2028.

Water and heat supply networks

- Replacement of 110 and 220 kV power lines (over 1,000 km);
- Modernisation of water and heat supply networks.

Contribution to energy efficiency:

focus on enhancing performance of new CHP power units and an overall reduction of energy losses along the energy generation and transmission chain.

Heat and power plants

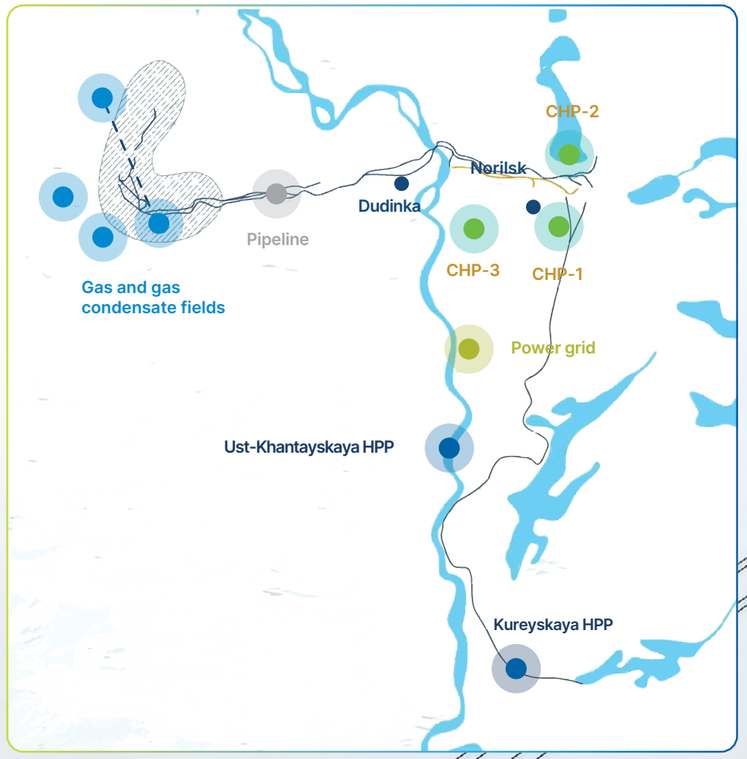
- Construction of four power units at CHP-2 and five power units at CHP-3;
- New more efficient fuel-saving equipment to minimise energy losses.

Hydropower plants

- Upgrade of all seven hydro turbines at Ust-Khantayskaya HPP completed;
- Upgrade of Kureyskaya HPP aiming to increase the installed capacity and energy efficiency and to boost the capacity of low-carbon hydropower plants.

The Company is currently going through an active phase of its investment cycle. In 2022, our CAPEX was USD 4.2 bn, with USD 4.7 bn expected to be spent on key investment projects in 2023. In the next reporting year, we plan to review design solutions and update our investment programme for 2024–2030.

Geography



- Gas and gas condensate upstream and transportation
- Thermal power plants
- Heating and water supply networks
- Hydroelectric power plants
- Gas transportation

Long-term trends supporting consumption growth for the metal basket. Our strategic projects

GRI 2-6

Long trends of global development will have a positive impact on the worldwide demand for the majority of Nornickel's metal basket. Our metals meet the needs in car manufacturing, electronics, electrical engineering, petrochemical and oil refining, power generation, construction, consumer goods, healthcare, and other global industries.

Nickel is the core metal for stainless steels used in multiple sectors – from mechanical engineering and construction to renewable energy. Together with cobalt, nickel is essential in producing electrochemical cells for the new and future generation batteries, which in turn play a vital role in developing electric transport.

Copper is critical for transitioning to the low-carbon economy as it is used in high-tech equipment, including that for making RES-based hardware. Over 70% of refined copper produced globally are used for manufacturing various cables and wires. By 2040, additional 10 mtpa of copper will be needed to meet the demand[1].

At present, the automotive industry is the key consumer of platinum (40%) which goes to auto catalytic converters. Another important application area is jewellery which consumes around 25% of platinum. Platinum is also used in glass manufacturing to produce equipment (bushings) for making glass fibre and optical glass, and in electronics.

PGM are catalysts for the production of key chemicals. Platinum and iridium are part of catalysts used for green hydrogen production. Palladium enables transportation of hydrogen at long distances and its purification. Palladium, platinum and rhodium are used in manufacturing HEVs. Catalytic converters mainly for gasoline engines are the biggest palladium consumers (over 80%) in the mid term. This metal is used in catalytic converters to detoxify exhaust fumes. In most countries, such converters are legally required to be installed on all cars. Palladium is also used in electronics, dentistry, jewellery, chemicals and pharmaceuticals.

We analyse risks and opportunities related to global economic trends and assume that potential changes in demand for metals in some industries will be offset by its growth in others.

[1] Vs 2022.

Key drivers affecting long-term demand for Nornickel's key products

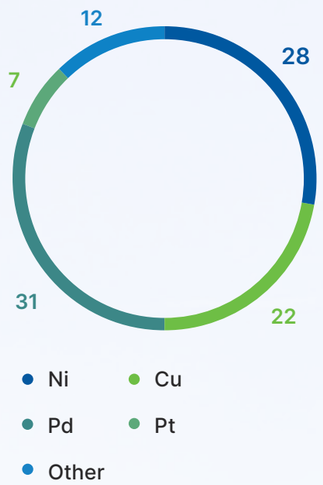
	Ni	Pd/Pt	Cu
Growth of BEVs market share	↗	↘	↗
Growing hybrid vehicle market	↗	↗	↗
Growing fuel cell market and hydrogen economy	→	↗	→
Growth of renewables / low carbon fuel in power generation	↗	↗	↗
Storage and grid expansion to support growth in EVs	↗	→	↗
Net effect	↗	→	↗

Based on the study of trends across industries that are key consumers of Nornickel metals, we expect an increase in the long-term demand for nickel and copper and a neutral effect on PGM.

In 2022, Nornickel forecast changes in key metal demand based on three scenarios for the global economy and climate change[1]: "Rapid Transformation", "Sustainable Palladium" and "Global Growth". According to our estimates of prospective demand and supply, we can say that demand for our metals will grow and our strategy is resilient to changes in climate risk factors. The key expected risks are related to demand for palladium.

[1] For more details on our social and economic scenarios, please see the Climate Change and Energy Efficiency section.

Potential revenue breakdown in 2030, %



Ni

Current

Electrification of vehicles and implementation of electricity storage systems

Increased demand for stainless steel associated with the construction sector, use of renewable energy sources, urbanisation, and increased quality of life in the post-COVID period

Cu

Current

Global infrastructure development programmes, mainly in the US and China

Expected

Electrification of vehicles, charging infrastructure development, increased generation of renewable energy

Pd

Current

Higher number of vehicles across the world and growing real income of the population

Hybridisation of vehicles and a shrinking share of diesel cars

Introduction of palladium-based solutions for H_2 storage, transportation and purification, and hydrogen system safety

Pt

Expected

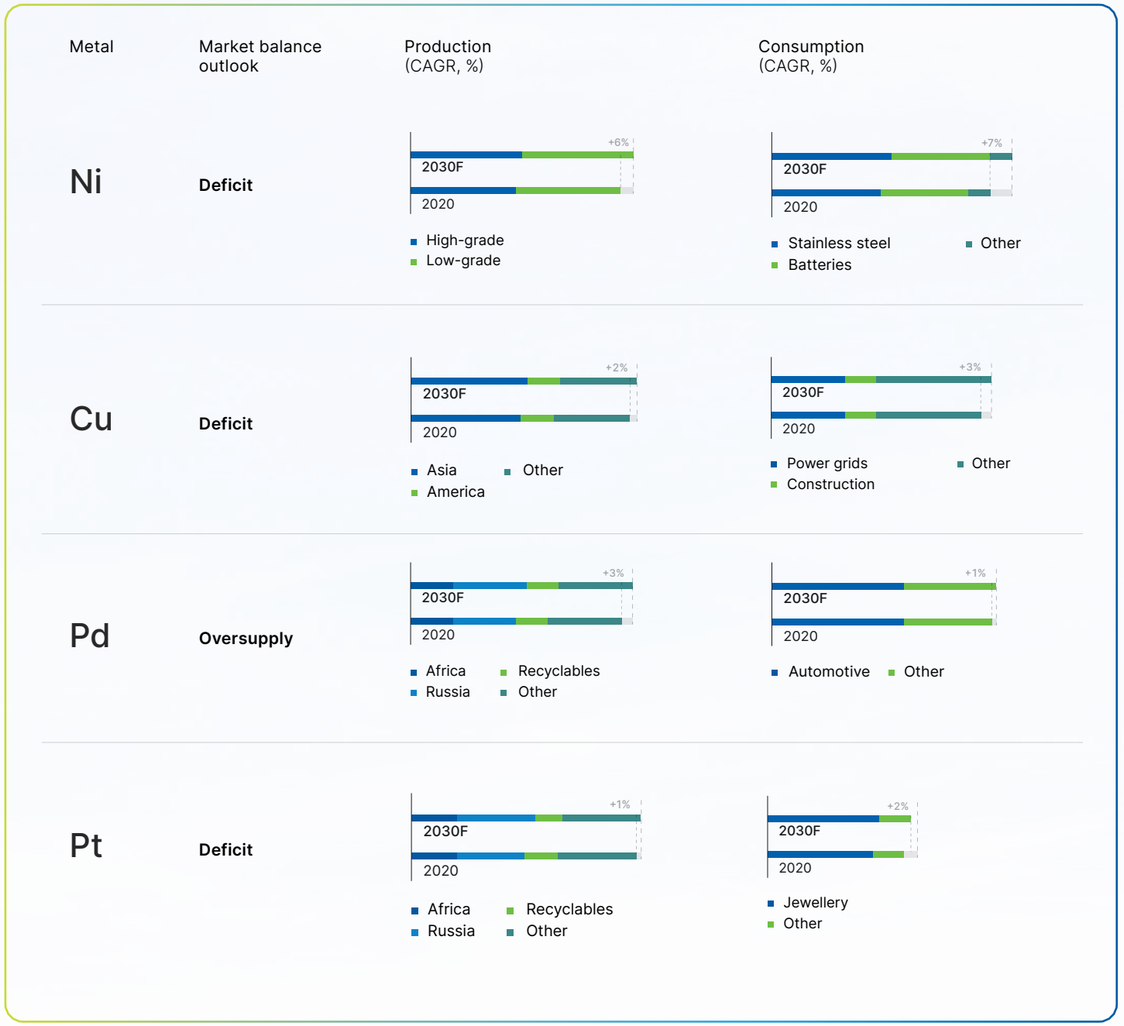
Hydrogen energy and fuel cell cars

Other

Current

Using cobalt in batteries and rhodium in more eco-friendly cars with internal combustion engines

Long-term outlook for the metals market



Nornickel and UN Sustainable Development Goals

Nornickel takes steps in furtherance of the UN Sustainable Development Goals (SDGs) up to 2030. In 2018, we started integrating SDGs into our strategy. The SDGs were adopted in 2015 are a high-level guidance set to bring the authorities, business, and the public together to address the issues of sustainable development, and to protect the planet.

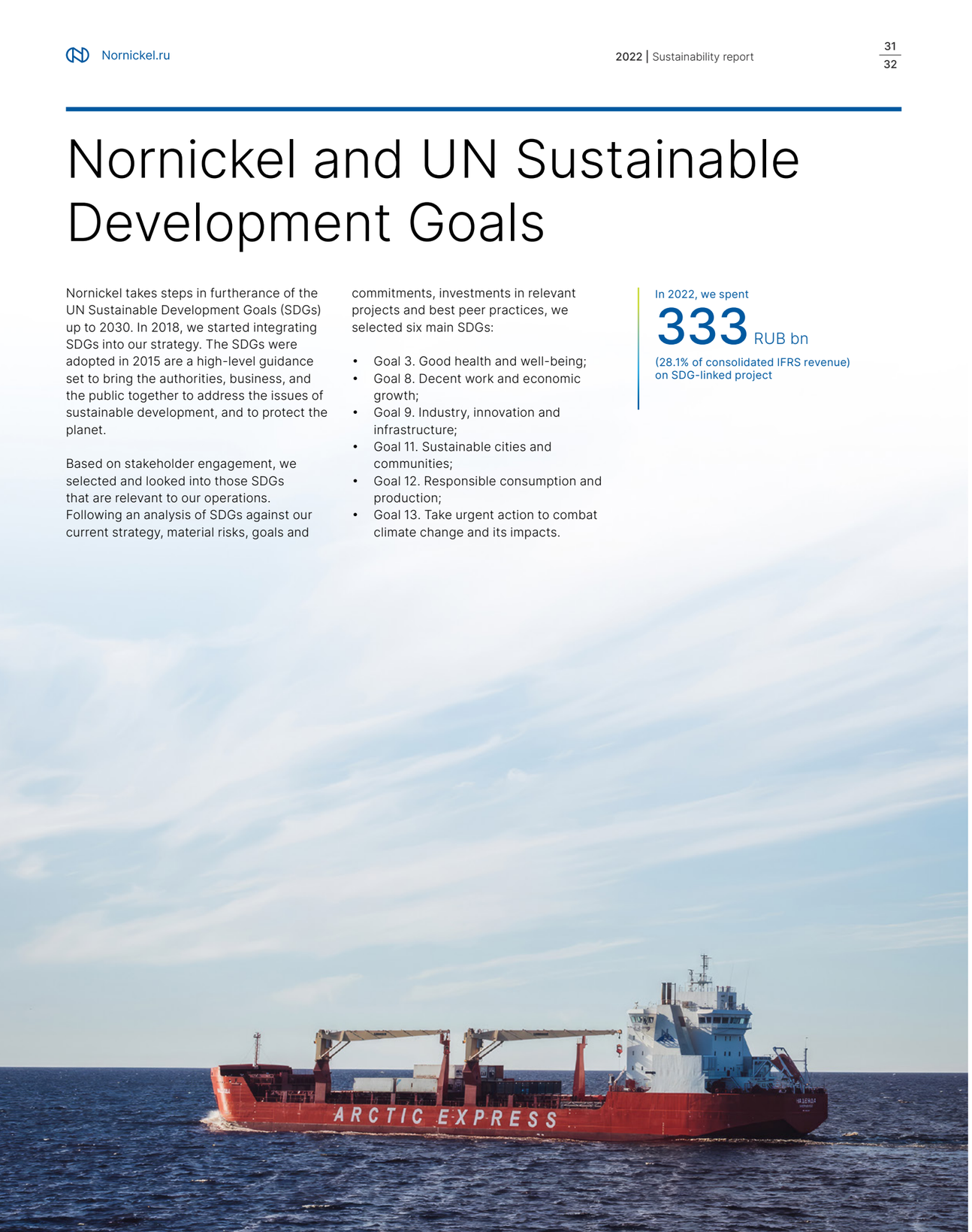
Based on stakeholder engagement, we selected and looked into those SDGs that are relevant to our operations. Following an analysis of SDGs against our current strategy, material risks, goals and commitments, investments in relevant projects and best peer practices, we selected six main SDGs:

- Goal 3. Good health and well-being;
- Goal 8. Decent work and economic growth;
- Goal 9. Industry, innovation and infrastructure;
- Goal 11. Sustainable cities and communities;
- Goal 12. Responsible consumption and production;
- Goal 13. Take urgent action to combat climate change and its impacts.

In 2022, we spent

333 RUB bn

(28.1% of consolidated IFRS revenue) on SDG-linked project



Our contribution towards the Sustainable Development Goals in 2022

SDG	Nornickel contribution in 2022
Goal 3. Ensure healthy lives and promote well-being for all at all ages	• Participants of health improvement programmes increased by 4.1% y-o-y to 25,500 people. • In 2022, the number of employees and their relatives holding VHI insurance policies increased by 11.9% y-o-y to 84,300 people. • We completed the first stage of the programme to upgrade the Company's healthcare facilities and medical examination rooms for pre-trip and pre-shift check-ups. • Our network of corporate healthcare centres keeps expanding. • We organised regular corporate sports events, tournaments and training exercises. For more details, please see the Occupational Health and Safety, Social Policy and Development of Local Communities sections.
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	• Employees covered by staff training, professional development, retraining, and upskilling initiatives increased by 86.9% y-o-y to 216,000. • The average number of annual training hours per employee (based on the average headcount) grew by 22.8% y-o-y to 85. • Nornickel's corporate scholarship programmes covered 76 university students. • Nornickel adopted the Training Strategy for 2022–2025 to build an accelerated training ecosystem for staff development. • We launched Tsifronikel.Junior, an educational project for our employees' children aged 8 to 12. • Nornickel unveiled a multi-platform competency management system. • Norilsk reported 0% unemployment. For more details, please see the HR Management and Social Partnership section.
Goal 6. Ensure availability and sustainable management of water and sanitation for all	• Reused and recycled water makes up 82% of total water consumption. • Yenisey River Shipping Company[1] acquired several models of auxiliary vessels and treatment equipment to prevent river water contamination during the operation of vessels. • Water supply to Norilsk: 10.9 mcm of water supplied to local residents in 2022. For more details, please see the Water section.
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	• RES share in the Group's energy consumption rose by 4 p.p. y-o-y to 51%. • The installed power generation and transformer capacity of our energy assets grew by 73 MW. • Our facilities provided access to electricity in the cities of operation, including Norilsk. • We conducted an analysis of opportunities to switch to green energy sources to replace our own conventional gas power generation facilities in the Norilsk District. For more details, please see the Climate Change and Energy Efficiency section.

[1] Part of Nornickel Group.

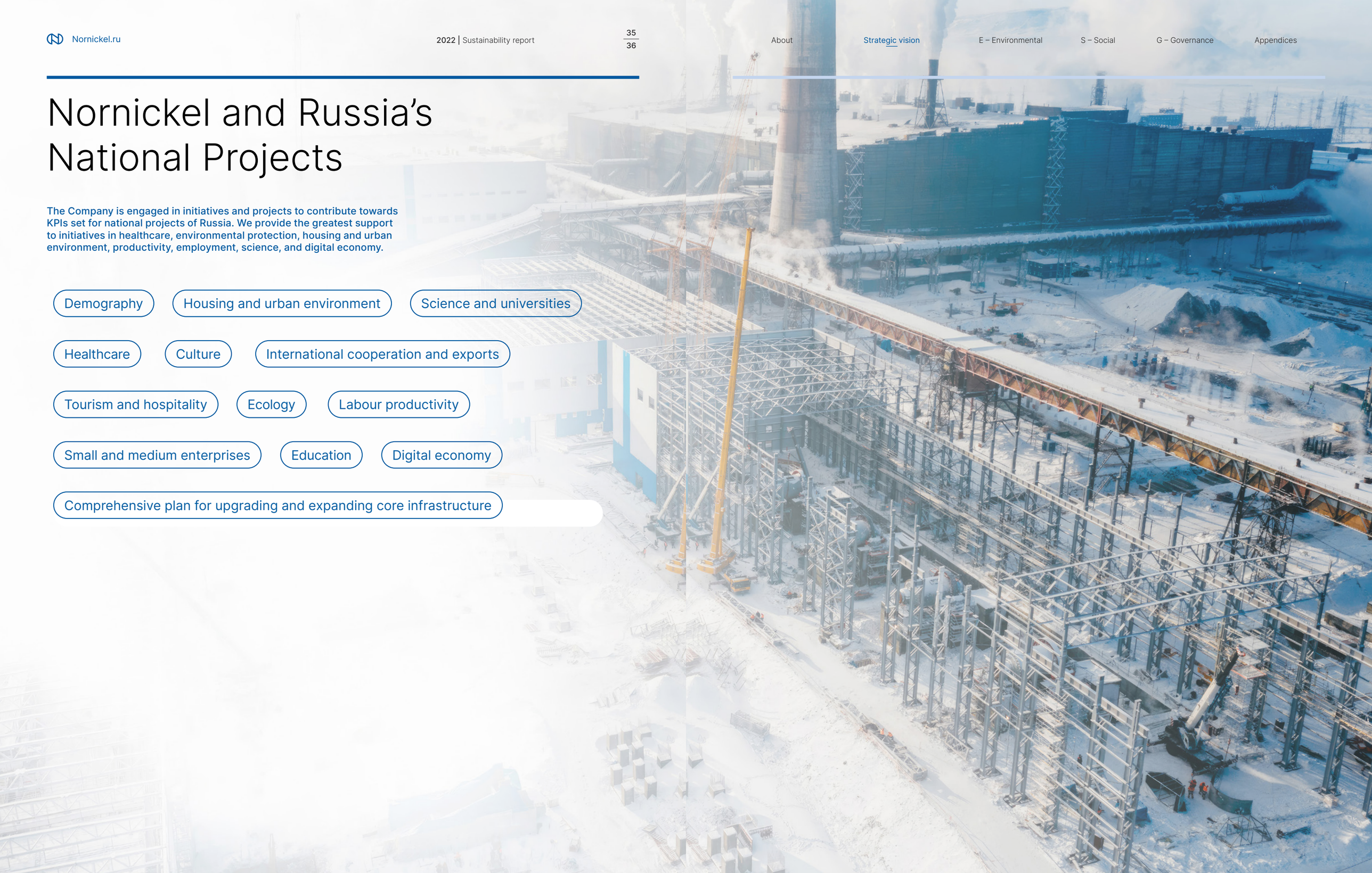
SDG	Nornickel contribution in 2022
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	• Our average monthly salary increased by 25.8% y-o-y to RUB 182,500. • A share of employees covered by collective bargaining agreements rose by 0.4 p.p. y-o-y to 94.4%. • We increased spending on improvements to social and working conditions by 71.1% y-o-y to RUB 3.2 bn. For more details, please see the HR Management and Social Partnership section.
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation	• Together with Rostechnadzor, Nornickel participated in the Russian Government's experiment to launch a system for remote control over industrial safety. • In Norilsk Industrial District, we expanded the bandwidth to improve the quality of communications. • We are running a project to monitor the foundations of buildings and structures in Norilsk. For more details, please see the Research and Development, Digital Technologies section.
Goal 10. Reduce inequality within and among countries	• The number of participants in the relocation support programme increased by 135.3% y-o-y to 3,224. • Expenses on relocating Norilsk and Dudinka residents to regions with better climate conditions stood at RUB 830 mln. • The Company launched the Employee Relocation programme to support an employee when moving to another region either with their current employer or with a different employer within the Group. • We rolled out an automated system for employee onboarding across 26 Group companies. For more details, please see the Social Policy and Development of Local Communities sections.
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	• Pollutant emissions from Kola MMC decreased by 90% vs 2015. • We continued to build off-gas recycling facilities and related infrastructure as part of Sulphur Programme. • Some 2.6 million m² of contaminated areas are cleaned in the Norilsk Industrial District. • The Company set up an air quality monitoring and forecasting system in Norilsk, Monchegorsk, Nickel and Zapolyarny. For more details, please see the Air and Development of Local Communities sections.
Goal 12. Ensure sustainable consumption and production patterns	• We increased waste disposal by 12.1% y-o-y to 33.1 mt. • We started looking into projects to set up recycling facilities for construction waste and ferrous and non-ferrous metal scrap and introduce mud reuse technologies. • A pilot project for waste sorting in Monchegorsk has started. For more details, please see the Tailings and Waste section.

SDG	Nornickel contribution in 2022
Goal 13. Take urgent action to combat climate change and its impacts	• Scope 1 and 2 GHG emissions shrank by 3.9% y-o-y to 9.9 mt of CO_2 equivalent. • We scaled up the project to assess physical risks. • Nornickel developed its own scenarios for global economy and climate change. • Our employees received training on climate change and climate change risks. For more details, please see the Climate Change and Energy Efficiency section.
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	• We completed the rehabilitation of land plots contaminated by the fuel spill at CHP-3. • The Big Scientific Expedition to study biodiversity in the regions of operation was organised. • We drafted a corporate standard for ecosystem biodiversity conservation and monitoring. • Our biodiversity conservation spending totalled RUB 90 mln. For more details, please see the Biodiversity section.
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	• We informed 100% of our employees about our anti-corruption practices. • Nornickel conducted a training campaign on the basics of anti-corruption compliance for the Group's employees responsible for implementing anti-corruption procedures. • Our Russian business units held an anti-corruption monitoring exercise. • A conflict of interest reporting process was implemented for the employees of Russian business units hired before the Regulation on the Prevention and Management of Conflicts of Interest came into effect. For more details, please see the Business Ethics and Anti-corruption section.
Goal 17. Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development	• Working bodies (committees, expert and working groups, etc.) established by public organisations and government authorities where Nornickel Group is represented are 25. • Nornickel and Rosprirodnadzor entered into a cooperation agreement to preserve the environment and ensure environmental safety. • The scenarios for the global economy and climate change were presented at the Sharm el-Sheikh Climate Change Conference (COP 27). For more details, please see the Stakeholder Engagement section.

Nornickel and Russia's National Projects

The Company is engaged in initiatives and projects to contribute towards KPIs set for national projects of Russia. We provide the greatest support to initiatives in healthcare, environmental protection, housing and urban environment, productivity, employment, science, and digital economy.

- Demography
- Housing and urban environment
- Science and universities
- Healthcare
- Culture
- International cooperation and exports
- Tourism and hospitality
- Ecology
- Labour productivity
- Small and medium enterprises
- Education
- Digital economy
- Comprehensive plan for upgrading and expanding core infrastructure



Environmental

Enviromental management 41

Climate change and energy efficiency 48

Air 71

Water 74

Tailings and waste 78

Soil protection and responsible mining 83

Biodiversity 88

Nornickel's contribution to the Environment national project

The Environment national project is aimed at significantly improving the environmental conditions and delivering a positive impact on the health of people in Russia.

Relevant UN SDGs

Relevant federal projects:

- Clean Country;
- Clean Air;
- Clean Water;
- Conservation of Unique Water Bodies;
- Biodiversity Conservation and Ecotourism Development;
- Implementing the Best Available Technologies.

Environmental management priorities

Waste

Key projects
- Clean Norilsk
- Building a crushing unit for construction waste recycling
- Recycling of large tyres and rubber products.

For more details, please see the Contribution to Combating Contamination with Waste section.

Key results

Waste recovery at Nornickel's sites grew by **19.5**% vs 2021 to **33** mt

Industrial waste collection in the Norilsk Industrial District delivered **6.5** X increase vs 2021 to **510** kt

Reuse of waste increased by **31.8**% vs 2021 to **17.8** mt

Water

Key projects
- Improving the closed waster circuit
- Preventing pollution from entering rivers
- Cleaning polluted water bodies and their shores.

For more details, please see the Water section

Key results

Total wastewater discharge reduced by **16.3**% vs 2021 to **168.0** mcm

13.1 kt of wastewater and **1** kt of waste collected by trash interceptor vessels

Air

Key projects
- Sulphur Programme
- Air quality monitoring and forecasting system.

For more details, please see the Air section

Key results

29 stations installed and put into trial operation as part of the air quality monitoring system

Biodiversity

Key projects
- Big Scientific Expedition
- Cooperation agreements with the Russian Ministry of Natural Resources and Environment.

For more details, please see the Biodiversity Conservation Efforts section.

Key results

Three key regions of operation and a section of the Northern Sea Route explored during the Big Scientific Expedition

Aerial survey of polar bears conducted on Wrangel Island

Two polar bears rescued from death

Gyrfalcon conservation agreement concluded

Technology

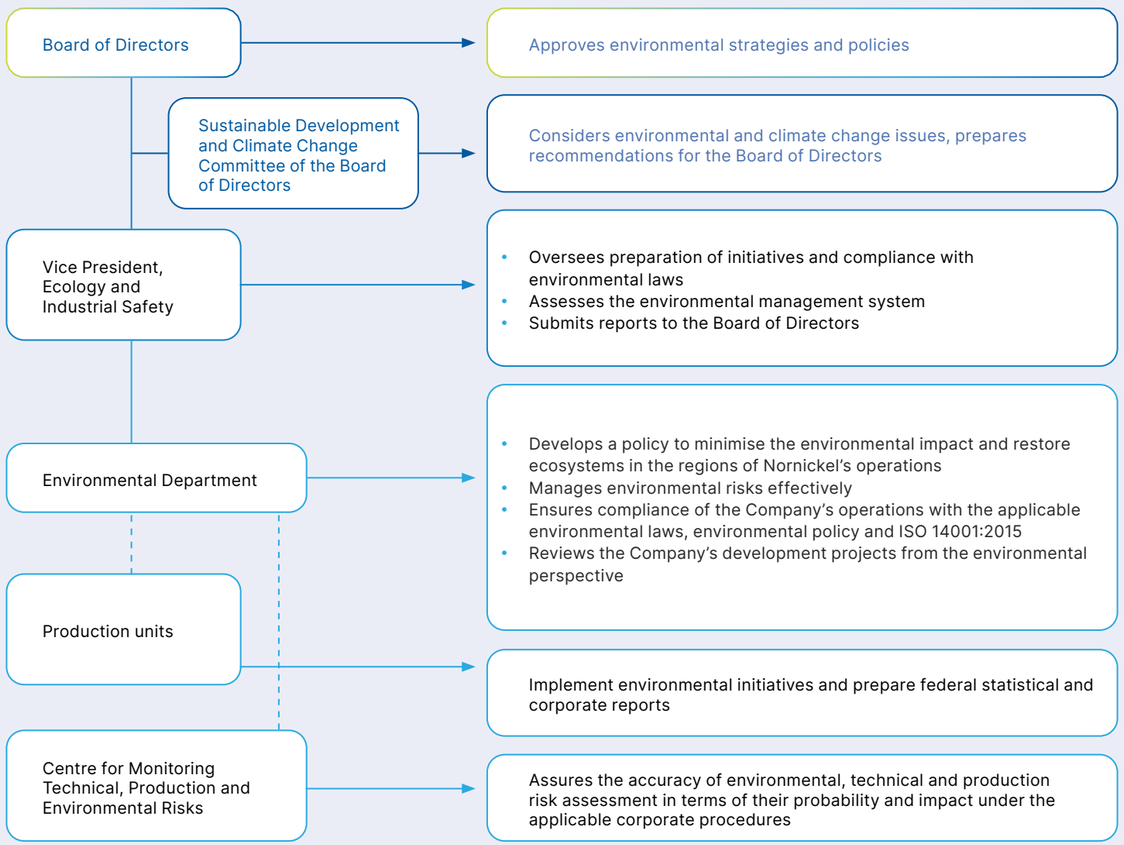
Key projects
Most of Nornickel's projects with a positive environmental effect involve technological advances.

For more details on innovative environmental projects, see the Research and Development, Digital Technologies section.

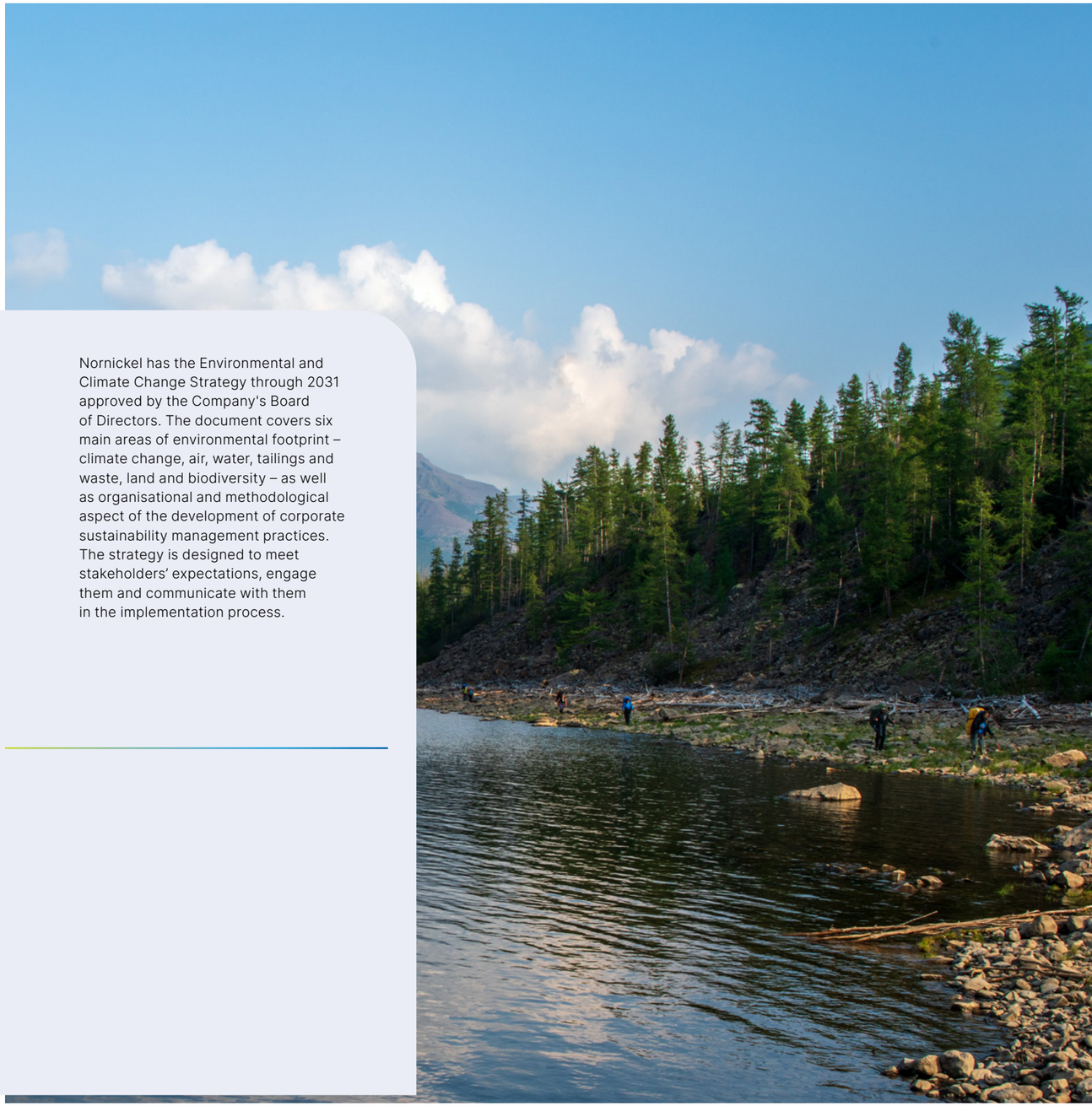
Enviromental management

Nornickel is engaged in ongoing efforts to reduce the negative environmental impact of its operations. Environmental management responsibilities are distributed among different governance bodies of Nornickel in line with their competencies.

GRI 2-12, 2-13, 2-14



Nornickel has the Environmental and Climate Change Strategy through 2031 approved by the Company's Board of Directors. The document covers six main areas of environmental footprint – climate change, air, water, tailings and waste, land and biodiversity – as well as organisational and methodological aspect of the development of corporate sustainability management practices. The strategy is designed to meet stakeholders' expectations, engage them and communicate with them in the implementation process.



Key areas and targets of the Environmental and Climate Change Strategy through 2031

Strategic area	Target indicators	2022 results
Climate change	1. Maintaining absolute GHG emissions from operations (Scope 1 and 2) at around 10 mt of CO_2 equivalent through 2030 while growing production by 30–40% (Ni equivalent vs 2017). 2. Keeping Scope 1 and 2 GHG emissions per tonne of Ni-equivalent in the bottom quartile of global metals and mining industry GHG intensity curve.	In 2022, absolute Scope 1 and 2 GHG emissions totalled 6.4 mt of CO_2 equivalent, while the Sulphur Programme GHG emissions provision totalled 2.2 mt of CO_2 equivalent[1].
Air	3. Reducing SO_2 emissions by 85% at Kola Division in 2021 and by 90% at Polar Division in 2025 vs 2015.	Thanks to the Sulphur Programme implementation, Kola Division's SO_2 emissions declined by 90% vs 2015. Construction and installation continued at Nadezhda Metallurgical Plant and are to be completed by the end of 2023.
Water	4. No interregional or federal emergency situations.	In 2022, there were no significant spills. In 2022, there were no interregional or federal emergencies with environmental consequences. Construction was carried out at Nornickel's sites to erect wastewater treatment facilities.
	5. Reducing the volume of pollutants discharged by 25% vs 2019 and achieving the maximum permissible emissions rate of 159 kt by 2031.	The volume of pollutants discharged in 2022 reduced by 12% y-o-y.
	6. Keeping fresh water withdrawal (excluding mining water) for production needs at the level of 2020 at 120 mcm[2].	In 2022, fresh water intake (excluding mining water) for production needs totalled 236.4 mcm[3].
	7. Keeping water recycling and reuse rates above 80%.	Water recycling and reuse rate was 82% in 2022.
	8. Eliminating the CHP-3 fuel spill consequences and clean-up to normalise the water indicators by the end of 2022.	The CHP-3 incident clean-up was completed.
Tailings and waste	9. Disposing of 100% of tailings generated by new projects to environmentally safe facilities featuring best-in-class technologies, starting 2025.	Over the last five years, there have been no environmental incidents at the Company's hydraulic structures.
	10. Eliminating (collection and processing) 100% of accumulated waste. 11. Increasing/maintaining the share of non-mineral waste (other than gypsum) recycling. 12. Increasing/maintaining the share of mineral waste recycling above 30%. 13. Increasing the share of gypsum waste recycling.	Nornickel collected 510 kt of waste and 32 kt of scrap metal, dismantled 154 facilities, and cleaned more than 1.5 million m^2 of contaminated areas in the Norilsk Industrial District. The technical phase of disturbed land rehabilitation was carried out on an area of 78.8 ha. The project will continue until 2030. Efforts are underway to increase/maintain the share of non-mineral waste recycling.
Land	14. Rehabilitation of 117 ha/year of disturbed land and land clean-up in towns and cities near production sites.	In 2022, 362 ha of disturbed land was rehabilitated, including landscaping of 2 ha, reforestation of 285 ha, and reclamation of 75 ha.
Biodiversity	15. Reducing a negative impact on biodiversity, including forest conservation near production sites.	Baseline biodiversity surveys were conducted to collect primary data, and a methodology was developed to determine the target of net zero biodiversity losses as a result of the Company's operations.
Stakeholder expectations, engagement and communications	16. Compliance with the TCFD principles.	• Climate scenarios for the world economy and climate change through 2050 were developed; • Scope 3 emissions were measured; • methodology to calculate the internal carbon price was developed; • rollout of the monitoring solution continued for foundations built on permafrost soils in Norilsk.
	17. Compliance with ICMM requirements.	Based on the results of the self-assessment, work is underway to develop by-laws and upgrade management practices to meet the requirements.
	18. Compliance with IRMA requirements.	The Company conducted a self-assessment and an independent assessment of its mining assets compliance and readiness for certification.

In addition to the Strategy and divisional programmes, Nornickel relies on a number of environmental regulations.

[1] Excluding GHG emissions from heat and electricity supply to the public.
[2] Excluding Energy Division.
[3] Including Energy Division

Key environmental management regulations

- Russian environmental laws
- MMC Norilsk Nickel's Environmental and Climate Change Strategy
- MMC Norilsk Nickel's Environmental Impact Assessment Policy
- MMC Norilsk Nickel's Environmental Policy
- MMC Norilsk Nickel's Climate Change Policy
- MMC Norilsk Nickel's Renewable Energy Sources Policy
- MMC Norilsk Nickel's Tailings Management Policy
- MMC Norilsk Nickel's Position Statement on Biodiversity
- MMC Norilsk Nickel's Position Statement on Water Stewardship
- Comprehensive environmental permits and other permissions
- Environmental Performance Enhancement Programme, environmental action plans

Key environmental policies are subject to approval by the Board of Directors, as well as regular review and improvement. Trainings on policies and regulations are held in line with annual (quarterly) training plans of respective units.

When planning its operations and in the course of its production activities, Nornickel complies with the applicable Russian environmental laws and regulations. During a state expert review, design documents and results of engineering surveys for all the ongoing projects undergo mandatory assessment for compliance with the applicable laws.

Environmental management system

Since 2005, Nornickel has been operating an Environmental Management System. The System enables the Company to harmonise environmental and quality management initiatives with the operations of other functions (such as production management, finance, and safety) and enhance its overall performance along with environmental safety.

The auditors of Bureau Veritas Certification (BVC), an international certification body, conduct surveillance audits once a year and recertification audits once every three years to confirm compliance of the Company's Environmental Management System with ISO 14001:2015. The 2021 recertification audit confirmed the Company's compliance with ISO 14001:2015 and awarded a certificate for a new (sixth) certification period. The second surveillance audit of the sixth certification period was conducted in November 2022. According to the auditors' conclusions, the Company ensured successful implementation, maintenance, and constant improvement of the Corporate Integrated Management System, and confirmed compliance with ISO 14001:2015.

Precautionary approach

GRI 2-23

Nornickel assesses potential impact of the Company's operations. In accordance with its Investment Project Risk Management Regulations, Nornickel analyses risks and assesses impacts and potential consequences using qualified expert review during both project planning and implementation. If the analysis identifies any material risks, mitigation initiatives are developed, and a decision may be taken to abandon the project.

Stakeholder engagement on environmental issues

Environmental issues, including efforts to reduce Nornickel's environmental footprint, are constantly on the agenda of the Company and stakeholders. All internal and public events feature environmental discussions.

In 2022, the following items were on the agenda of various forums and platforms:

- implementation of the Environmental and Climate Change Strategy;
- implementation of the Company's environmental programmes and initiatives;
- improvement of environmental laws and regulations;
- decarbonisation and sustainable development;
- sharing of best practices in environmental protection;
- industrial ecology problems;
- results of the Big Scientific Expedition;
- preservation of ecosystems across the footprint of production sites.

In October–December 2022, Nornickel and the Siberian Branch of the Russian Academy of Sciences held a series of public meetings to present the results of biodiversity surveys conducted near the Company's mining, production, energy and logistics facilities. The meetings took the form of a dialogue, with scientists and Nornickel representatives sharing the results of their work and answering all the questions from those present, while also recording stakeholders' expectations. The public meetings at regional civic chambers were open to all residents and organisations that wished to attend subject to prior registration on the Civic Chamber's platform.

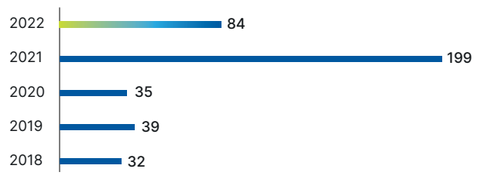
In 2022, Nornickel entered into two agreements with the Russian Ministry of Natural Resources and Environment as part of the federal Biodiversity Conservation and Ecotourism Development project – one to protect the population of an endangered bird species of the Falconidae family, the gyrfalcon, and the other for the conservation and restoration of the polar bear population.

For more details, please see the Biodiversity section.

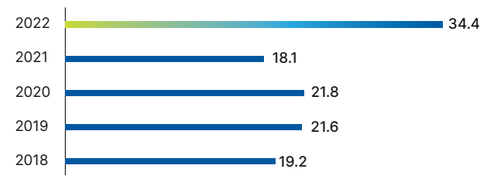
In the reporting year, Nornickel also signed two agreements with the Federal Service for Supervision of Natural Resources (Rosprirodnadzor) aimed at preserving the environment and ensuring environmental safety. The first agreement provides for the exchange of information and joint implementation of environmental initiatives. The second one relates to a pilot project, first of its kind in Russia, and covers the provision of support and advice by Rosprirodnadzor on Nornickel's high-potential investment projects.

Environmental protection expenditures

Environmental costs and expenditures, RUB bn

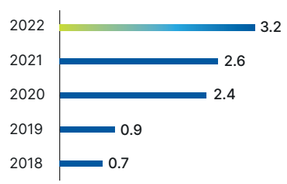


Current environmental expenditures, RUB bn



In 2022, the increase in current environmental expenditures was caused by higher costs of operating the surface backfilling preparation complexes at Polar Division.

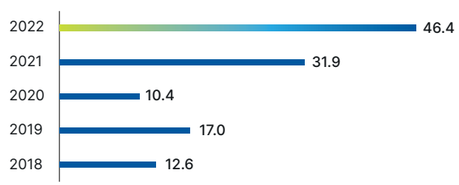
Charges for permissible and surplus emissions (effluents) and disposal of production and consumption waste, RUB bn



The increase in pollution charges was caused by the recovery of processing volumes of copper and nickel feedstock from Norilsk Division mines after their suspension due to flooding in 2021 and a higher sulphur content in the incoming feedstock.

The charge increase is also due to a greater volume of the disposal of construction and renovation waste generated by the programme on land clean-up

Capital investments to ensure environmental protection and sustainable use of natural resources, RUB bn



The increase in investments in 2022 is due to the active construction phase at the Sulphur Programme.

Charges paid by the Company to remedy damages arising from noncompliance with environmental laws (excluding environmental fines)[1], RUB mln

In 2022, penalties imposed for the damage caused by violation of environmental laws totalled around RUB 236 mln, of which the largest was the charge for damage to water bodies (lakes No. 1 and No. 2 near the Tukhard settlement) resulting from an aviation fuel spill of 2020.

[1] RUB 146 bn paid in 2021 is the fine for the fuel spill at NTEC's CHP-3, which occurred in 2020

Climate change and energy efficiency

Approach to climate change

Nornickel realises that climate change is one of the most significant and urgent global issues that poses a high risk to economic activity and society. As a party to the UN Global Compact, the Company fully supports the UN Sustainable Development Goals (SDGs), in particular SDG 13 Climate Action, and actively participates in joint efforts of the international community to combat global warming.

The Company unconditionally shares the principles of the Paris Agreement and supports its implementation in terms of keeping the global average temperature increase below 2 °C and making efforts to limit the increase to 1.5 °C. Nornickel actively engages with the scientific community, supporting and promoting nature and climate studies in the region, creating and expanding the climate monitoring system, and developing and implementing measures to reduce GHG emissions and adapt to climate change.

In developing strategic and regulatory documents and implementing climate change initiatives, Nornickel is guided by recognised international standards for building a corporate governance system and a climate risk management system, as well as standards for climate-related disclosures. These standards and guidelines include:

- TCFD Recommendations;
- GHG Protocol;
- ICMM principles;
- IRMA's Standard for Responsible Mining;
- Global Industry Standard on Tailings Management (GISTM);
- requirements of ESG agencies and ratings (EcoVadis, Sustainalytics, MSCI, CDP);
- recommendations of the Bank of Russia on disclosure by public joint-stock companies of non-financial information related to their operations;
- methodological recommendations and indicators of the Russian Ministry of Economic Development on climate change adaptation.

The Company plans to issue its first public climate change report in 2023. The report will be drafted in accordance with the TCFD Recommendations, and aims to demonstrate the progress made towards achieving the goals of the Paris Agreement. The report will reflect the Company's key projects and initiatives for effective adaptation to climate change and its effects, including a description of physical risk assessment projects and transition risks and opportunities.

Climate change impact on Nornickel's strategy

In line with its Environmental and Climate Change Strategy, Nornickel has set a number of goals and commitments aimed at improving control over climate change risk management and performance in this area.

Nornickel's climate change targets

- Take into account climate factors as part of our risk management system
- Continue to work on reducing GHG emissions in the long term
- Promote low carbon transition by supporting R&D to search for and scale up in-novative solutions and encouraging intra and cross-sectoral dialogue on climate change
- Comply with globally recognised climate disclosure standards
- Strive to increase the share of low-carbon energy consumption

Highlights and results

Key achievements

Key climate change achievements in 2022

- Proprietary global economy and climate change scenarios developed to assess climate change risks and opportunities;
- The project to assess physical risks scaled up: climate change modelling across the Company's footprint through 2050, identifying key climate risk factors and pilot assessment of their impact on the production assets of Norilsk, Kola, Trans-Baikal and Energy Divisions;
- Transition risks and opportunities identified and pilot assessment conducted;
- A methodology developed to calculate the internal carbon price;
- Upstream Scope 3 GHG emissions calculated for the first time;
- The first stage of a building and structure monitoring system (foundations and foundation beds on permafrost soils) deployed in the Norilsk Industrial District.

Highlights[1]

7.7
mt of CO_2 equivalent
Actual GHG emissions (Scope 1 and 2)

2.2
mt of CO_2 equivalent
Sulphur Programme GHG emissions provision (Scope 1)

3.9
mt of CO_2 equivalent
GHG emissions, downstream Scope 3 (down 3% y-o-y)

1.8
mt of CO_2 equivalent
GHG emissions, upstream Scope 3

Global Warming Potential (100 years) based on ISO 14044, kg of CO_2 equivalent per kg of metal[2]

Pd	Pt	Rh
30,412.4	31,417.5	31,654.3

Global Warming Potential (100 years) based on ISO 14044, kg of CO_2 equivalent per kg of metal in the product[2]

Metallic Ni	Ni sulphate	Metallic Co	Co sulphate	Cu cathodes
9.7	10.6	24.3	13.9	6.8

In the process of implementing the Buildings and Structures Monitoring System project:

automated metering tools were installed at **165** facilities

a network of more than **1,200** sensors was deployed

comprehensive inspections of **154** phase 1 facilities were carried out

An IT platform titled Polar Division's Information and Diagnostic System was developed and rolled out in Norilsk and Energy divisions.

[1] GHG data is presented for 2022 and includes Norilsk Nickel Harjavalta.
[2] Data is presented for 2021 and includes Norilsk Nickel Harjavalta.

Corporate climate agenda: key results and plans in 2021–2023

2021 – results

- ✓ Sustainable Development and Climate Change Committee of the Board of Directors set up
- ✓ PJSC MMC Norilsk Nickel's Climate Change Policy developed and approved by the Board of Directors
- ✓ Roadmap to comply with the TCFD Recommendations developed and approved by the Company's management
- ✓ Project to implement organisational changes solidifying functions and roles in climate change across the Company (including divisions) launched
- ✓ Relevant methodology developed and assessment conducted to measure the carbon footprint of the Company's core products
- ✓ First batch of carbon-neutral nickel produced
- ✓ Pilot project to assess physical climate change risks launched at business units of Norilsk and Energy divisions as well as in Polar Transport Division

2022 – results

- ✓ Approaches to climate change risks and opportunities assessment developed
- ✓ The project to assess physical risks scaled up with the support of climate scientists: climate change modelling across the Company's footprint through 2050, identifying key climate change risk factors and pilot assessment of their impact on the production assets of Norilsk, Kola, Trans-Baikal and Energy Divisions
- ✓ International best practices in climate change risk adaptation studied in various cities and companies
- ✓ Proprietary scenarios for global economy and climate change developed by Nornickel
- ✓ Register of transition risks and opportunities compiled with their pilot assessment
- ✓ Amendments to the Company's guidelines prepared in connection with climate change risk management (including the Risk Management Regulations)
- ✓ Analysis conducted in line with Science Based Targets criteria for the Company
- ✓ Methodology developed to calculate the internal carbon price
- ✓ Upstream Scope 3 GHG emissions calculated for the first time
- ✓ Quality of public climate change disclosure in the Sustainability Report improved
- ✓ Possible options analysed for the development of in-house power generation facilities up to 2050 based on low-carbon technologies
- ✓ Training on climate change and climate change risks provided to more than 200 employees at the Head Office and in the divisions
- ✓ Climate change aspects incorporated into the corporate competence model

2023 – plans

- Update the Roadmap to comply with the TCFD recommendations, including the development of the divisions' climate change risk management plans
- Publish the first dedicated climate change report
- Improve assessment methodologies for climate change risks and opportunities, including with the engagement of researchers
- Integrate climate change risks and opportunities into corporate business processes, including by amending corporate risk management documents
- Develop adaptation and mitigation approaches and tools for transition risks and for physical risks (for individual production assets as well)
- Include GHG emission issues in the scope of the Company's supplier due diligence
- Develop a system for assessing climate change aspects in the corporate competence model
- Develop cooperation and partnerships and promote the climate agenda in the professional community, in particular participation in climate agenda committees and working group of ESG Alliance

Approaches to climate change management

Nornickel is developing a climate change management system, which includes the development and approval of by-laws, allocation of responsibilities between management bodies, and assignment of their functional duties on climate change issues.

Climate Change Policy

The Company has a Climate Change Policy setting out the basic principles, commitments and initiatives related to the adaptation to climate change for all business units of the Group.

The Climate Change Policy forms the foundation of the corporate sustainability programme, which creates the conditions for energy efficiency and reliance on renewable energy and green technologies, including carbon dioxide capture and recovery as well as energy storage technology.

The Company has the following key obligations under the Policy:

- develop and regularly update its climate change strategy[1];
- implement management systems and risk management tools to respond to climate change and have them integrated into the risk management system in line with the TCFD requirements;
- organise regular audits of climate change risk management and publicly disclosed climate change indicators;
- identify and measure the contribution of the Company's products to the low-carbon economy in the process of organisational life-cycle assessment;
- review commercially viable opportunities to reduce carbon footprint, including the use of assessment tools for responsible value chain management and the development of green technology partnerships to accelerate the decarbonisation of the Company's operations;
- attract and effectively allocate capital to implement the Company's climate change strategy;
- promote advance practices and innovations;
- apply GHG emission offsetting mechanisms, including natural climate solutions (including conservation and restoration of forests and other ecosystems that absorb carbon dioxide) where the application of these solutions appears to be the most feasible and commercially viable solution;
- adopt key performance indicators (KPIs) related to climate change goals for managers and employees of the Company;
- expand engagement and partnership with stakeholders on climate change agenda;
- ensure transparent and regular disclosure of GHG emission targets and other relevant indicators and aspects in accordance with the Russian laws and best global standards.

[1] Part of the Environmental and Climate Change Strategy

Climate change management framework

GRI 2-9, 2-12, 2-13

Board of Directors

Sustainable Development and Climate Change Committee of the Board of Directors

- Approves the Climate Change Policy and amendments to it
- Approves the Climate Change Strategy and climate change risk appetite
- Supervises performance of the risk management framework with regard to climate change risks

Management Board

Risk Management Committee of the Management Board led by the President

- Implements initiatives and procedures to manage climate change risks
- Reconciles parameters of the Company's climate change risk appetite and makes recommendations to the Board of Directors regarding their approval

Senior Vice President, Operational Director

- Develops the Environmental and Climate Change Strategy and an action plan to implement it
- Drafts climate change KPI proposals
- Takes stock of GHG emission sources
- Calculates GHG emission volumes (Scope 1 and 2)
- Delivers on energy efficiency initiatives

Senior Vice President, Chief Financial Office

- Calculates GHG emission volumes (Scope 3 in Upstream)
- Calculates the internal carbon price
- Calculates the actual and projected values of products' carbon footprint
- Assesses the impact of climate change risks on the Group's financial performance
- Integrates climate KPIs into the Group's team KPIs

Vice President, IR and Sustainable Development

- Participates in drafting the Environmental and Climate Change Strategy to ensure that it complies with the sustainability concept
- Forges climate change ambitions and vision
- Develops the corporate sustainability policy and coordinates its implementation
- Provides methodological support for risk owners to incorporate climate risk factors into risk management

Senior Vice President
Strategy and Strategic Project Management, Logistics and Procurement

- Integrates the Environmental and Climate Change Strategy into the Company's development strategy
- Makes calculations for the strategic model scenarios and assesses the long-term impact of the climate scenarios on the Group's development

Vice President
Internal Control and Risk Management

- Develops the map of key physical and transition risks, drafts reports on key risks
- Ensures uniformity of the corporate methodology to identify, assess and manage climate change risks
- Drafts proposals on the parameters of risk appetite

Senior Vice President
HR, Social Policy and Public Relations

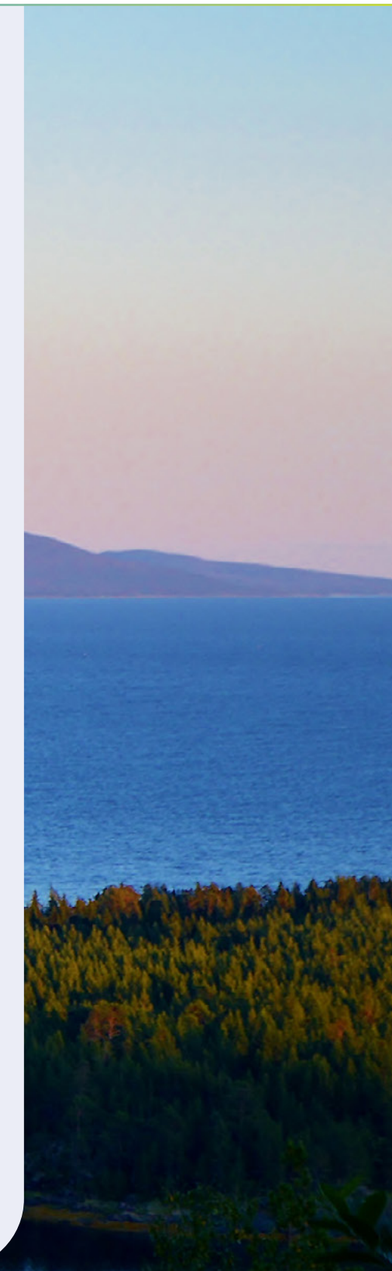
- Cooperates with federal, regional and municipal authorities, and expert, scientific and non-governmental organisations on climate change issues
- Identifies, assesses and mitigates reputational transition risks associated with climate change
- Organises climate change training for employees

Vice President
Sales and Commerce

- Assesses the impact of climate change risks and opportunities on the resilience of the product portfolio and sales strategy
- Calculates GHG emission volumes (Scope 3 in Downstream)

Group divisions

- Develop, implement and monitor initiatives to support the Environmental and Climate Change Strategy, including initiatives to mitigate physical climate change risks
- Identify and assess physical climate change risks, draft relevant methodologies



Responsibilities

The Board of Directors reviews and approves our Environmental and Climate Change Strategy and risk appetite and supervises the risk management framework for climate change. In 2021, the Board created the Sustainable Development and Climate Change Committee to ensure a deeper focus on these matters.

The Committee meetings discuss the following matters:

- integration of sustainability principles, including climate change, into the Company's operations;
- development and implementation of a strategy on sustainable development and climate change;
- risk management and internal control in the realm of sustainable development and climate change;
- the Company's internal reporting and disclosures on sustainable development and climate change;
- external audit of the Company's sustainable development and climate change reports and activities.

The implementation of climate change risk management measures and procedures is the responsibility of the Company's Management Board and the Management Board's Risk Management Committee. Members of the Board agree upon parameters of the Company's risk appetite, including those relating to climate change, and make recommendations to the Board of Directors regarding their approval. The key risks, including climate change threats, are reviewed on a quarterly basis.

Details of the climate agenda review by the Management Board's Risk Management Committee and the Sustainable Development and Climate Change Committee of the Board of Directors will be disclosed in the climate change report.

The Vice President for Investor Relations and Sustainable Development is responsible for setting ambition and vision for climate change and developing and monitoring the implementation of the Company's Climate Change Policy.

Since 2022, the Sustainable Development Department's functions include methodological support for risk owners to incorporate climate risk factors into risk management. Respective changes have been incorporated into the Regulations on the Sustainable Development Department and the Risk Management Regulations. Dedicated units of the Head Office, branches and Group companies are responsible for certain aspects of the Climate Change Policy and the Environmental and Climate Change Strategy within their scope[1]. The Company's branches, standalone business units and divisions develop proposals regarding the Environmental and Climate Change Strategy implementation, ensure the availability of financial and other resources related to the Environmental and Climate Change Strategy implementation, and identify and assess physical climate change risks.

[1] For full information on responsibilities and functions of the Company's governance bodies and units, please see PJSC MMC Norilsk Nickel's Climate Change Policy.

Nornickel's Roadmap to comply with the TCFD recommendations

In 2021, Nornickel approved the Roadmap to comply with the TCFD Recommendations for 2022 – Q1 2023. The roadmap includes more than 50 activities aimed at improving strategic and operational management of climate change issues, including risks and opportunities, achieving TCFD-recommended targets and indicators, and generating quality public reporting.

In 2023, the Company is going to analyse the completeness of implementing the planned activities and update the Roadmap for the medium-term period.

Core elements of the Roadmap to comply with the TCFD Recommendations

Dimension	Key measures and projects
Corporate governance	• Strengthening the role of the Board of Directors and top management to increase the effectiveness of managing climate change-related issues, regular monitoring of climate risks and opportunities, and overseeing the implementation of key actions • Building an organisational structure of climate risk management and improving the Company's regulations and guidelines
Corporate strategy and financial planning	• Developing scenarios to assess climate change risks and opportunities • Analysing the resilience of the Company's strategy when it comes to climate change scenarios, including the less than 2 °C warming by 2050 scenario
Risk management	• Integrating climate change risks into corporate business processes by preparing amendments to regulatory and procedural guidelines. Keeping risk owners abreast of climate change risk factors • Building procedures of and approaches to assessment of physical risks and transition risks and opportunities
Goals and targets	• Calculating and disclosing the carbon footprint generated during production • Calculating and disclosing Scope 1, 2 and 3 GHG emissions • Developing of an internal carbon price calculation approach • Doing analysis against Science Based Targets in climate change for the Company • Regularly updating and disclosing goals and target indicators used by the Company to measure progress in the climate strategy implementation

Climate change risks and opportunities

GRI 201-2

In the process of implementing the Roadmap to comply with the TCFD Recommendations and meeting the targets set in the corporate Environmental and Climate Change Strategy, Nornickel is building a framework for managing climate change risks and opportunities. The Company identifies both physical risks associated with the impact of chronic climate change and abnormal weather events, and transition risks and opportunities associated with the changing market, regulatory, technological and political environment during the transition to a low-carbon economy. In this context:

- shared climate change scenarios (pathways) apply[1];
- the Company is developing approaches to assess the impact of physical risks and transition risks and opportunities on the Company's operations and financial performance;
- mechanisms and plans are being developed to mitigate and adapt to these risks.

Building a framework for managing climate change risks and opportunities based on shared pathways.[2]

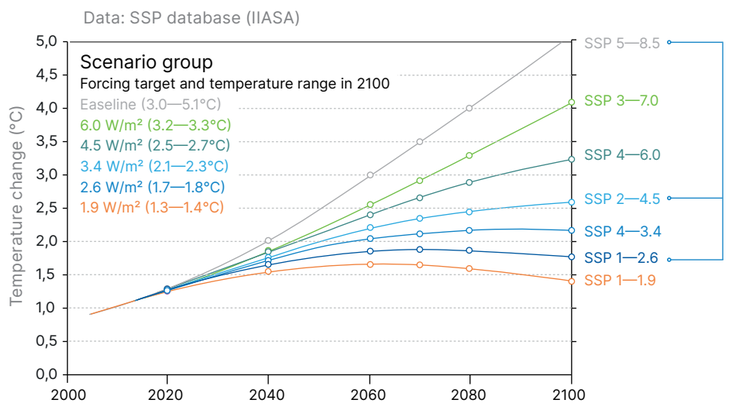
Physical risks

For climate change modelling, the Company chose three shared global climate scenarios (pathways) developed by the Intergovernmental Panel on Climate Change (IPCC) – SSP1-2.6, SSP2-4.5 and SSP5-8.5 and CMIP 6.[1]

[1] The Company's own scenarios for the assessment of risks and opportunities correspond to the temperature ranges of the SSP used for physical risk assessment.
[2] SSP – Shared Socio-Economic Pathways.

[1] Coupled Model Intercomparison Project

Characteristics of IPCC scenarios[1]



Scenarios used in the analysis:

SSP 5—8.5
SSP 2—4.5
SSP 1—2.6

SSP 1-2.6

SSP1-2.6 is an optimistic scenario: greenhouse gas emissions are expected to decline and reach zero by 2055, with an average annual temperature increase of 1.8 °C by 2100. Society makes the transition to more sustainable practices, with the focus shifting from economic growth to general well-being. Investments in education and health will be growing, and inequality will be declining.

SSP 2-4.5

SSP2-4.5 is a realistic scenario: the current rate of increase in greenhouse gas emissions will be maintained, with carbon neutrality achieved by 2100. Socio-economic factors are changing in line with historical trends. Progress towards sustainable development is slow, with an even growth of the pace of development and incomes. According to the scenario, the average annual temperature will increase by 2.7 °C by the end of the century.

SSP 5-8.5

SSP5-8.5 is a pessimistic scenario: the current level of GHG emissions will double by 2050. The world economy will demonstrate a rapid growth and development through the extensive use of fossil fuels and increased energy consumption. By 2100, the average annual temperature will increase by 4.4 °C.

The initial phase of the work involved retrospective analysis of climate change since the 1960s supported by experts from the Institute of Atmospheric Physics of the Russian Academy of Sciences to determine the climate trends already occurring in the Company's regions of operation. Modelling showed an upward trend in the average annual temperature in all divisions of Nornickel. In Norilsk, for example, the temperature rose by 0.6 °C every decade, suggesting that the Paris Agreement milestone had already been passed in the region by 2022.

Retrospective analysis was followed by scenario modelling of possible changes in climate risk factors through 2050: the SSP1-2.6, SSP2-4.5 and SSP5-8.5 global climate scenarios were "localised" to all regions where the Company operates, including Finland. Assessment of climate risk factors was carried out for the Russian divisions – Norilsk, Kola, Trans-Baikal and Energy.

The key climate change risk factors identified for all areas across Nornickel's footprint are the growing average annual temperature, thawing of permafrost soils, increase in extreme precipitation and flooding, and greater frequency and intensity of thunderstorms.

Some of the identified climate change risk factors, such as thawing of permafrost soils, may lead to key risks.

Detailed information on physical risks will be disclosed in the climate change report.

[1] IPCC — Intergovernmental Panel on Climate Change

Permafrost monitoring

In 2021, as a way of adaptation to risks associated with permafrost thawing, Nornickel launched a project to develop and deploy a real-time foundation condition monitoring system for buildings and structures located in permafrost soils in Norilsk using advanced automated observation tools and a specialised IT platform.

The monitoring project is focused on using automatic equipment to keep track of temperatures in permafrost soils around bases, deformation behaviour in foundations, and temperature and humidity levels in crawl spaces. It seeks to help prevent accidents at Nornickel's industrial facilities and, later on, local housing infrastructure and proactively identify any hazardous defects or deviations that might result in damage to the buildings and structures or their elements, with special safety criteria developed for all monitored indicators.

During 2022, an information and diagnostic system was established and put into operation, and comprehensive inspections were conducted at 154 facilities, each with surveillance programmes and safety criteria. For effective data transmission and processing, a control room was deployed and a transparent business process for supervision, monitoring and inspection of buildings and structures was built, including the development of a geotechnical monitoring standard.

As at the end of 2022, 17 assets of the Company were connected to the system and around 700 facilities were being monitored.

Transition risks and opportunities

To assess in its strategic planning the risks and opportunities arising from the global energy transition, Nornickel has developed three proprietary long-term scenarios for the global economy and climate change through 2050.

The global economic and climate change scenarios were drafted in consultation with the Institute of Economic Forecasting of the Russian Academy of Sciences. The estimated changes in global temperature under these scenarios are consistent with the three IPCC scenarios (SSP1-2.6, SSP2-4.5 and SSP5-8.5) that have been adopted by the Company to assess the physical climate change risks. The scenarios were developed based on an analysis of some 190 available public scenarios from leading providers in this area (International Energy Agency, World Energy Council, International Renewable Energy Agency, OPEC, Bloomberg, NGFS, Shell, BP, DNV, etc.).

The first scenario, "Rapid Transformation" (25% probability), is aimed at achieving the Paris Agreement goals, the second, "Sustainable Palladium" (70% probability), focuses on maintaining current social, economic and technological trends, and the third, "Global Growth" (5% probability) involves abandoning efforts to curb climate change, with further economic growth to be supported by hydrocarbons, mainly in developing countries.

Sustainable Palladium became the baseline scenario, which provides for traditional industries to remain centre stage along with the green economy. In particular, ICE vehicles will retain a large market share, contributing to a steady demand for palladium in the long run. The Company will apply the other two scenarios in stress-testing of risks associated with climate change. In addition, a scenario parameter monitoring tool was developed to record actual deviations from the baseline.

The scenarios were approved by the Risk Management Committee of the Management Board and reviewed and recommended for further risk assessment by the Sustainable Development and Climate Change Committee of the Board of Directors.

Detailed information on transition risks and opportunities will be provided in the climate change report.

Greenhouse gas emissions

GRI 305-1, 305-2, 305-4, SASB EM-MM-110a.1

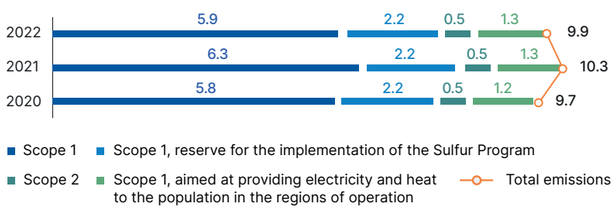
The Company regularly assesses greenhouse gas emissions (Scope 1 and Scope 2) in accordance with the GHG Protocol methodology. The calculation of emissions for the Group takes into account the following greenhouse gases: carbon oxide (CO_2), nitrous oxide (N_2O), methane (CH_4), with no or insignificant emissions of other greenhouse gases. The quantitative assessment of Scope 1 GHG emissions also includes the Company's estimated prospective GHG emissions associated with the implementation of the Sulphur Programme.

Based on the results of 2022, actual direct and indirect GHG emissions (Scope 1 and 2) decreased by 0.5 mt of CO_2 equivalent y-o-y to a total of 7.7 mt of CO_2 equivalent, including the supply of heat and electricity to retail customers. The Sulphur Programme GHG emissions provision totalled 2.2 mt of CO_2 equivalent. The Company's actual direct GHG emissions amounted to 7.2 mt of CO_2 equivalent and indirect energy emissions, to 0.5 mt of CO_2 equivalent. Indirect energy emissions were calculated using the location-based method, taking into account regional coefficients.

Bystrinsky GOK, a key facility in Nornickel's Trans-Baikal Division, entered into a deregulated bilateral power purchase agreement for the supply of 118.3 mln kWh of electricity in order to reduce the climate impact.

In 2022, the inventory of equipment that is a source of GHG emissions was updated for the extended scope of enterprises.

GHG emissions (Scope 1 and 2)[1], mt of CO_2 equivalent



The reduction of GHG emissions (Scope 1 and 2) is due to the following reasons:

- optimisation of in-plant operation of the heat and power plants;
- optimisation of hydropower plant load regimes (increasing the share of electricity output from hydropower plants);
- weather conditions – in 2022, the heating period was shorter and the ambient air temperature during the heating period was higher than in 2021.

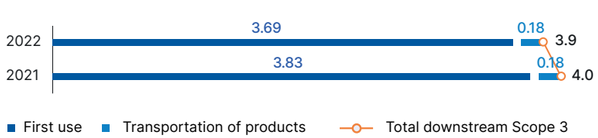
The intensity of actual GHG emissions (Scope 1 and 2) was 6.5 t of CO_2 equivalent per RUB 1 mln of consolidated IFRS revenue.

In 2022, the Company continued to quantify indirect GHG emissions (downstream Scope 3) to the extent related to product sales. Under the GHG Protocol, these emissions are associated with transportation from the Company's production assets to the customer and the first stage of product processing.

In line with the principle of continuous improvement of calculations, a number of GHG emission factors was updated based on the best available sources for the production of metals and concentrates sold by the Group. For the purpose of comparison, the data for 2021 was recalculated using emission factors applied in 2022. The Group's downstream Scope 3 emissions for 2022 totalled 3.9 mt of CO_2 equivalent, down 3% y-o-y. The main drivers of the reduction are lower sales volumes and the geographical and sectoral structure of sales. The volume of downstream Scope 3 emissions is relatively small compared to global metals and mining peers, reflecting the structure and size of the Group's product portfolio.

GHG emissions (downstream Scope 3)[2], mt of CO_2 equivalent

GRI 305-3

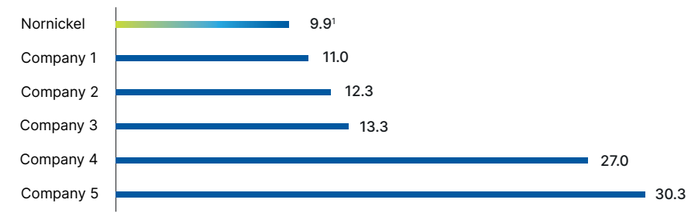


[1] GHG emissions are calculated in line with the GHG Protocol methodology. The Group's GHG emissions include the following greenhouse gases: direct carbon dioxide (CO_2) emissions of 9.7 mt, nitrogen oxide (N_2O) emissions of 53.3 t, methane (CH_4) emissions of 2.5 kt (mainly generated by gas transportation units), including the Sulphur Project and the heat and electricity supply to the public. The calculation includes potential GHG emissions after the completion of the Sulphur Programme. The data includes Norilsk Nickel Harjavalta.

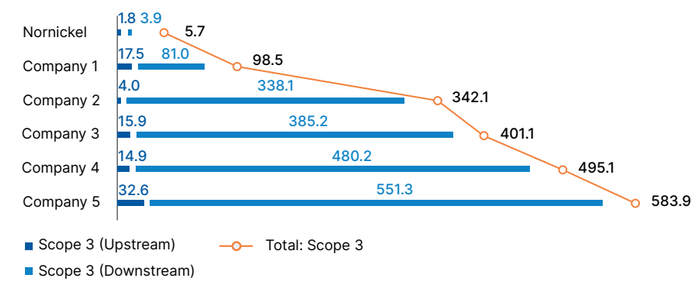
[2] The data for 2021 was recalculated using emission factors applied in 2022. The data includes Norilsk Nickel Harjavalta.

Comparison with global metals and mining peers

GHG emissions (Scope 1 and 2), mt of CO_2 equivalent



GHG emissions (Scope 3), mt of CO_2 equivalent



Source: the Company's analysis based on the most up-to-date available data for 2021–2022. Peers include leading global diversified metals and mining companies: BHP Billiton, Rio Tinto, Vale, Glencore, and Anglo American

Upstream Scope 3 GHG emissions

In 2022, the Company made its first public disclosure of a quantitative estimate of upstream Scope 3 GHG emissions, covering all emission categories required by the GHG Protocol. The bulk of the emissions are related to the purchase of goods and equipment from third-party suppliers and to energy and fuel consumption (to the extent not included in Scope 1 and 2).

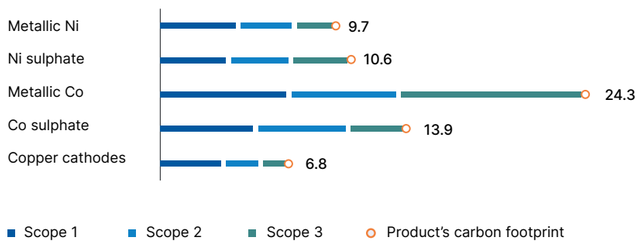
In 2022, total emissions amounted to 1.8 mt of CO_2 equivalent.

[1] Taking into account the reserve for the Sulfur Program (2.2 mln t of CO_2-eq.)

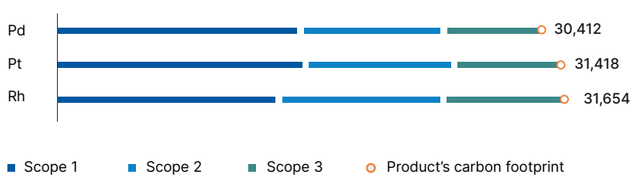
Carbon footprint of products

Assessment of products' carbon footprint in 2021[1]

Carbon footprint of the product (non-ferrous metals), kg of CO_2 equivalent per kg of metal in the product



Carbon footprint of the product (PGM), kg of CO_2 equivalent per kg of metal

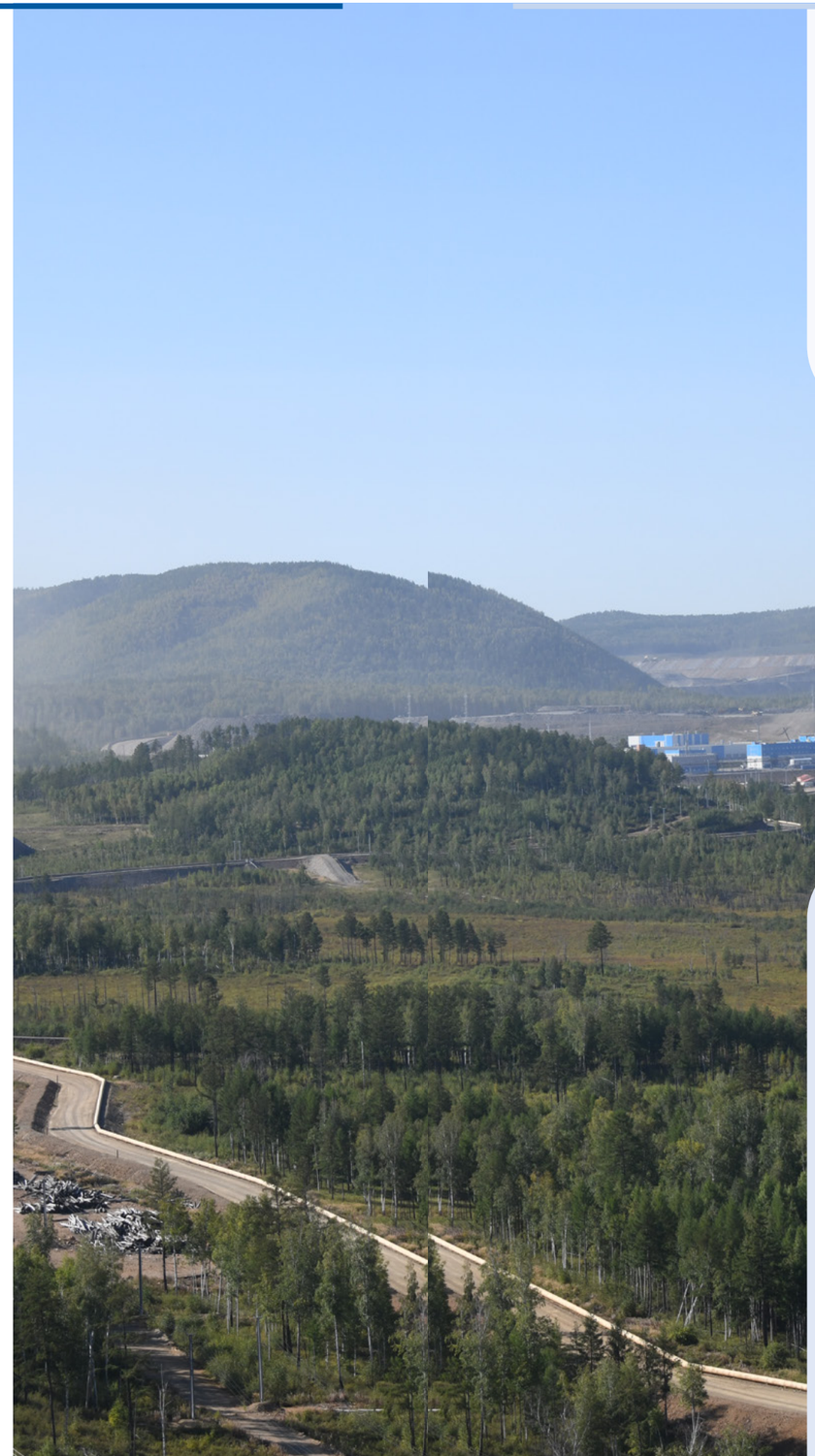


The carbon footprint of MMC Norilsk Nickel's products is calculated in accordance with ISO 14067:2018, ISO 14040:2006, ISO 14044:2006, GHG Protocol Product Life Cycle Accounting and Reporting Standard methodology, and LME passport guidance – Nickel Institute guidance for nickel producers to calculate their GHG emissions.

In 2022, the Company made a number of technical updates to the model for calculating a product's carbon footprint:

- using corporate directories to update significant categories in order to calculate average carbon intensity ratios;
- using the SAP ERP system as a source of information on the allocation of the actual use of resources.

[1] Including the Sulphur Programme provision implemented and Norilsk Nickel Harjavalta.



Scope of products' carbon footprint calculation

End product manufacturers:

- Polar Division
- Kola MMC
- GRK Bystrinskoye
- Norilsk Nickel Harjavalta

Manufacturers of raw materials / resources or services

- Medvezhy Ruchey
- NTEC
- Norilsk Production Support Complex
- Norilskgazprom
- Norilsktransgaz
- Murmansk Transport Division
- Norilsknickelremont

In the medium term, Nornickel plans to deploy an end-to-end automated system for calculating GHG-related indicators based on a unified methodology using a dedicated IT platform. This solution will allow for more efficient and accurate carbon accounting of all material flows, process stages and resources across the Group. In addition, the automated process will make it easier to provide climate information to all stakeholders in a timely manner.

Internal carbon price

In 2022, Nornickel started developing the internal carbon price – a new management tool enabling the Company to consider climate change risks when planning future operations.

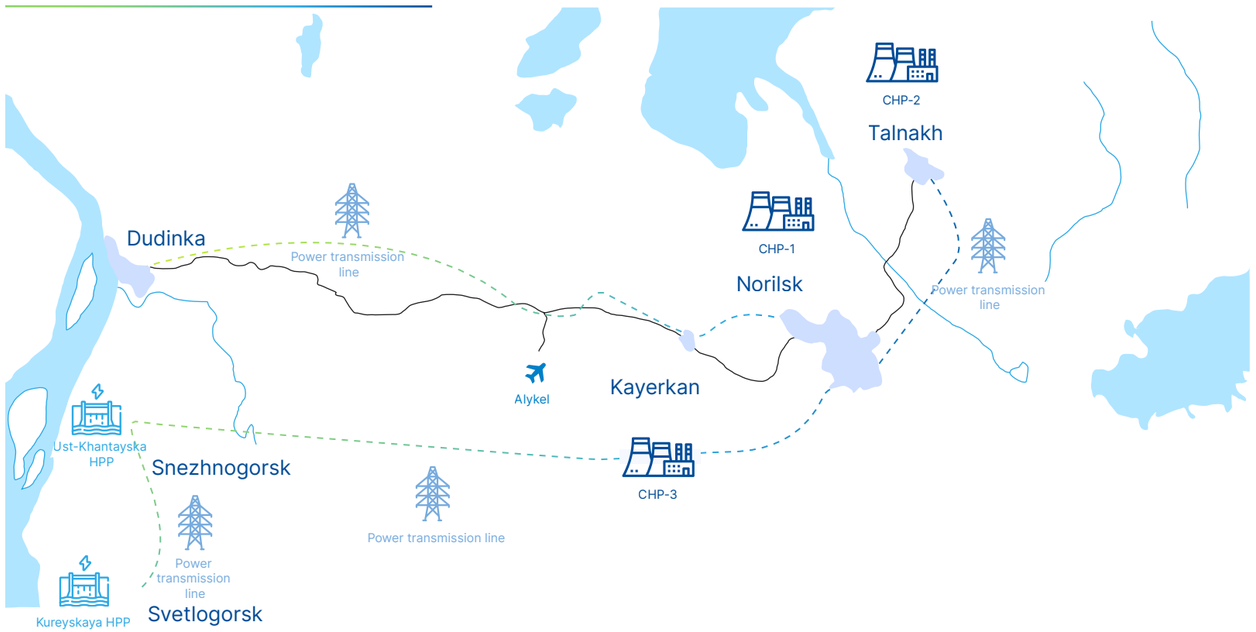
Information on the methodology and results of the internal price calculation will be provided in the climate change report.

Energy consumption and efficiency

SASB EM-MM-130a.1

As Nornickel Group's key production facilities operate in the harsh climatic conditions of the Far North, the Company's fuel and energy services are tasked with a critical mission of ensuring a reliable and continuous power supply to households and production facilities.

Nornickel's main power generation facilities in the Norilsk Industrial District (NID)



51% of electricity consumed came from renewable sources

More than half of the electricity is generated by two hydropower plants with a total capacity of 1,111 MW:
- Ust-Khantayskaya HPP – 511 MW
- Kureyskaya HPP – 600 MW

Three gas heat and power plants

The rest of the electricity and heat demand is covered by:
- CHP-1 – 325 MW
- CHP-2 – 350 MW
- CHP-3 – 440 MW

with a total capacity of 1,115 MW.

Seven gas boilers

One boiler in each of Talnakh, Kayerkan and Alykel, and four boilers in Dudinka provide the district with heat.

The most essential projects that we are implementing to improve equipment reliability and energy efficiency, as well as to ensure increase in production output, are:

- replacement of main hydroelectric units at Ust-Khantayskaya HPP and power units at CHP-2 and CHP-3 in Norilsk;
- reconstruction of the backup diesel fuel storage facilities at CHP-1, CHP-2 and CHP-3, boiler in Dudinka as well as at Ust-Khantayskaya HPP and Kureyskaya HPP;
- modernisation of the electricity, heat and water supply networks;
- construction of stormwater and industrial waste water treatment facilities;
- modernisation of the gas transmission and gas distribution networks;
- infrastructure modernisation and development in Tukhard;
- building five new gas wells at the Pelyatkinskoye Gas Condensate Deposit;
- comprehensive oil terminal reconstruction programme: Norilsk, Dudinka and Kayerkan oil depots.

Utilisation of renewable energy sources

Nornickel takes a comprehensive approach to energy infrastructure development, combining the objectives of improving the reliability of production assets with those of reducing GHG emissions. Nornickel makes continuous efforts to reduce the consumption of such energy sources as diesel fuel and coal, and develop alternative energy – hydropower. To that end, Nornickel works consistently to provide its operations with more economical and green energy sources, including in the long term.

Share of renewable energy in total electricity consumption by Nornickel Group, %

In 2022, the total share of electricity consumed by Nornickel's production operations from renewable energy sources reached **51%**

The use of renewable energy, such as solar, geothermal and wind energy, is limited by harsh climatic conditions, the length of the polar night and a number of other natural features of the regions where the Company operates. Nevertheless, Nornickel keeps looking for alternative solutions to improve its energy efficiency. In 2022, the Company conducted an analysis of opportunities to switch to green energy sources to replace its own conventional gas power generation facilities in the Norilsk District in the long term through 2050.

The analysis, carried out for the Norilsk region, revealed that most of the technologies considered for achieving zero carbon emissions from the Norilsk District's own power generation facilities in the long term to 2050 cannot be implemented under current conditions. Natural and climatic constraints of the Arctic Zone, the requirements of an isolated power system, and the Arctic design of equipment significantly limit the use of direct carbon emission reduction technologies in the Norilsk District.

At the moment, the most economically viable option is the use of carbon capture, transport and storage technologies. However, the Company has yet to confirm the positive experience with such technologies at high-capacity gas heat and power plants.

In addition, Nornickel is exploring the possibility of using ground- or water-based small modular nuclear reactors in Norilsk.

Total energy consumption by Nornickel Group, TJ

GRI 302-1, 302-3

Indicator	2018	2019	2020	2021	2022
Fuel consumption	148,910	144,772	141,237	151,235	141,909
Energy from renewable sources (HPPs)	14,877	15,058	15,310	14,586	16,152
Electricity and heat procurement from third parties	10,931	11,331	11,200	10,891	11,005
Electricity and heat sales to third parties	18,926	18,766	17,254	19,974	18,968[1]
Group's total energy consumption (1 + 2 + 3 – 4)	155,792	152,395	150,493	156,738	150,098
Energy intensity, GJ / RUB mln[2]	214	174	135	117	127

Fuel consumption by Group companies by type of fuel, TJ

GRI 302-1

Indicator	2018	2019	2020	2021	2022
Total fuel consumption	148,910	144,772	141,237	151,235	141,909
Natural gas	129,335	125,329	122,216	130,867	125,934
Coal[3]	1,660	2,087	2,180	1,557	2,027
Diesel fuel and fuel oil	13,788	13,535	13,939[4]	15,097	13,623
Gasoline and jet fuel	4,127	3,820	2,902	3,715	325

In 2022, total fuel consumption by Group companies decreased by 6.2% compared to 2021 due to a lower gasoline and jet fuel costs because of the sale of NordStar Airlines outside the Group's perimeter in 2022. A 3% increase in electricity consumption by 2021 was due to an increase in the consumption by the key operations in the Norilsk Industrial District. Due to higher monthly average temperatures in 2022, there was a 6% reduction in total heat and steam consumption compared to 2021.

[1] Including 4,183 TJ of electricity and 14,785 TJ of heat energy.
[2] RUB mln of consolidated revenue.
[3] The Company uses coal as a chemical element in its production processes, with no coal used for heating purposes.
[4] Taking into account the diesel fuel lost as a result of NTEC's CHP-3 accident on 29 May 2020.

Electric power and heat consumption by the Group companies, TJ

GRI 302-1

Indicator	2020	2021	2022	Including in 2022	
				Electricity	Heating and steam
Electric power and heat consumption by the Group companies	59,996	60,771	60,143	31,546	28,597[1]
including:					
• Polar Division	30,869	30,727	31,307	14,806	16,501
• NTEC	6,185	6,439	6,045	4,071	1,974
• Kola MMC	11,542	9,393	9,289	6,599	2,690
HPP share in total electric power consumption in the Norilsk Industrial District	55%	52%	56%	-	-
HPP share in total electric power consumption by the Company	46%	47%	51%	-	-
HPP share in total electric power and heat consumption by the Company	25,5%	24%	26,9%	-	-

[1] Including 5,946 TJ of steam energy.

Fuel and energy savings resulting from energy consumption reduction and energy efficiency improvement initiatives in 2022

GRI 302-4

Indicator	Nornickel Group average	Including			
		Polar Division	NTEC	Kola MMC	Medvezhy Ruchey
Total savings, TJ	**362.7**	**128.0**	**37.8**	**69.2**	**61.1**
including:					
• electricity	76.6	12.5	–	24.2	9.4
• heat in water and steam	248.3	115.4	–	45.0	51.7
• fuel	37.8	–	37.8	–	–

The Company's divisions annually develop and implement initiatives to save fuel, energy, and water.

In 2022, the implementation of operational and technical measures to reduce energy consumption and improve energy efficiency resulted in savings of 362.7 TJ, with the costs totalling RUB 2,2 bn. The savings were achieved due to the measures to switch to LED lighting, improving thermal insulation through the use of modern materials for piping, window and door openings, the use of automatic heat control systems based on changes in ambient temperature, and by introducing automated energy accounting systems for plant workshops.

362.7 TJ
energy efficiency resulted in savings in 2022

Air

GRI 413-2

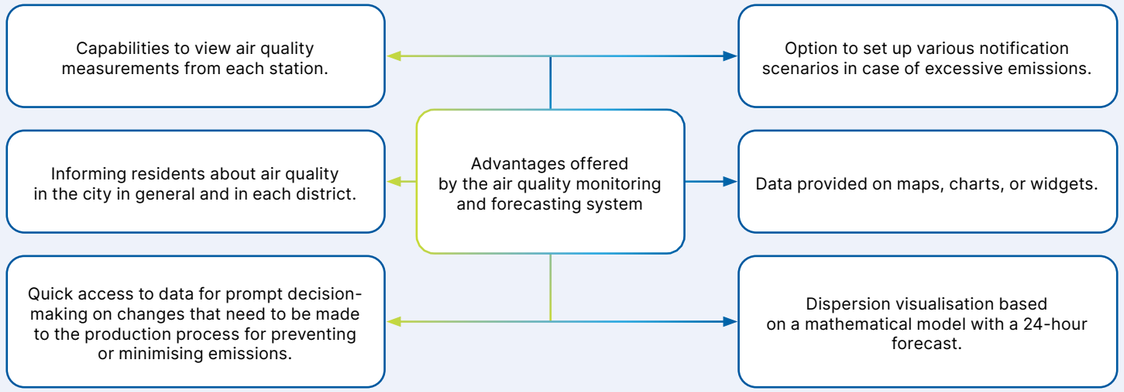
As Nornickel has a significant impact on atmosphere, reduction of pollutant emissions is one of the key objectives pursued by the Company's Environmental Strategy.

With its wide range of operations, Norilsk Division emits more than 60 pollutant substances into the air. Sulphur dioxide accounts for around 98% of those emissions.

Reduction of sulphur dioxide emissions is Nornickel's strategic priority. To that end, it runs the Sulphur Programme, the largest environmental initiative of the Company in terms of scope and financing.

Air quality monitoring and forecasting system

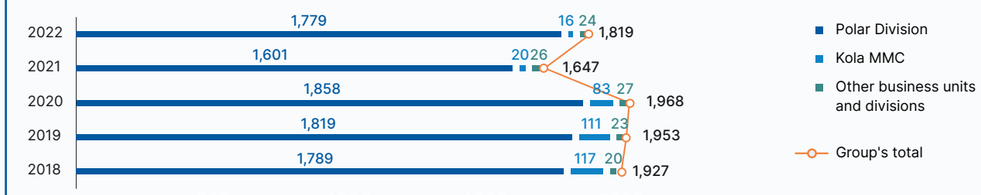
To ensure the high quality of input data and raise awareness of local communities about pollutant emissions, the Company has rolled out an advanced air quality monitoring and forecasting system in Norilsk, Monchegorsk, Nickel and Zapolyarny.



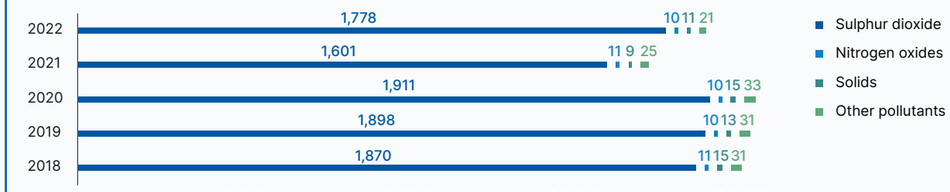
Air pollutant emissions

GRI 305-7, SASB EM-MM-120a.1

Air pollutant emissions, kt



Air emissions by pollutant, kt



In 2022, the Group's total emissions amounted to 1.8 mt, up 10.5% y-o-y. The growth was driven by the recovery of Norilsk Division's production volumes after their reduction in 2021 as a result of suspended operations at two mines of Norilsk Concentrator. Kola Division's emissions continued to decrease following the shutdown of several outdated metallurgical shops: total emissions went down by 18% y-o-y.

Use of ozone-depleting substances

Nornickel neither produces nor uses ozone-depleting substances (ODS), except for extremely limited amounts used as a chemical agent for laboratory-based chemical analysis as well as for filling and topping compressors in air conditioning units and carbonated water machines that produce water used as a cooling agent for medium- and low-temperature refrigerating equipment. The Company reports on the use of such substances to the Russian Ministry of Natural Resources and Environment as required.

There were no ODS emissions in 2022.

Sulphur Programme

The Sulphur Programme is Nornickel's flagship environmental project on sulphur dioxide (SO_2) capture and recovery, which is one-of-a-kind globally. The technology makes it possible to capture up to 99% of SO_2, convert it into sulphuric acid and then into gypsum.

The total CAPEX for the Sulphur Programme is estimated at around

USD **4.1–4.3** bn[1]

The Sulphur Programme provides for gradual reduction in SO_2 emissions in the Norilsk Industrial District and on the Kola Peninsula as our key geographies. On the Kola Peninsula the programme was completed in 2021, with Kola Division's SO_2 emissions declining by 90% vs 2015.

In 2022, Norilsk Division continued to build off-gas recycling facilities and related infrastructure at Nadezhda Metallurgical Plant.

Progress against the Sulphur Programme in Norilsk Division

The first stage of the programme aims to design and introduce new solutions and technology to recycle SO_2 coming from off-gases produced by the key smelting units of Nadezhda Metallurgical Plant. The off-gases will be used to make sulphuric acid, neutralise this acid with natural limestone and obtain gypsum.

In 2022, the Company completed a wide range of procurement and construction works at the key facilities of the integrated project implemented at Nadezhda Metallurgical Plant as part of the Sulphur Programme, while also building a variety of infrastructure and linear facilities for this project. These works included:

- construction and installation (earthworks, concrete works, assembly of metal structures, erection of structural parts of buildings and structures, installation of electrical equipment, overhead power lines, pipelines, gas ducts and technical infrastructure, cabling, assembly of engineering equipment, road construction, etc.);
- supply of materials and technical resources and installation of process equipment (including large-size equipment);
- construction and furnishing of gypsum storage facilities;
- individual equipment tests.

The second stage of the programme envisages a comprehensive project to design and introduce new solutions and technology at Copper Plant with a view to obtaining sulphuric acid from off-gases of the existing Vanyukov furnaces and the new continuous converting facility, neutralising this acid with natural limestone and producing gypsum.

As a number of technology partners refused to continue cooperation with Nornickel in 2022, the Company began to review some of its design solutions in a bid to minimise the adverse effects of the sanctions on the integrated project implemented as part of the Sulphur Programme at Copper Plant.

Social and economic impacts of the Sulphur Programme on Russian economy

In 2022, Nornickel joined forces with the Institute of Economic Forecasting of the Russian Academy of Sciences to assess the social and economic impacts of the sulphur disposal facilities constructed and operated by the Company (Sulphur Programme) on Russian economy.

Researchers from the Russian Academy of Sciences found that the Sulphur Programme has a clearly articulated social dimension. Instead of focusing on commercial gains, the Sulphur Programme seeks to create significant social and environmental benefits beyond the scope of its design capacities by boosting the output of enterprises from allied sectors and encouraging the redistribution of additional profits throughout wider economy in the form of salaries for employees, earnings for businesses and taxes paid to the budget of Russia. Eventually, this will trigger an increase in end demand for domestically produced goods and have a positive macroeconomic impact on GDP growth.

Also important is the positive impact the Sulphur Programme will have on the environment, as it will help increase the quality of life in local communities. Fundamental environmental changes will be instrumental in improving public health and reducing excess mortality in Norilsk.

[1] CAPEX to be updated in 2023 following the review of certain design solutions.

Water

Protection of water bodies

GRI 303-1, 303-2, 303-3, 303-4, 303-5, SASB EM-MM-140a.2

Nornickel takes a responsible approach to its use of water resources. The Company withdraws water for production needs strictly in line with the pre-approved limits and consistently ensures compliance with permissible wastewater discharge limits based on the Group companies' corporate environmental reporting and its analysis.

Nornickel uses water from surface and underground sources for drinking and production needs, as well as for recirculating and recycling water supply. The Company regularly runs observation programmes for water bodies and water protection zones that serve as water sources for Nornickel. In 2022, no major impact of Nornickel's operations on water bodies was identified; water withdrawal was within the pre-approved limits. No water is withdrawn from the bodies included in the Ramsar Convention on Wetlands of International Importance. The Company's areas of operation are not water-scarce[1].

To decrease withdrawal volumes, the Company continues to improve its closed water circuit, which enables efficient use of water resources. In 2022, 82% of all water used by the Company was recycled and reused.

Nornickel has in place a Position Statement on Water Stewardship, which outlines key relevant principles, commitments, initiatives and targets.

Key principles of Nornickel's water stewardship:

Complying with applicable national laws and rules	Enabling information accessibility and transparency as regards water stewardship	Working towards water consumption and discharge targets, efficient water use
Adherence to international best practices and requirements of leading sustainability associations	Liaising with government bodies to participate in drafting environmental responsible water protection regulations	No Company's or its branches' operations in waterscarce areas as they are defined in the World Resources Institute's Aqueduct Water Risk Atlas
Proactively engaging stakeholders on matters of external water resource management to support predictable, consistent and effective regulation	Making sure that the employees of the production facilities belonging to the Company and its branches comply with the 2021 Position Statement on Water Stewardship at all stages of these facilities' life cycle	Fostering employee knowledge and skills in responsible water use at our sites and branches, identifying meaningful incentives to stimulate responsible water use

The Company works to reduce and, where possible, prevent negative impact on water resources caused by production and delivery operations.

[1] The methodology to identify water-scarce areas is based on the data of the Aqueduct project of the World Resources Institute and Climate Zoning of the Russian Federation.

Management of water stewardship risks

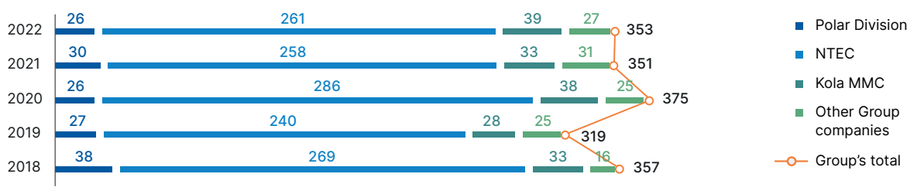
To manage risks, Nornickel regularly assesses its impact on water resources using the following procedures:

- wastewater inventory;
- monitoring of effluent volumes and quality at the discharge locations;
- observations of surface water bodies at control points upstream and downstream of the discharge locations;
- monitoring of wastewater treatment processes at treatment facilities and taking measures to improve treatment efficiency.

The Company continuously invests in improving the efficiency of existing water treatment systems and building new ones.

Total water withdrawal from external sources[1], mcm

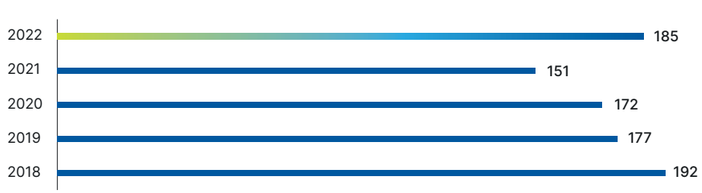
GRI 303-3



Water withdrawal in 2022 remained broadly flat y-o-y.

Total water consumption[2], mcm

GRI 303-5

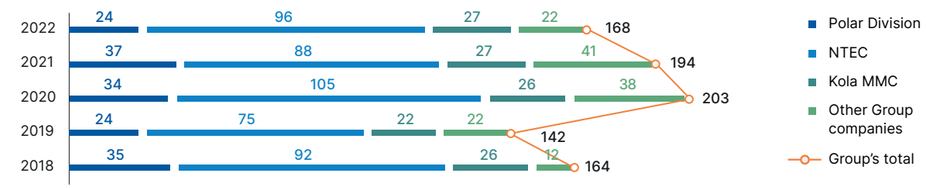


The water consumption for production needs increased due to the launch of new shops at Kola MMC, ramp-up of the Carbonyl Nickel Section, achievement of the designed capacity of the concentrate shipment section of the concentrator, and commissioning of a system for commercial accounting of power consumption at Polar Division.

[1] Excluding water reuse from NTEC. Until 2019 (incl.) the water withdrawal of Polar Division also accounted for the water withdrawal of Norilskenergo (MMC Norilsk Nickel's branch); since 2020, the latter has been accounted for as part of NTEC's water withdrawal. Data includes the natural inflow of mine water.
[2] The data in the chart is presented in line with GRI 303 (2018) methodology.

Total effluents, mcm

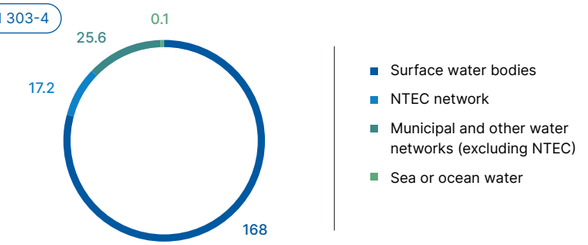
GRI 303-4



Nornickel's wastewater discharges into water bodies are predominantly in line with the pre-approved limits as required by Russian laws. Effluent discharge in 2022 went down by 13% y-o-y. The discharge of wastewater pollutants in 2022 decreased by 12% y-o-y, mostly due to changes in mine workings' inflow caused by weather conditions.

Effluents by destination in 2022, mcm

GRI 303-4



Impact of transport on water bodies

GRI 303-1

The Company operates water and other modes of transport, which affects the environment. Nornickel's impact on water bodies was analysed during the big scientific expedition.

for more details, please see the Biodiversity section.

The environmental impact of water transportation largely arises from:
- use of oil-containing fuel (mainly diesel fuel), which directly contributes to air pollution during combustion and indirectly – to water bodies' contamination;
- noise pollution affecting hydrobionts, marine birds and marine mammals;
- ballast, bilge and wash water sent by the Company to treatment facilities and then discharged into water bodies.

A fuel spill has the most potential adverse impact and is the key hazard for marine mammals.

The Company recognises that there are risks that may potentially lead to adverse environmental impacts. These risks include:
- losses during cargo operations (loading and unloading of oil products, bulk cargo, other substances);
- fuel spills;
- emergencies (leakage of oil products into water bodies);
- dispersal of invasive species by ballast water.

Risks associated with the negative impact of the Company's transport on water bodies are identified and mitigated within the framework of the environmental risk management system.

Nornickel's management of its impact on water bodies includes liaising with a wide range of stakeholders, in particular external experts and employees directly engaged in operations involving the Company's water transport. Interaction with dedicated professionals helps Nornickel be more effective and efficient in reducing the negative and building up the positive impact on water resources.

In managing its impact on water bodies, the Company regularly carries out:
- pollutant emissions and discharges' review;
- industrial environmental control;
- measurement of the volume of water withdrawn from water bodies, as well as the volume and quality of effluent discharge, including drainage water;
- observations of water bodies (their morphometric features);
- observations of water protection zones;
- development of standards.

To reduce its environmental footprint, the Company also implements environmental protection measures and programmes aimed at reducing fuel consumption and preventing contamination of the Dudinka and Yenisey rivers. To compensate for the estimated damage to aquatic biological resources, Nornickel regularly releases juvenile fish.

Port infrastructure, including water transport with a negative impact on the environment, is operated in accordance with the Russian laws.

In 2022, Yenisey River Shipping Company (part of the Group) spent RUB 301.7 mln on environmental protection, up 65% y-o-y.

The funds were mainly used to support the maintenance and operation of the auxiliary fleet which serves to prevent river water contamination during the operation of vessels. The auxiliary fleet comprises five waste collecting vessels with a carrying capacity of 100–600 t, two vessels for complex waste processing and two treatment plants located at Podtyosovo and Yermolaevo repair and operations bases.

In 2022, Nornickel expanded its environmental fleet with Sborshchik-2, a motor vessel with a capacity of 150 t, which was acquired and put into operation after a repair.

During the navigation period, waste collecting vessels collect oil-contaminated water, sewage and rubbish from motor vessels along the Yenisey River and the Lower Angara River. Yenisey River Shipping Company has a licence to collect, transport, treat, utilise, neutralise, and dispose of waste of hazard classes 1–4. Waste collecting vessels also provide crews with drinking water. The company also renders these services to third parties lacking such a licence and auxiliary fleet.

In the 2022 navigation period, the collecting vessels collected a total of
13.1 kt
of wastewater, including
4.3 kt
of oil-containing water,
and approximately
1 kt of rubbish,
while also delivering
3.5 kt of drinking water.

Tailings and waste

Sustainable waste management

GRI 306-1, 306-2, SASB EM-MM-150a.10, EM-MM-540a.2

In accordance with the Russian laws, the Company maintains records of waste generated, treated, recovered, neutralised, transferred to or received from third parties, and disposed of; these records are aggregated on a quarterly and annual basis. The Company aims to monitor waste management throughout its entire life cycle, including the management of waste by third parties. Contracts for further waste management are made with third parties possessing all necessary permits, licences, state expert conclusions, technical regulations and specifications.

More than 99% of waste generated by the Company is associated with mining and concentration and is not hazardous as this is overburden and host rock (hazard class 5), and tailings (hazard classes 4 and 5)[1].

All other waste not associated with mining and concentration is a result of various production or other economic activities, or comes from materials and products that have lost their consumer properties after having been used according to their intended purpose.

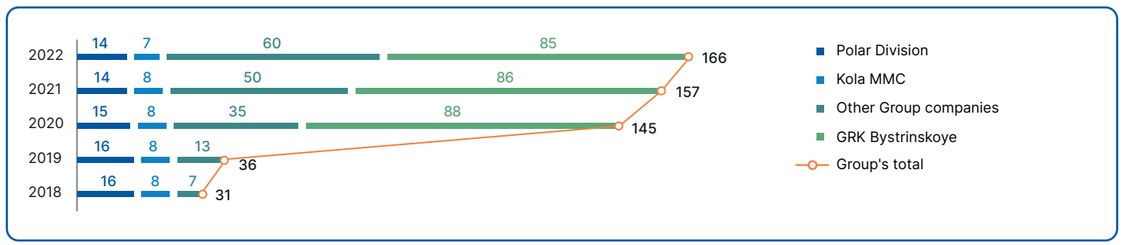
The most hazardous waste generated by the Company is hazard class 1 (extremely hazardous) and hazard class 2 (highly hazardous) waste. The majority of this waste is mercury lamps and thermometers, batteries, acids and alkalis used in batteries, uninterruptible power supplies, and oils.

Hazard classes 1 and 2 waste is below 0.001% of the total waste generated.

In 2022, hazard classes 1 and 2 waste amounted to 57 t.

In compliance with the new legal requirements, in March 2022 Nornickel switched to a new procedure for managing hazard classes 1 and 2 waste, which includes the use of the dedicated state information system. As a result, in 2022:
- the Group companies generating hazard classes 1 and 2 waste entered into contracts with the Russian Environmental Operator for hazard classes 1 and 2 waste management;
- a series of meetings on the management of hazard classes 1 and 2 waste and on the performance of the federal state information system were held jointly with the Russian Environmental Operator;
- the business process target map for using the Federal State Information System for the Accounting and Monitoring of Hazard Class 1 and Hazard Class 2 Waste was developed from the moment of registering with the system to signing the primary accounting documents.

Waste generation, mt



The total amount of waste generated in 2022 increased due to the expansion of production activities (mining and concentration), as well as implementation of a programme on land clean-up and dismantling of unused buildings and structures, which resulted in the generation of construction waste in theNorilsk Industrial District.

[1] Hereinafter hazard classes are as per the waste hazard classification adopted in Russia.

Contribution to combating contamination with waste

GRI 306-2, 306-4

Nornickel strives to foster non-waste production by developing and implementing waste recovery approaches, making efforts to clean up existing pollution. Waste generated by the Company is used by third parties and Nornickel itself for backfilling of mined-out areas and pits, road filling, building of tailing dumps, and placement in waste dumps. Recovery provides for the economic utilisation of waste and reduction of landfill disposal, which helps minimise adverse environmental impact.

Key projects and initiatives contributing to increased waste recycling and treatment

Initiatives	Expected effect
Building a crushing unit for processing construction waste into certified crushed stone	15% of waste generated by the Company will be recovered
Constructing a ferrous scrap recycling shop	Ferrous scrap metal processing capacity will be 100 ktpa
Building a non-ferrous scrap recycling shop	Non-ferrous scrap metal processing capaci-ty will reach 2 ktpa
Launching a pilot project for waste sorting in Monchegorsk	80% of waste generated by the Company will be sorted
Processing large tyres and rubber products into crumb rubber / pyrolysis fuel	All of the Company's rubber products waste will be recycled
Developing a technology to recycle sludge	–

In-house waste disposal, mt

An increase in waste disposal in 2022 was due to the use of overburden in own operations (road backfilling, strengthening of tailing dumps, site levelling).

In 2022, the Company continued implementing the Clean Norilsk Project to clean up industrial and construction waste.

To implement the Project, in 2020 the Company's Polar Division established dedicated units tasked with:

- dismantling of unused and dilapidated buildings and structures;
- clean-up of production waste and scrap metal;
- removal of waste and scrap metal to special landfills and processing sites;
- clean-up of waste and scrap metal in hard-to-reach locations of the forest-tundra area;
- implementation of land rehabilitation measures;
- processing of collected scrap into charge for further transportation.

Since the start of the Clean Norilsk programme in 2021, 262 dilapidated buildings have been dismantled, 71 kt of scrap metal and 814 kt of waste collected and removed, and an area of 2.6 million m² cleaned. The technical phase of disturbed land rehabilitation was carried out on an area of 78.8 ha. Total costs since Clean Norilsk was implemented have exceeded RUB 11 bn.

By 2030, Nornickel plans

Remove

up to **2** mt of waste

> 600 kt of scrap metal

Clean an area

of up to **24** million m²

Dismantle

over **500** abandoned structures

Taking into account the scope of work, seasonality factor, and a large distance between the to-be cleaned areas and waste disposal sites, the programme will be carried out in stages

over the next **10** years

According to preliminary estimates, the programme's cost will exceed

RUB **40** bn

Waste disposal

Tailing dumps

SASB EM-MM-540a.1, EM-MM-540a.2

Nornickel takes a responsible approach to tailings management, paying particular attention to their physical and technological safety.

In 2021, the Company put in place a Tailings Management Policy, which is fundamental for managerial decision-making.

The Company currently operates six tailing dumps.

Division/subsidiary	Number of tailing dumps	User
Polar Division	2	• Talnakh Concentrator, • Nadezhda Metallurgical Plant
Medvezhy Ruchey	2	• Norilsk Concentrator
Kola MMC	1	• Zapolyarny Concentrator
GRK Bystrinskoye	1	• Bystrinsky Concentrator

A gypsum storage facility is also under construction in Norilsk.

The Company regularly monitors the condition of hydraulic structures of tailing dumps and conducts environmental monitoring in the adjacent areas.

Nornickel complies with the Russian laws associated with tailings management. Additionally, we developed mandatory safety criteria to operate each tailing dump and had them approved by regulators. The Company regularly reviews the time frames for decommissioning of tailing dumps and determines the future closure and land rehabilitation costs. Based on the results, the Company calculates the present value of future costs, recognising its environmental provision with respect to the tailing dumps.

Nornickel takes a risk-based approach to tailings management. To address tailing dump-related risks, the Company has organisational units and officers providing regular reports to the management. Such units engage qualified and experienced staff. The hydraulic structures are constantly monitored by the operating personnel and a dedicated environmental team.

In addition to the Company's initiatives, Rostechnadzor carries out annual pre-flood inspections of hydraulic structures together with Nornickel employees. Every five years, the hydraulic structures are subject to detailed inspections by a Rostechnadzor-certified agency that issues an industrial safety declaration upon which Rostechnadzor carries out a comprehensive audit.

Over the last five years, there have been no environmental incidents at the Company's hydraulic structures.

SASB EM-MM-540a.3

There are two processes in place to assess the Company's tailing dump-related risks:

- estimates of potential damage to life and health of individuals, and to property of individuals and legal entities as a result of an emergency at a hydraulic structure. Estimates of potential damage serve to identify possible emergency scenarios and assess emergency risks and the negative impact on communities, ecosystems and critical infrastructure;
- assessment of technical and production risks carried out in line with Nornickel's Regulations on Technical and Production Risk Management.

Potential damage estimates show minimum risks for local communities, ecosystems and critical infrastructure in case of an emergency, as all of the tailing dumps operated by Nornickel are located away from production facilities and residential areas.

Nevertheless, the Company develops emergency preparedness and response plans for worst-case scenarios, as required by the Russian laws. The plans determine roles, responsibilities, and communication procedures.

The emergency preparedness and response plans as well as the public warning system are subject to periodically testing. At least once every five years, when developing a safety declaration Nornickel runs comprehensive drills to verify its preparedness for containing and eliminating emergencies at hydraulic structures. These drills are attended by experts from EMERCOM. If successful, an opinion is issued on the company's readiness to contain an emergency at a hydraulic structure and protect local residents.

Nornickel has all necessary material and financial resources required to respond to an emergency at its tailing dumps and promptly repair any damage, including a sufficient fleet of excavators, dump trucks and other special vehicles (as outlined in contingency plans). Employees operating the tailing dumps undergo regular dedicated training and knowledge tests mandated by Rostechnadzor.

Soil protection and responsible mining

Land protection

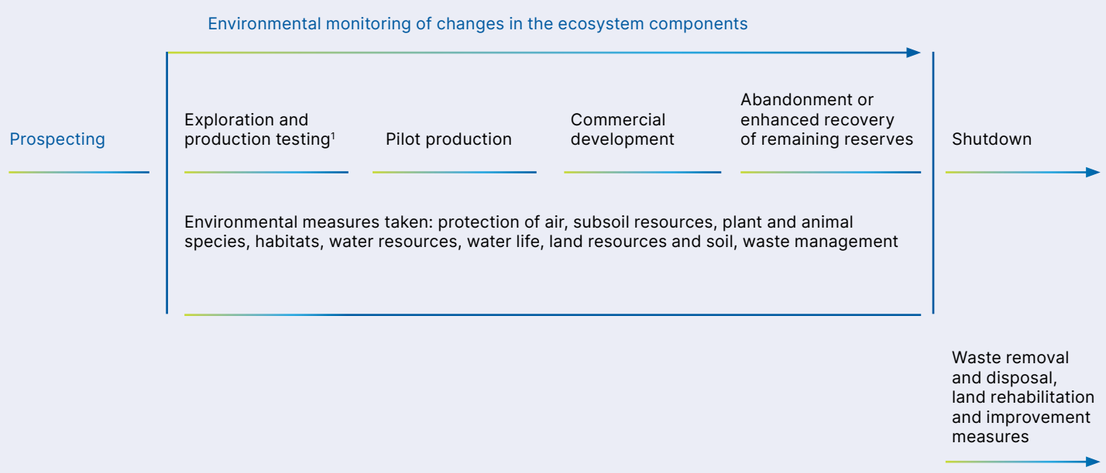
Nornickel seeks to reduce the negative impact on soils resulting from the Company's operations. To this end, Nornickel focuses on the rehabilitation of all land affected by construction and mining, as well as otherwise affected by our operations.

The Company conducts an environmental impact assessment, including a negative impact on land, in accordance with the Russian laws.

Nornickel is developing the Oktyabrskoye, Talnakhskoye and Norilsk-1 deposits on the Taimyr Peninsula, Zhdanovskoye, Zapolyarnoye, Kotselvaara and Semiletka deposits on the Kola Peninsula, and the Bystrinskoye deposit in the Trans-Baikal Territory.

For each deposit, the Company has built and is continuously updating a list of measures to prevent or mitigate potential negative effects on the environment while ensuring sustainable use of natural resources throughout the deposit life cycle.

Environmental protection and monitoring measures taken during the deposit life cycle



1
- State and public environmental review
- Environmental Impact Assessment (EIA):
  - Review of layout options and technology
  - Environment analysis and environmental impact assessment
  - Mitigants
  - Monitoring programmes
  - Public discussions with local community

The Company has field development, mine liquidation and land rehabilitation project documents in place for all of its deposits. Nornickel's deposits are in commercial development, exploration or production test stages with liquidation or abandonment not expected until 2050 and special provisions set aside for rehabilitation activities.

Disturbed and rehabilitated land area in 2022, ha

GRI 304-3

Indicator	Total	Including:			
		during mining	during construction	during disposal of solid domestic and industrial waste	during other activities
Total disturbed area, beginning of period	16,694	14,055	1,066	782	791
Total rehabilitated area[1]	75	0	0	0	75
Total disturbed area in the reporting period	317	145	127	45	0
Total disturbed area, end of period	16,936	14,199	1,193	828	716

Completion of the restoration efforts at CHP-3

In January 2022, NTEC transferred land plots of a total area of 47.5 ha to the Norilsk Administration, with certificates for acceptance and delivery signed; 2021 saw the rehabilitation of these land plots, which were contaminated by the fuel spill and disturbed during clean-up activities.

As for the remaining area of 27.4 ha, the rehabilitation works were completed in full in the reporting year.

The quality of the work performed is confirmed by:
- lab tests of the rehabilitated soils conducted by the Trofimuk Institute of Petroleum Geology and Geophysics of the Siberian Branch of the Russian Academy of Sciences;
- report on the inspection control and evaluation of the work quality submitted by the Institute of Soil Science and Agrochemistry of the Siberian Branch of the Russian Academy of Sciences.

The transfer of the rehabilitated land plots of a total area of 27.4 ha to the Norilsk Administration is scheduled for 2023.

1 The table does not include data on disturbed and rehabilitated land near CHP-3.

Responsible exploration and field development

To replenish its resource base, Nornickel focuses closely on exploration, including geophysical and geochemical surveys and drilling at promising subsoil areas across the Company's current operations. Nornickel sees a significant potential for the discovery of new deposits and plan to continue exploration both within and beyond its footprint to unlock it.

The Group's exploration activities are subject to various regulations of the Russian Federation covering subsoil use, environmental protection, occupational health, industrial and fire safety. Furthermore, Nornickel assesses its environmental protection obligations based on the requirements of applicable laws in various jurisdictions, terms of licence agreements and internal engineering estimates as interpreted by the Company's management.

In order to assess, monitor and predict the environmental situation during exploration, development and operation of deposits to make competent management decisions aimed at preserving habitats and ensuring environmental safety of traditional trades, we conduct environmental monitoring at all stages of exploration and development.

As Nornickel seeks to keep ecosystem intact, it avoids exploration at protected natural areas and world heritage sites, and ensures no negative impact on the traditional industries, cultural heritage, interests and traditional lifestyles of indigenous peoples.

In addition to environmental monitoring, exploration is accompanied by a set of measures to protect the subsoil, topsoil, vegetation and water bodies. Upon completion of reserve exploration, disturbed land is subject to rehabilitation including liquidation of drilling sites, neutralisation of soil contaminated with fuel and lubricants, as well as land levelling. The sites are brought to a condition suitable for further use according to their intended purpose.

Exploration areas of Nornickel Group in 2022

- Yuzhno-Norilskaya area
- Mikchangdinskaya area
- Arylakhskaya area
  - Copper-nickel sulphide ores
- Mokulaevskoye deposit – Limestone, dolomite
- Western flank of the Oktyabrskoye deposit – Copper-nickel ores
- Ozero Lesnoye deposit
- Kayerkanskoye deposit
  - Basalt
- Mostovskaya area – Gold, silver, copper ore, molybdenum ore
- Dogyinskaya area – Gold-copper ores, gold-silver ores
- Bystrinskoye deposit flanks – Gold, copper, iron
- Alenuyskaya area – Gold, silver, iron ore, copper ore, molybdenum ore
- Shamyanskaya area – Gold-molybdenum-copper ores

Environmental impact of exploration activities

Activity	Source of impact	Type of impact	Object of impact	Environmental activities
Preparatory works: • Drilling site lay-out • Equipment transportation and storage • Construction of storage facilities for chemicals, fuel and lubri-cants	• Road transport • Exhaust gases of motor vehicles, construction and road machinery • Excavated soil • Materials for site construction and preparation of drill-ing mud and ce-ment slurries	• Physical disturbance of the fertile soil layer, natural landscapes, thermal abuse, degradation of topsoil layers. • Ecosystem disturbance, changes in the flora and fauna habitats	• Fertile soil layer on drilling equipment sites, routes of lin-ear facilities • Flora and fauna, atmospheric air, soil, ground, sur-face water, land-scape	• Compliance with land allotment standards • Land rehabilitation • Construction of trays and platforms at machinery parking lots • Soil protection measures • Fire safety measures
Well drilling	• Mud mixing unit • Drilling waste circulating system • Chemicals used for drilling and plugging • Waste products (mud spills, slime) • Domestic wastewater • Solid domestic waste • Crossflows inside the annulus and damaged casing string	• Ecosystem disturbance and changes in habitats of certain plant and animal species • Machinery-generated noise	• Flora and fauna, soils, subsoil, surface and underground water, snow cover, air • Animal and human habitats	• Compliance with the requirements for the completeness of the study and use of subsoil • Planning protective measures based on the results of hydrological, geotechnical and environmental monitoring • Well plugging
Well abandon-ment and mothballing	• Leaks in casing, casing pipes, wellhead equipment, mineralised water	• Ecosystem disturbance and changes in habitats of certain plant and animal species	• Flora and fauna, soils, surface and underground water, air, animal and human habitats	• Plug and abandonment operations • Rehabilitation

Biodiversity

Biodiversity impact management

SASB EM-MM-160a.1

Nornickel recognises the need to protect the environment and seeks to prevent net biodiversity losses caused by the Company's operations.

Nornickel's biodiversity goals

- Ensure preservation, recovery and sustainable use of terrestrial ecosystems
- Ensure sustainable management and protection of marine and coastal ecosystems
- Ensure protection and restore biodiversity of water bodies
- Protect, restore and promote sustainable use of terrestrial ecosystems and their biological resources
- Take measures to stem the degradation of habitats, biodiversity loss, and extinction, protect endangered species
- Ensure that the value of ecosystems and their biodiversity is taken into account when planning new and expanding current operations of the Company.

The Company's activities in this area are guided by the following principles:
- biodiversity impact management;
- sustainable use of natural resources;
- conservation of key biodiversity values;
- recognition of the importance of biodiversity conservation in preventing climate change;
- protection and promotion of the sustainable use of terrestrial ecosystems;
- protection of freshwater and marine ecosystems;
- assistance in preventing the extinction of threatened species;
- transparent operations and open dialogue with local communities on biodiversity impact management;
- prohibition of exploration and mining at World Heritage sites and in all protected natural areas.

In 2021, the Company committed to preserve biodiversity by issuing a Position Statement on Biodiversity[1]. In 2022, Nornickel started to deliver on its commitments, with the first step being a baseline biodiversity research.

The project on the baseline biodiversity research called the Big Scientific Expedition was the jump-off point for the development of the Company's biodiversity impact management system. The expedition included a comprehensive study of ecosystems in the areas where the Group companies operate, which helped identify the main aspects necessary to develop a biodiversity impact management system:
- historical data on ecosystems;
- boundaries of areas with a negative impact on ecosystem biodiversity;
- negative factors and threats to biodiversity;
- indicator species reflecting the ecosystem condition;
- key biodiversity values in the negative impact areas;
- reference areas;
- biotic and abiotic indicators of the present state of ecosystems in the identified areas of negative impact and in reference areas.

In 2023, the Company plans to continue its biodiversity research, aiming for continuous monitoring of biodiversity. This approach will help capture changes in the state of ecosystems, while changes in the deviation targets of the impacted areas as opposed to reference areas will help assess the effectiveness of the Company's initiatives.

The data on biodiversity indicators obtained in 2022 following the expedition[2] helped form the basis for determining the Company's biodiversity conservation target.

To effectively manage the negative impact at the Head Office level, a draft corporate standard for ecosystem biodiversity conservation and monitoring was developed and is expected to be finalised in 2023–2024.

[1] Publicly available at Nornickel's website.
[2] For more details, please see the presentation on the results of the Big Scientific Expedition at Nornickel's website.

In addition, the Company's divisions and some remote assets that have a negative impact on biodiversity are developing and adopting their own local biodiversity conservation programmes.

Nornickel's biodiversity impact management system covers all stages of the project life cycle, from pre-FEED to post-liquidation. The system provides for mandatory pre-project biodiversity research.

Impact on biodiversity in terms of value chain and life cycle stages

Nornickel's mining facilities include mines and open pits operated by mining enterprises of the Company. Processing facilities include mills and factories. Logistics facilities comprise marine and river transport companies. Energy facilities consist of fuel and energy enterprises.

Nornickel's mining, processing and energy facilities are interconnected into production clusters that are located in the shared areas and have both an individual and cumulative impact on ecosystems. When it comes to biodiversity monitoring, it is not practical to break down enterprises along the value chain into categories as they are connected in terms of location. For such conglomerates, biodiversity impacts are managed through unified biodiversity conservation and monitoring programmes in unified areas of cumulative impact.

Water transport companies develop separate programmes for biodiversity conservation taking into account their specifics.

Biodiversity conservation issues are also included in the supplier management system as part of the relevant section in the Supplier Code of Conduct, which the contractors are required to follow.

Most of Nornickel's assets are in operation, and they also have the greatest impact on biodiversity. In the reporting year, all existing mining, production, energy and logistics assets saw biodiversity studies, training of specialists, and drafting of biodiversity impact management system documentation.

In 2022, the Company's asset in Nickel was prepared for liquidation. Biodiversity monitoring continues around the shutdown workshop.

Assessment of Nornickel's impact on biodiversity

GRI 304-1

The features of the areas affected by the Company's operations for more than 80 years were studied during the 2022 big scientific expedition. The expedition was conducted by Nornickel jointly with the Siberian Branch of the Russian Academy of Sciences to identify the Company's impact area and assess the current state of ecosystem biodiversity within the proposed impact areas. The Siberian Branch of the Russian Academy of Sciences was selected as an institution capable to attract a large number of experts from relevant scientific institutions in a variety of regions. The expedition also involved experts from specially protected natural areas situated nearby in view of their comprehensive knowledge of the local context.

The research covered three regions: Trans-Baikal Territory, Murmansk Region, Krasnoyarsk Territory (including water transport companies' ports), and a section of the Northern Sea Route.

Boundaries of impact areas, km

Division	Impact			Updated impact area
	Significant	Medium	Low	
Trans-Baikal Division	1	1-5	5-10	10
Norilsk and Energy divisions	1-2	1-5	2-10	10
Kola Division	2-3	3-10	10-16	16

The most significant changes manifested in the reduction of most of the recorded biodiversity parameters are observed in the area of significant impact of the Company and have clearly delineated boundaries marked as sanitary protection areas, which in some cases may extend up to 1–3 km beyond the territory where Nornickel operates.
The boundary between medium and low impact areas is conventional as the differences in biodiversity parameters between these areas are generally insignificant, and a comparative analysis reveals almost no statistically significant differences.

Main biodiversity threats

GRI 304-2

The research identified negative factors and threats to biodiversity. The main negative factors affecting biodiversity due to the Group's operations:

- habitat fragmentation caused by withdrawal of territories, including transport and energy infrastructure;
- landscape transformation due to overburden and rocks, and hydraulic facilities (tailing dumps);
- contamination of the environment with emissions and discharges;
- human activities.

The most obvious threats to biodiversity following the expansion or lack of timely upgrade of the production facilities:

- man-induced transformation of habitats of typical and rare animal species;
- fragmentation of species and communities' habitat;
- mediated expansion of certain vector species' distribution;
- introduction of non-native species;
- increased frequency and scale of fires.

Ecosystems of the Norilsk Industrial District (Norilsk and Energy divisions)

According to the research results, emissions have a significant impact on ecosystems, getting lower with distance. In some areas, utility effluents from production facilities also affect water bodies. In the surroundings of Norilsk to the south along the Medvezhy Ruchey valley, impact on vegetation cover in the form of chemical burns on leaves can be traced up to 15 km from production facilities, while a reliable decrease in species diversity is observed at a distance of up to 3–4 km. At longer distances, no credible impacts on vegetation biodiversity are observed.

A specific feature of the Norilsk Industrial District is the proximity of production facilities and their common cumulative impact zone. Norilsk Division comprises mining, processing and energy companies, as well as the city of Norilsk and other associated facilities, collectively referred to as the Norilsk Industrial District. Their impact on biodiversity is of a cumulative nature and therefore viewed as a single area of negative impact.

The specially protected natural area located closest to the Company's facilities is the Putoransky State Nature Reserve, which is over 50 km away from Norilsk Division's enterprises and, according to the research, does not suffer a negative impact on biodiversity.

Ecosystems in the vicinity of Kola Division enterprises

The soil cover of the Monchegorsk District (Murmansk Region) is dominated by podzols and peat swamp soils of low fertility and high acid content. Due to natural geochemical anomalies associated with the occurrence of ore bodies, there are labile Ni, Cu, Co, Cr, Cd, and As found in more than a 20 cm deep layer of soil, which are most likely to cap biodiversity and productivity of plants and animals. The second major factor limiting biodiversity is man-induced contamination. Nornickel deposits in Zapolyarny and Nickel fall within the natural geochemical anomaly areas.

The results of hydrobiological surveys show that Lake Arvaldemlompolo, which is located in the significant impact area as compared to the Eastern Ore Cluster, is most affected by human impact. According to the results of test catches and collection of ichthyoplankton, there is no ichthyofauna in this water body. A potential negative factor reducing hydrobiont and ichthyofauna communities' biodiversity is utility effluents (in addition to industrial sewage) from urban enterprises containing many organic pollutants. It should be noted that the Company is not the only user of this water body cumulatively affected by many facilities.

The bird fauna boasting the largest number of species and specimens can be found in the area of significant impact from production facilities and near residential areas. The high numbers of certain bird species in the significant impact area do not mean it is a low-pressure area; rather, they are driven by the high concentration of wintering birds near human habitation. In this particular case, the increase in the bird number and species diversity is also supported by non-freezing water bodies, and trees and shrubbery.

Ecosystems in the vicinity of Trans-Baikal Division enterprises

The most significant decline in species diversity is observed in the significant impact area in the immediate vicinity of the Company's facilities. The boundary of the significant impact area runs approximately 1–2 km from Nornickel facilities.

Soils near the Company's Trans-Baikal Division enterprises are naturally of low fertility, have a subacid or medium acid reaction and high concentrations of arsenic. The main factor potentially limiting biodiversity in the area is low soil fertility. Because of this, plants and animals may experience a lack of biophilic macro- and micronutrients. The second major factor potentially limiting biodiversity is man-induced soil contamination.

The analysis of floristic and coenotic diversity showed that there are two sites suffering from the Company's operations:

- extensive wetland area (floodplain of the Bystraya River, supported by spurs of the Uryumkansky ridge from the north, west and south). A nearby tailing dump may influence the floristic composition and diversity of plant communities due to groundwater inflow;
- woodland is represented by a variety of larch, birch, and mixed larch and birch forests. The area was heavily influenced during the period of gold mining. Currently, waste dumps are being overgrown with vegetation, with no visible changes in the forest vegetation due to Bystrinsky GOK.

All bird communities in the vicinity of Bystrinsky GOK are very diverse. Species diversity is the lowest in the significant impact area and the highest (over 30 species) in the areas of medium and low impact. All communities are aligned; there are no species with too high an abundance compared to the others. Faunal diversity and bird density have little dependence on the level of impact from the Company's facilities, but are more related to the diversity of biotopes on a particular reference site.

The Uryumkan Nature Reserve in the Gazimuro-Zavodsky District (Trans-Baikal Division) is located closest to Trans-Baikal Division facilities and its area of impact and is the most important for biodiversity maintenance and restoration. The distance between the Nornickel site and the Uryumkan Nature Reserve is 22 km. Thus, it appears that Trans-Baikal Division enterprises do not have a significant impact on biodiversity and the ecosystem of specially protected natural areas in the region.

Ecosystems of port areas of river transport enterprises

The research showed that all three segments of Krasnoyarsk River Port and Lesosibirsk Port are only minor elements of the overall urban agglomeration. Based on a number of facts, it can be said that Nornickel's enterprises in Krasnoyarsk River Port and Lesosibirsk Port have no specific impact on bird populations and microbiological parameters of water bodies. A biodiversity conservation programme was developed to manage the impacts on the biodiversity of river transport industry, focusing specifically on preventive measures to minimise the pollution of water bodies during the operation of vessels and port facilities possessed by the Company.

Specific impacts of branches using the Northern Sea Route

According to the bird fauna research results, the minimal impact of the ports' berthing facilities is inseparable from the overall impact of the ports and the urban territory as a whole. Therefore, it is not the operation of the berths that has a significant impact on biodiversity of the ornithocomplexes and marine mammals but the shipping traffic on the Northern Sea Route as a whole. To manage the biodiversity impact from vessel operations, a programme of measures has been developed that include preventing the pollution of the water body from the operation of berths and minimising the negative impacts from shipping. Population monitoring of birds and marine mammals was carried out along the Northern Sea Route in 2022.

Key biodiversity values identified in the impact areas of Nornickel's operations

GRI 304-1

Key biodiversity values include protected species as well as critical habitats and key biotopes[1].

For the information on protected species found in the impact areas of the facilities see the Appendix GRI Quantitative Indicators Disclosure.

Norilsk and Energy divisions

In the Norilsk Industrial District, a habitat critical for the conservation of a rare plant species, northern spikemoss (Selaginella selaginoides), was identified. The plant has an extensive Holarctic distribution, but is far from being of universal occurrence. The identified habitats are considered as critical and should be used for multi-year monitoring of the species' local populations.

In addition to rare species' habitats, highly threatened and/or unique ecosystems were identified within Energy Division's footprint, in particular the steppe-tundra habitats on the boulder trains in the Medvezhy Ruchey valley. This steppe-tundra is a relic of the Last Glacial Period – a period of cold and dry climate, when mammoths existed. It is of scientific interest as a living witness of past geological epochs and is a valuable resource for species occupying newly emerging habitats amid global climate change.

Norilsk Division also includes habitats of plant communities with a high level of diversity, specifically, larch forests and alder thickets with an extensive grass cover, as well as the abundance of herbaceous perennial species that are rare or absent in other types of communities.

Kola Division

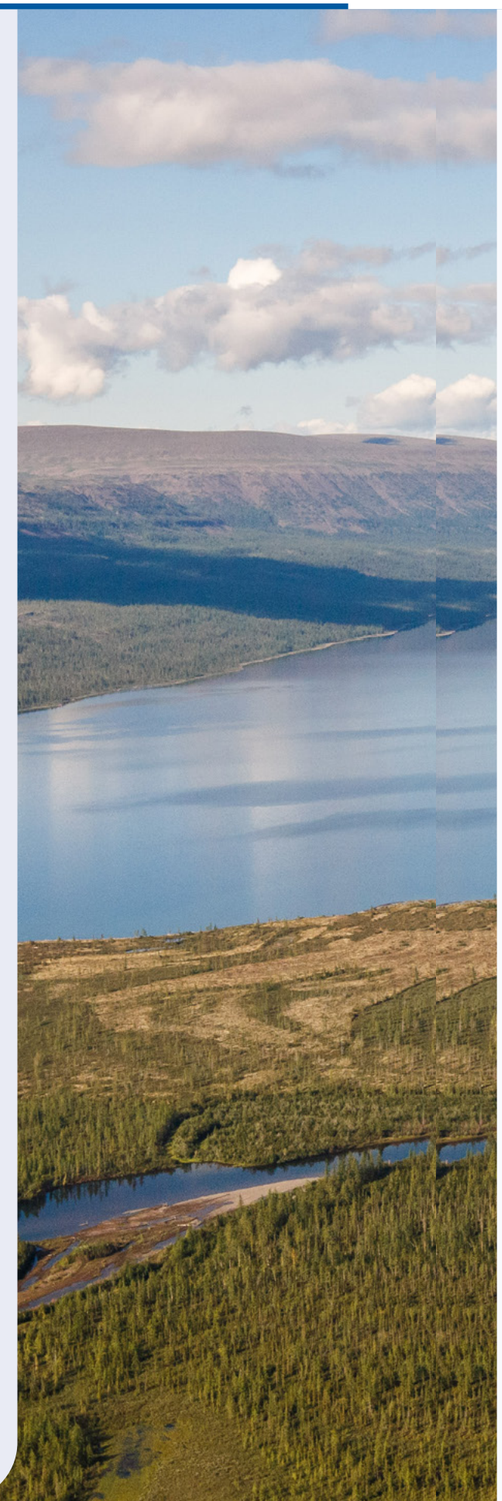
There are two state nature reserves whose territories and buffer zones are partly located within the identified areas of medium and low impact of Kola Division: Pasvik and Lapland nature reserves. They are home to endemic species and/or species with a limited distribution area as well as critically endangered and/or unique ecosystems.

These reserves can be viewed as critical habitats requiring continuous monitoring. Nornickel will pay particular attention to areas falling within the proposed footprint of the former smelting shop which was decommissioned by 2022.

Trans-Baikal Division

As far as Trans-Baikal Division is concerned, the research area did not exceed 1% of the protected species' (birds and plants) habitats in the Trans-Baikal Territory. Under IFC Performance Standard 6 dated 1 January 2012, the area of Trans-Baikal Division facilities' operations cannot be classified as critical habitat for any of the protected bird species identified. Based on observations made during the warm season of 2022, it was not possible to identify key biotopes.

[1] Habitats of rare and endangered plants, fungi, or animal species, or large populations of rare and endangered species; areas of special significance for vertebrate animals' life cycles (reproduction, rearing of the young, fattening, rest, migration, etc.).



Biodiversity conservation efforts

Nornickel is developing initiatives to reduce the pressure on ecosystems taking into account the mitigation hierarchy, i.e., the **avoid – reduce – restore – compensate** principle. These initiatives seek to:

- avoid direct and indirect negative impacts on ecosystems (e.g., closure of Nickel Plant);
- reduce and minimise direct and indirect negative impacts on ecosystems (e.g., the Sulphur Programme, construction of local wastewater treatment plants, bigger share of water recycling ecosystems);
- restore ecosystems (e.g., disturbed land rehabilitation);
- compensate (e.g. restore fish populations by releasing fish fry).

Nornickel's Environmental and Climate Change Strategy groups the above measures in categories depending on negatively impacted natural environments targeted.

In 2022, Nornickel invested RUB **90** mln in biodiversity conservation.

Cooperation with the government on biodiversity conservation

In 2022, Nornickel entered into two agreements with the Russian Ministry of Natural Resources and Environment as part of the federal Biodiversity Conservation and Ecotourism Development project.

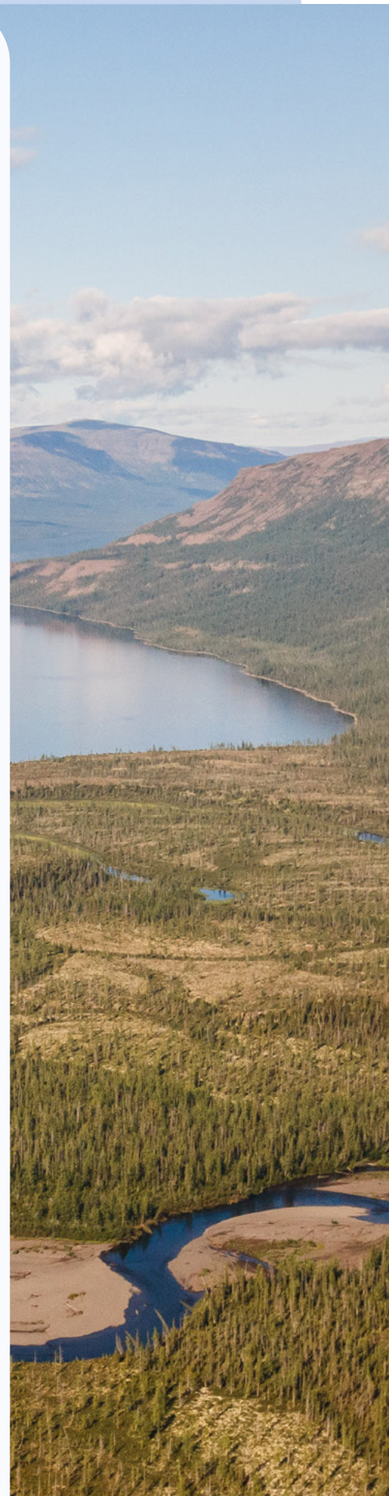
The first agreement is to protect the population of an endangered bird species of the Falconidae family, the gyrfalcon[1]. The project is expected to be implemented in 2023.

The second one is for the conservation and restoration of the polar bear population[2]. As part of the project to cooperate with the Umka 2022 expedition of the Russian Geographical Society and the Russian Navy Headquarters, a drone survey of polar bears on Wrangel Island was conducted in August and September 2022. The survey also focused on polar bears' food sources, namely walruses, whales, seals, bearded seals, as well as muskoxen and semi-aquatic birds. Data was collected on animal deaths.

In addition to recording the number of polar bears on Wrangel Island, the survey helped clarify their distribution on the island and assess the state of the polar bear and their habitats. 67 samples (sea and river water, snow, soil and biota, including samples of liver, wool and feathers of dead animals and birds) were taken for further analysis to determine heavy metal and persistent organic contaminants.

2022 surveys show that the population of polar bears is currently estimated at **1,910**

[1] Over the past 20 years, the gyrfalcon population in Russia has fallen by almost three times due to poaching. Now it is estimated at 3,500–5,000 breeding pairs.
[2] Polar bear is one of the 13 wildlife species included in the list of rare and endangered animal species that require priority recovery measures.



Cooperation with specially protected natural areas and tourism development

Cooperation with nature reserves represents one of the ways for Nornickel to help conserve and restore biodiversity.

Our cooperation with nature reserves primarily focuses on developing research and technology and supporting their social, volunteering and environmental awareness programmes.

Following a special request, in 2014–2022 Nornickel provided RUB 9.8 mln to the Joint Directorate of Taimyr Nature Reserves to update infrastructure involved in the directorate's core activities. Among other things, the funds were used to:

- acquire construction materials;
- buy equipment: a boat, boat motors, and satellite communication sets;
- finance a flight to deliver a prefabricated mountain home to the Kureyka River area;
- carry out facility repairs;
- hold anniversary events.

The Joint Directorate of Taimyr Nature Reserves is an active participant of the Company's Socially Responsible Initiatives Competition. Between 2013 and 2020, it won eight grants totalling RUB 26.5 mln. The funds were used to implement socially significant projects.

2022 saw the creation of a roadmap for implementing Nornickel's Environmental and Climate Change Strategy, which includes fostering systemic work and partnerships with the Joint Directorate of Taimyr Nature Reserves related to biodiversity monitoring and conservation, development of nature reserves, support for research work, and environmental education. To this end, the Company donated RUB 20 mln to the Joint Directorate of Taimyr Nature Reserves. The research will be carried out by the Directorate in 2023. In 2022, the allocated funds were used for preparatory work and procurement of research equipment.

Biological species living on the territory of the Pasvik Nature Reserve and the Lapland Nature Reserve, listed in the Red Books and the Red List of the International Union for Conservation of Nature[1]

GRI 304-4

Indicator	Pasvik	Lapland
On the IUCN Red List	4	1
On Russia's Red Data Book	22	24
On the Murmansk Re-gion's Red Data Book	117	163

[1] The nature reserves are located in a relative proximity to the Kola MMC operations

Social

Stakeholder Engagement 99

Respect for human rights 104

Occupational health and safety 112

HR management and social partnership 129

Social policy 153

Corporate volunteering 164

Development of local communities 167

Stakeholder engagement

GRI 2–29

Building mutually beneficial long-term relationships with stakeholders is at the core of our efforts to achieve the Company's goals and maintain nimble and robust risk management.

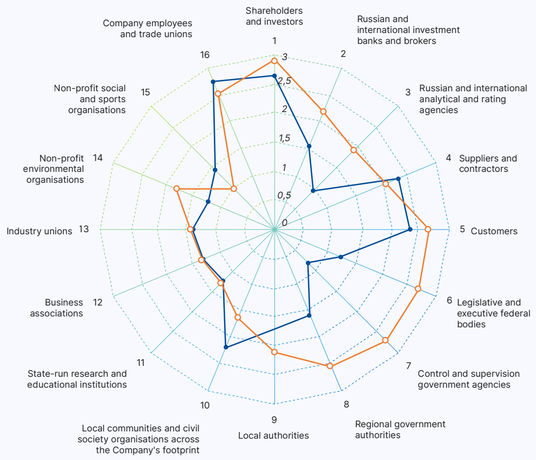
Nornickel's cooperation with government bodies, local authorities, non-profit organisations and local communities is guided by strict compliance with Russian laws and regional and municipal regulations, mutual respect of interests, and social responsibility.

The key principles, duties, initiatives and procedures related to stakeholder engagement are outlined in the Company's by-laws[1]. We maintain dialogue with stakeholders in line with international standards and accountability principles[2].

In 2022, Nornickel reaffirmed its commitment to transparency by providing stakeholders with regular updates on the Company's operational and financial performance, its financial position, social programmes for employees and local residents, and events and progress on the ESG agenda. The Company took steps to collect feedback on stakeholder satisfaction with the quality and flow of the Company's information and the compliance with the principles set out in its Information Policy Regulations.

Stakeholder map[3]

GRI 2–29



Shareholders, investors, brokers (1-2)

Interests
- Capitalisation and liquidity growth
- Distribution of earnings
- The Company's sustainable development
- Maintaining investment grade credit ratings, improving ESG ratings

Interaction mechanisms
- General Meeting of Shareholders
- One-on-one communication, phone calls and emails (meetings, conference calls)
- Website presentations and press releases
- Site visits
- Conferences and forums

2022 highlights
- Over 100 investor calls and meetings held

For more details, please see the Corporate Governance section

Analytical and rating agencies (3)

Interests
- Impact of the Company's operations on industry, society and environment
- Transparency of information and timely disclosure of key facts

Interaction mechanisms
- Meetings, conference calls
- Website presentations and press releases
- Phone calls and emails

2022 highlights
- Participation in Sustainalytics, EcoVadis, and MSCI ESG ratings

For more details, please see the Sustainability Management section

Suppliers and contractors (4)

Interests
- Streamlining procurement as regards timelines and engagement procedures
- Accessibility of procurement procedures
- Participation in the Company's projects

Interaction mechanisms
- Meetings, conferences, in-person and online negotiations
- Long-term agreements (contracts)
- Supplier assessment and surveying
- Interaction through the Shipment Notice and SAP SRM portals

2022 highlights
- Comprehensive risk-oriented screening completed with respect to suppliers of mineral resources
- The Group's companies and branches connected to SAP SRM, over 10,000 suppliers registered in the system

For more details, please see the Supply Chain Responsibility section.

Customers (5)

Interests
- Product quality
- Packaging and labelling
- Information support of transactions
- Delivery terms
- Sustainable growth of sales markets and registration of products in these markets
- The Company's ESG activities

Interaction mechanisms
- Official meetings, conferences, exhibitions
- Annual customer satisfaction surveys
- Working with customers (processing customer complaints and grievances and responding to them, analysing consumption trends and perspectives)
- Working with regulators and commodity exchanges

2022 highlights
- The customer satisfaction score came in at 2.85, which is fully in line with Nornickel's target

For more details, please see the Customer Satisfaction subsection

Federal authorities, control and supervision agencies (6-7)

Interests
- Implementation of socially important projects
- Compliance and regulatory improvements
- Discussion of draft regulations
- Business climate improvement
- Environmental protection
- Support for domestic producers

Interaction mechanisms
- Participation in working and expert groups, commissions, and committees
- Public events and conferences

2022 highlights
- A cooperation agreement signed by Nornickel and Rosprirodnadzor to preserve the environment and ensure environmental safety

For more details, please see the Tax Strategy and Development of Local Communities sections

Representatives of regional authorities (8-10)

Interests
- Stable tax payments
- Environmental protection
- Contribution to social stability, including creation of new jobs
- SME support
- Training of highly skilled professionals

Interaction mechanisms
- Working and expert groups, commissions, committees and councils
- One-on-one negotiations, working meetings
- Cooperation agreements
- Implementation of investment agreements
- Forums, conferences, fairs, and round table discussions

2022 highlights
- Initiatives implemented as part of the Norilsk renovation project (opening of a fire station, overhaul of the Integrated Social Service Centre)

For more details, please see the Development of Local Communities section

Non-profit organisations (11-15)

Interests
- Environmental protection
- Promoting innovations and educational programmes
- Developing sports in regions
- Discussing draft regulations
- Drafting social and economic development plans and investment programmes
- Improving business climate

Interaction mechanisms
- Working and expert groups, commissions, committees and councils
- Joint R&D and business projects
- Open dialogues, working meetings
- Forums, conferences, fairs, and round table discussions
- Participation in dedicated public events and expert organisations to discuss key issues

2022 highlights
- Big Scientific Expedition held
- Nornickel took part in the COP27 climate change conference
- Events held as part of the World of New Opportunities programme (30,000 participants)

For more details, please see the Enviromental management and Development of Local Communities sections

Employees and trade unions (16)

Interests
- Social benefits and guarantees
- Decent salaries
- Favourable and safe working conditions
- Company's stability as an employer

Interaction mechanisms
- Joint commissions, committees and working groups; discussions with trade unions and labour councils
- Offices for operational, social and labour matters
- Targeted polls, research focusing on engagement measurements and efficiency of social programmes
- Corporate media, booklets, information screens and boards, online portal

2022 highlights
- Nornickel Live, a Q&A session; spring corporate dialogues
- New corporate portal implemented; the Nika chatbot actively used

For more details, please see the HR Management and Social Partnership and Social Policy sections

[1] MMC Norilsk Nickel's Stakeholder Engagement Policy, Kola MMC's Stakeholder Engagement Procedure, MMC Norilsk Nickel's Business Ethics Code and other by-laws are available on the Company's official website.
[2] AA1000AP (AA1000 Accountability Principles), AA1000SES (AA1000 Stakeholder Engagement Standard).
[3] Put together based on surveys of the Company's managers and employees.

GRI 2–26

Dialogue with investors

Over **100**
investor meeting and calls in 2022

Nornickel maintains active dialogue with a wide range of Russian and international investors and equity analysts via conference calls and meetings, investment conferences and site visits. In addition, we hold annual Investor Day attended by the Company's senior management to discuss our strategic development.

In 2022, Nornickel continued to operate in conformity with the high international standards on disclosure. The Company uses different channels to reach out to stakeholders such as press releases, presentations, annual and sustainability reports, corporate action notices, as well as interactive tools. Nornickel publishes its reports in the Russian and English languages. Investor information is available in the Investors section on the Company's website.

In 2022, the Company held over 100 meetings and calls with investors.

Dialogue with business partners

Satisfaction level:
2.85
(out of 3.0)

Customers

In 2022, the Company supplied its products to 34 countries. Nornickel runs a global network of representative and sales offices in Russia, China, the USA, and Switzerland. The Company's primary focus is on direct sales.

To build effective trust-based relationships with customers and raise customer satisfaction level, the Company carries out surveys and monitors compliance with contractual terms on an ongoing basis. In 2022, the customer satisfaction level stood at 2.9 points out of 3.

Suppliers

All suppliers are checked for compliance with certain requirements, including those related to the ESG-agenda. To control compliance and select the best suppliers, Nornickel has rolled out a special due diligence management system across all its divisions. To ensure efficiency and transparency of its procurement activities, Nornickel uses SAP SRM, an automated system for supplier relationship management.

Dialogue with local communities

Continuous work of regional development centres

Nornickel contributes to better lives for the local communities affected by the Company's operations across its footprint. Nornickel takes account of their interests, opinions and preferences, as well as their history, culture, traditions, way of life and historic heritage. To make this possible, the Company organises various activities, themed studies and surveys, focus group sessions and open dialogue events.

The Norilsk Development Agency, the Monchegorsk Development Agency and the Second School Centre for community initiatives of the Pechengsky District (territorial development institutions established with Nornickel's support) contribute to creating conditions for improving quality of life, developing social environment and ensuring human capital growth in the regions where the Company operates.

For more details, please see the Development of Local Communities section.

Dialogue with employees

Up to **63%**
growth in employee engagement

Continuous open communication with employees is the backbone of efficient governance. The Company has been developing a social partnership framework regulating labour relations and has in place offices for social and labour relations, a response centre and task forces at divisions.

For more details, please see the HR Management and Social Partnership section.

To increase employee awareness, improve trust between workers and leadership and raise employee engagement, Nornickel carried out the following activities in 2022:

- the Company expanded and improved its communication channels (30,000 employees used the new corporate portal, over 60,000 people used NIKA chatbot);
- the Company's Vice-Presidents held Norilsk Live, a Q&A session, which gained over 15,000 views;
- Nornickel carried out 50 corporate dialogue sessions, during which almost 5,000 questions were asked;
- the Company ran eight information campaigns, with a total audience of more than 250,000 people.

The efforts to improve employee communication have contributed to higher engagement — the engagement index increased by 7 p.p. from 56% to 63% from 2021.

For more details, please see the Engagement section.

The Company has the Corporate Trust Line in place enabling its employees to report any violations of law and standards of conduct and ethics.

Environmental protection dialogue

2
important agreements with Rosprirodnadzor

The Company is actively involved in key law-making initiatives related to environmental protection, natural resource use, including subsoil use, as well as economy of natural resource use.

In the reporting year, Nornickel held the 9th Ecological Forum themed "Ecology and Production. Challenges, Trends and Technologies", participated in the Industrial Ecology conference and organised public dialogue meetings.

In 2022, Nornickel and Rosprirodnadzor signed two agreements to preserve the environment and ensure environmental safety. They establish a framework for the exchange of information, joint implementation of environmental activities, and the provision of advice by Rosprirodnadzor on Nornickel's high-potential investment projects, a first-of-its-kind cooperation initiative in Russia to provide a business with export opinion and expert evaluation of environmental plans.

Environmental protection is also fostered through volunteering, which brings together the Company's employees, local communities and government authorities. One of the Company's major projects is the Let's Do It annual environmental marathon encouraging people to clean up their local areas and plant trees.

Public and media relations

Ranked **1**

in terms of mentions in the media

The key channels used to relay information to the stakeholders and the public are the Company's official website www.nornickel.com, on which updates for stakeholders and general public are published, video and audio conferences, briefings, conference calls, and stakeholder meetings and dialogues. Nornickel regularly expresses its position – its senior management provides commentary to media outlets and it publishes press releases.

The Company has an efficient media communications system. In 2022, Nornickel was the top Russian metals and mining company in terms of mentioning in the media. The significant share of its publications covers social policy (14–15%). ESG matters have also gained greater focus over the last two years – the number of times they were mentioned increased from 2% in 2020 to 10% in 2022. Other most covered topics include environment, digitalisation, production development.

Dialogue with authorities and non-profit organisations

Represented in **25**

committees, commissions, expert and working groups

The Company takes part in parliamentary sessions and round table discussion organised by the Federation Council and State Duma of the Federal Assembly of the Russian Federation, Government of the Russian Federation, Civic Chamber of the Russian Federation, Russian Union of Industrialists and Entrepreneurs, Chamber of Commerce and Industry of the Russian Federation, Association of Managers (an interregional public organisation), etc.

The Company's experts engage in debates on draft regulations organised by community councils of the federal executive bodies, anti-corruption due diligence, and regulatory impact assessments. All of that helps maintain a constructive dialogue with the government, cut administrative red tape and improve business climate in our country. Our representatives are also part of various working groups created by federal executive authorities to help implement the regulatory guillotine mechanism.

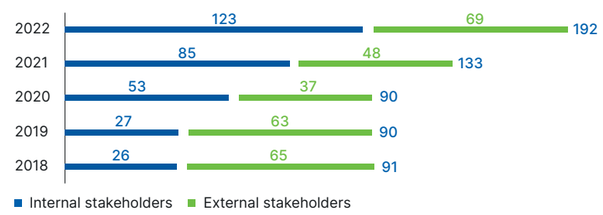
Dialogue in public non-financial reporting

192

stakeholders surveyed

Each year, Nornickel engages in dialogues with stakeholders while drafting sustainability reports and conducts surveys to define the material topics. In 2022, surveys covered 192 people, up by 44.4% from 2021.

Number of stakeholders surveyed as part of the efforts to define priority topics for the Sustainability Report in 2018–2022[1] (people)



[1] External stakeholders are representatives of regional and local authorities, communities, and non-profit organisations, while internal stakeholders refer to managers and employees of various levels from the Head Office, Polar Division, and Kola MMC.

Respect for human rights

GRI 2–23 | SASB EM-MM-210a.3

Approach to respect for human rights

Recognition, respect and observance of human rights is a basic principle that underlies Nornickel's operations and is embedded in its corporate values, Human Rights Policy, and other Company's by-laws[1].

The Company does not tolerate any forms of discrimination and does not use forced or child labour, giving every employee an equal opportunity to exercise their labour rights regardless of gender, race, nationality, origin, financial, social, and occupational status, age, domicile, religion, political beliefs, and other circumstances not related to professional qualities. No operations are run in, and no raw materials are procured from, areas involved in military conflicts.

Nornickel adheres to internationally recognised human rights norms and practices, including the core UN declarations, ILO conventions, industry initiatives and practical recommendations. Russia ratified most core ILO conventions. Nornickel is required by law to abide by requirements established therein. Human rights are addressed in the Company's key by-laws.

The responsibility for human rights protection lays with the Company's senior management. The Board of Directors and its Committees consider key matters such as health and safety at their meetings[2].

[1] Nornickel's by-laws are available on the Company's official website.
[2] The distribution of responsibilities is shown on slide 10 of the publicly available presentation titled 'Protecting and respecting human rights at Nornickel'.

External human rights regulations and standards applied by Nornickel

Generally accepted international declarations and guidelines

- UN Universal Declaration of Human Rights
- International Labour Organisation's declarations on fundamental rights and principles at work
- OECD Guidelines for Multinational Enterprises
- UN Guiding Principles on Business and Human Rights

Russian legislation

- Constitution of the Russian Federation
- Labour Code of the Russian Federation
- Federal Law No. 181-FZ On the Occupational Health and Safety in the Russian Federation dated 17 July 1999, Federal Law No. 82-FZ On the Minimum Wage dated 19 June 2000, Federal Law No. 82-FZ On Safeguarding the Rights of Indigenous Minorities of the Russian Federation dated 30 April 1999, and other federal laws

International and Russian initiatives

UN Global Compact

Social Charter of the Russian Business

Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy

UN Guiding Principles on Business and Human Rights (UNGP)

Practical recommendations

Guide for Integrating Human Rights into Business Management (UN Global Compact)

Global Reporting Initiative, uniform reporting standards and recommendations

Voluntary Principles on Security and Human Rights (VPSHR)

Industry-specific initiatives

IRMA Standard for Responsible Mining (2018)

ICMM Mining Principles

Responsible Minerals Initiative (RMI)

Protecting human rights at Nornickel. Regulations, approaches and key results

1. Business Ethics Code
2. Human Rights Policy
3. Equal Opportunities Programme
4. Working Conditions Policy
5. Occupational Health and Safety Policy
6. Personal Data Processing Policy
7. Freedom of Association Policy
8. Policy Regarding Support for Small and Medium Enterprises
9. Community Engagement Policy
10. Environmental Policy
11. Environmental Impact Assessment Policy
12. MMC Norilsk Nickel's Position Statement on Biodiversity
13. Renewable Energy Sources Policy
14. Indigenous Peoples' Rights Policy
15. Responsible Sourcing Policy
16. Supplier Code of Conduct

Right to life, freedom, and privacy, personal immunity, freedom of movement

Nornickel's by-laws

1 2 5 6

Approaches and key achievements in 2022

- In 2022, no cases of forced labour were registered;
- The Company does not restrict its employees' freedom of movement; it provides relocation assistance to employees in difficulty and allocates transportation subsidies to workers living beyond the Arctic Circle;
- The Company protects the personal data of its employees and protects them from arbitrary detention.

For more details, please see the Social Policy, Occupational Health and Safety, and Corporate Security sections

Right to safety, including occupational health and safety

Nornickel's by-laws

1 2 3 5

Approaches and key achievements in 2022

- Nornickel confirms its zero tolerance approach to work-related fatalities; in 2022, the Company recorded the lowest ever number of work-related fatalities;
- In 2022, health and safety expenses amounted to RUB 20.6 bn, or RUB 270,000 per employee.

For more details, please see the Occupational Health and Safety section.

Right to protection from discrimination

Nornickel's by-laws

1 2 3

Approaches and key achievements in 2022

- The Company does not tolerate discrimination on any grounds;
- In 2022, Nornickel had no reported cases of racial, gender, religious, political, social or other discrimination.

For more details, please see the HR Management and Social Partnership section

Right to freedom of association and collective bargaining

Nornickel's by-laws

1 2 3 7

Approaches and key achievements in 2022

- The Company maintains a well-developed social partnership framework, with collective agreements covering 94.4% of the workforce. The Group companies are parties to a total of 23 collective bargaining agreements.
- As at the end of 2022, 7.4% of the Company's employees were members of trade unions, while 77% were represented by social and labour councils.

For more details, please see the HR Management and Social Partnership section

Right to work, fair and adequate remuneration, favourable working conditions, and social security

Nornickel's by-laws

1 2 3 4

Approaches and key achievements in 2022

- The average salary paid to Nornickel's employees is well above Russia's average, standing at RUB 182,500 per month in 2022;
- The Company offers its employees a wide range of benefits and social assistance programmes (in 2022, the compensation package across the Group came in at RUB 194,700 per month, with the social assistance package accounting for 6% of this amount);
- Nornickel put in place an updated version of the Made with Care employee comfort programme (in 2022, 171 facilities underwent repairs, with RUB 3.2 bn allocated to improve social and working conditions);
- The Company takes steps to secure jobs for vulnerable population groups and people with disabilities.

For more details, please see the HR Management and Social Partnership section

A requirement for counterparties to respect human rights as part of the supply chain responsibility commitments

Nornickel's by-laws

1 2 15 16

Approaches and key achievements in 2022

- The Company introduced a Supply Chain Due Diligence Management System to identify and mitigate a variety of risks, including the risk of violating human rights and freedoms;
- The Company underlines its commitment to a zero tolerance approach to any violations of human rights across the supply chain.

For more details, please see the Respect for human rights and Supply Chain Responsibility sections

Right to education

Nornickel's by-laws

1 2 3 9

Approaches and key achievements in 2022

- The Company ensures equitable access to education for all categories of its employees by offering them a wide range of training programmes;
- In 2022, the average annual number of training hours per employee (based on average headcount) was 85, with the Company spending an average of RUB 21,113 per employee.
- The Company offers educational opportunities in the regions of operation as part of its World of New Opportunities programme;
- The Company provides targeted support to educational institutions across its geographies (cooperation with 30 institutions).

For more details, please see the HR Management and Social Partnership section

Protection of family, maternity and childhood

Nornickel's by-laws

1 2 9

Approaches and key achievements in 2022

- The Company respects and protects the rights of mothers and pregnant women;
- The Company provides all the necessary conditions for an employee to return to work from a maternity and/or childcare leave (in 2022, 592 employees returned to work after such leaves);
- The Company's social programmes in the fields of housing, healthcare and culture aim to support and provide leisure opportunities for families.

For more details, please see the Social Policy section

Right to a reasonable work schedule and paid leave

Nornickel's by-laws

1 2 4

Approaches and key achievements in 2022

- The Company complies with internal labour regulations, which are approved in consultation with the trade union organisation to establish the working hours of employees;
- Employees are entitled to paid job-protected annual basic and additional leaves;

For more details, please see the HR Management and Social Partnership section.

Right to shelter, right to own property

Nornickel's by-laws

1 2 9 14

Approaches and key achievements in 2022

- The Company does not implement or plan to implement any business projects related to alienation of land and forced relocation;
- In 2022, the Company continued running the Our Home / My Home and Your Home housing programmes (since the start of the programmes, 5,842 apartments have been provided to the Company's employees).

For more details, please see the Social Policy section

Right to a healthy environment

Nornickel's by-laws

1 2 10 11 12 13

Approaches and key achievements in 2022

- The Company continuously works to reduce its environmental footprint and implements a comprehensive environmental policy;
- As a result of Nornickel's Sulphur Programme, SO_2 emissions in Kola Division have gone down by 90% since 2015. The Company is now actively implementing the Programme in Norilsk Division;
- In 2022, the Company completed the first stage of implementing the air quality monitoring and forecasting system in Norilsk and Monchegorsk.

For more details, please see the Environmental Management section

Rights of local and indigenous communities

Nornickel's by-laws

1 2 8 9 14

Approaches and key achievements in 2022

- The Company has a wide range of programmes to improve the living standards of local communities (for example, the World of New Opportunities programme with 30,000 participants and the Plant of Goodness project with 3,500 volunteers and 370 events);
- The Company respects the rights of indigenous peoples and seeks to improve their living standards. As part of interactions with the indigenous minorities, Nornickel abides by a number of agreements. In 2022, the Company allocated RUB 412 mln to finance assistance projects.

For more details, please see the Development of Local Communities section

Human rights due diligence

To identify and assess any risks associated with direct or indirect human rights violations as a result of the Company's business operations and to take steps to prevent and/or minimise such risks, Nornickel applies the human rights due diligence procedure based on the UN Guiding Principles on Business and Human Rights (UNGP).

In 2022, the Company created a target model for this procedure to be implemented in five stages. Engagement with stakeholders and training are integrated into all stages.

Nornickel's human rights due diligence target model

Stage	Activities
1. Policy assessment	• a comprehensive review of the architecture of Nornickel's policies and documents in sustainable development; • preliminary risk assessment; • analysis of legal and political landscapes in terms of human rights in key markets and operating environments; • analysis of deficiencies and opportunities for improvement by way of revising the documents to integrate human rights as an element of Nornickel's corporate culture;
2. Risk assessment	• an in-depth analysis of the risks and impacts prioritised at stage I (analysis of specific human rights risk areas and relevant prevention and control measures); • development of updates to the human rights risk identification and assessment methodology, a human rights due diligence procedure as adapted to Nornickel's needs, regulations and guidelines for future consideration within the Company and with stakeholders;
3. Impact assessment at the level of production units	• risk assessment and analysis at the division and production unit levels, preparation of a final report and presentation; • development of recommendations on managing risks related to human rights; • detailed discussion with stakeholders of all prioritised human rights risks and impacts from the Company.

It was concluded that the Company as a whole and broken down by divisions and production units had low human rights impact on its key stakeholders and low exposure to business and human rights risks in Russia.
This report highlights some of the most important human rights initiatives and their outcomes in 2022.

For more details on the progress of the human rights due diligence system and human rights impact assessment, please see Nornickel's 2022 Human Rights Report.

As at the end of 2022, the following activities were implemented:

- Stage I activities were implemented in full: Commitment to human rights;
- Stage II activities were implemented to a significant extent: Identification and assessment of human rights risks and impacts;
- Activities of the following stages were implemented in part: Human rights risks and impact management, Monitoring and control, Information transparency.

The due diligence system rollout is scheduled to be completed in late 2024.

Human rights impact assessments

In 2022, Nornickel held a preliminary human rights impact assessment. An outline assessment of business and human rights risks in the Company's main jurisdictions was undertaken at the head office and division levels and involved interviews with employees and reviews of by-laws conducted by an independent expert organisation.

Procedure to report human rights violations

Nornickel's Corporate Trust Line is the first port of call for reporting human rights violations. In addition, the Company conducts regular personnel surveys and local community sentiment research. The Company guarantees anonymity and confidentiality for whistle-blowers and respondents. All employees are kept thoroughly informed of this service through information displays and stands, payslips, corporate calendars and brochures. A brief description of the Corporate Trust Line is available on the Company's website.

In 2022, we held discussions with stakeholders on options for updating the corporate grievance mechanism. As a result, we received recommendations on how to optimise the mechanism. As at the end of 2022, the Company revised the relevant regulations and improved the grievance mechanism.

For more details, please see the Corporate Trust Line and Grievance Mechanism subsections.

Human rights training

In 2022, the Company proceeded with its previously established plans to deliver basic training on human rights to the employees of the relevant units of the Head Office and companies/units of its divisions.

Some of the topics addressed include the importance of respect for and protection of human rights in the modern world, human rights in the metals and mining industry, the risk assessment system, challenges and commitments of the Company in the area of human rights, priorities to promote respect for human rights in the Company's corporate culture, basic knowledge of and skills for human rights risk assessment, etc. Nornickel also organised a standalone seminar for HR teams and relevant training for the Corporate Security employees to ensure compliance with the Voluntary Principles on Security and Human Rights (VPSHR).

The Company's human rights programmes were attended by more than 150 employees of the Group. The average duration of a training session was 1.5 hours.

Women in Mining Russia

Nornickel is a key partner of Women in Mining Russia (WIM Russia), a non-profit organisation that aims to promote professional development of women, raise awareness about engineering jobs, and develop a platform for professional communications. The organisation was named the Best Gender Equality Project at the Woman Who Matters award.

2022 was the second time WIM Russia held its Talented Woman in the Extractive Industry award ceremony in Moscow. The award received 388 entries, which is 64% more than in 2021. It brought together women from 40 Russian and CIS companies, with 20 coming out winners. Nornickel's employees received four out of ten nominations:

- Ambassador of the Year: Alexandra Nikolaeva (Dudar), manager, Management System Development Group, Darya Ermakova, chief expert, Sustainable Development Department (Kola MMC);
- Personal Achievement of the Year: Maria Korovina, dispatcher, Concentrator (Nornickel's Kola MMC), Zukhra Meshalkina, advisor to technical director (GRK Bystrinskoye);
- Breakthrough of the Year: Nadezhda Platonova, HSE director (GRK Bystrinskoye);
- Social Project of the Year: Anfisa Nikiforova, head of relations with indigenous minorities of the North, Nornickel's Polar Division.

15 women earned a Jury's Choice award. There were also Nornickel's employees among them:

- Larisa Bogdanova, grade 4 control console operator, GRK Bystrinskoye (Golden Idea of the Year);
- Olga Bondareva, head of procurement, Nornickel's Polar Division (Personal Achievement of the Year);
- Darya Shmakova, chief expert, gas treatment and recycling engineering support laboratory, Nornickel's Polar Division (Leader of the Future);
- Adelia Davlyatshina, grade 2 process engineer, Norilsk-Taimyr Energy Company (Personal Achievement of the Year);
- Maria Kalashnikova, head of hydrometallurgy laboratory, Gipronickel Institute (Inspiring Leader);
- Elena Pastushenko, expert in electrolysis of water solutions, Kola MMC (Golden Idea of the Year).

Occupational health and safety

Human capital

GRI 403–1

At Nornickel, we give priority to the life and health of employees over operational performance both when making management decisions and throughout the entire production. Nornickel's Occupational Health and Safety Policy outlines the Company's commitment to creating a safe and healthy environment and fostering sustainable employee motivation for safe workplace behaviour.

Main occupational health and safety goals:

01

Zero catastrophic occupational accidents: prevent accidents at the Company's facilities that may have negative impact on people from across the Company's regions and the Company's production results

02

No work-related fatalities: zero tolerance to any work-related fatalities

03

Safe working conditions and mitigation of mining and processing risks

Health and safety management

Occupational health and safety (OHS) at Nornickel covers all the Company's employees. It is governed by the Russian laws, international regulations and standards, and internal policies and regulations.

OHS regulations:

- Applicable Russian laws aligned with international laws, including conventions of the International Labour Organisation
- Occupational Health and Safety Strategy
- Occupational Health and Safety Policy
- Corporate OHS standards (14 in total)
- Regulations on the Health and Safety Management System
- Regulations on the Industrial Safety Management System
- OHS sections in collective bargaining agreements for the Group's Russian operations
- Regulations and guidelines for all production processes
- Project implementation plans and specifications for repair, construction and installation works
- Health and safety guidelines for specific jobs and types of work at all Company's facilities

Occupational health and safety responsibilities are allocated among Nornickel's various governing bodies and business units in line with their terms of reference.

GRI 2–9, 2–12, 2–13

Board of Directors
- Determines the Company's OHS strategy
- Monitors the Company's OHS performance

Senior Vice President, Operational Director, Chairman of the HSE Committee
- Improves the efficiency of OHS organisation and prevention initiatives
- Strengthens manager and expert responsibility for creating a healthy and safe working environment
- Assesses the efficiency of OHS initiatives
- Improves the OHS management system

Vice President, Ecology and Industrial Safety
- Organises and coordinates OHS activities
- Submits reports to the Board of Directors

HSE Department
- Develops accident and injury prevention initiatives and oversees their implementation
- Develops OHS initiatives and monitors compliance with the applicable legislation

In 2022, the second surveillance audit was conducted at Nornickel's divisions. The audit results confirm that the Company's existing health and safety management system conforms to ISO 45001:2018 Occupational Health and Safety Management System international standard.

Occupational health and safety certification

MMC Norilsk Nickel (Head Office, Polar Division, Polar Transport Division, Murmansk Transport Division)	ISO 45001:2018
Kola MMC	ISO 45001:2018
Pechengastroy LLC	ISO 45001:2018
Norilsk Nickel Harjavalta	ISO 45001:2018

Following the audits, Bureau Veritas Certification, the certification body, described the OHS management system as mature and well-established and found that the corporate systems of Nornickel's audited companies met the requirements of the standard.

Contractor safety management

GRI 403–1, 403–2, 403–5

2022 saw the revision of the standard regulating occupational health and safety at all stages of working with contractors. As a result, the Company was able to improve the level of control and occupational safety for contractors operating at Nornickel's facilities.

In the domestic market, Nornickel procures production and technical supplies under Master Agreements. As part of centralised procurement, a standalone agreement is signed with each contractor stating that the contractor recognises and commits to generally accepted principles in human rights (which include health and safety) and labour relations, as stipulated by international regulations and in particular the UN Global Compact.

In 2022, the Company revised the general terms regarding health and safety that are included in agreements with contractors. The current amendments focus on avoiding fatalities and non-compliance with the cardinal occupational safety rules and encourage contractors to be proactive on health and safety. This approach is better aligned with the Company's goals.

All works carried out by contractors in highly hazardous conditions are governed by the respective corporate standard. Work permits, operations certificates and work execution plans (process sheets, guidelines, etc.) must contain safety requirements to be met when organising and performing work. The Company checks compliance with these requirements during each shift.

Prior to commencement of work, contractors' staff receive pre-job and ad hoc health and safety briefing, including security measures set forth in work execution plans.

On the sites of its facilities, the Group holds regular joint inspections of compliance with safety requirements at work, and OHS council (committee) meetings involving contractor representatives. In case of failure to comply with OHS requirements, contractors are fined.

Workplace injuries

SASB EM-MM-320a.1

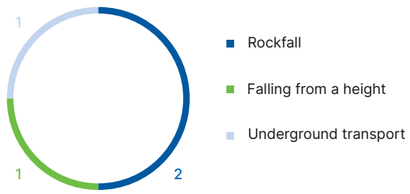
In 2022, we updated the procedure for collecting information on OHS incidents. These efforts helped improve transparency and quality of incident classification. The revised incident reporting procedure resulted in faster response times while the optimised incident classification opened up more opportunities for further data analysis. Root cause detection and investigation also had a major overhaul, which contributed to more effective incident prevention.

Key workplace injury indicators

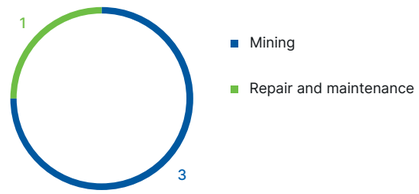
GRI 403–9, 403–10

Indicator	2018	2019	2020	2021	2022	Change in 2022 y-o-y, %
FIFR	0.05	0.08	0.08	0.10	0.03	–66
LTIFR	0.23	0.32	0.20	0.38	0.57	+49
Total workplace injuries as per Russian labour laws	32	44	31	53	70	+32
Fatal workplace injuries	6	9	9	11	4	–64
Minor injuries	1,043	1,000	788	314	187	–40
Occupational diseases	318	290	235	213	174	–18

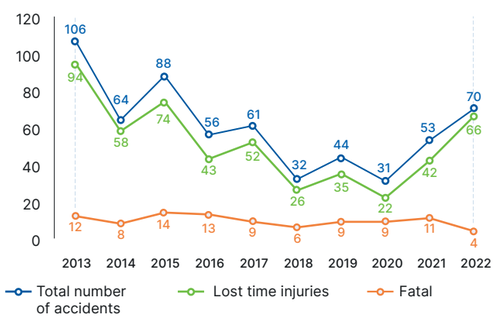
Number of fatalities by accident type in 2022

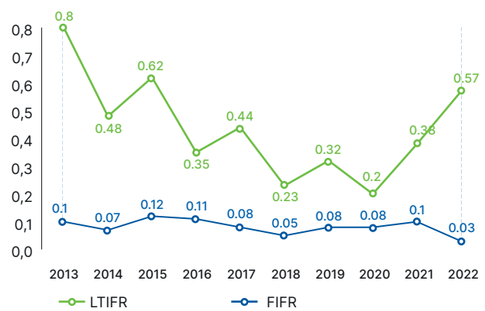


Number of fatalities by work type in 2022



Accidents and work-related injuries since 2013





In 2022, the Group had 66 lost time injuries, with lost time injury frequency rate (LTIFR) standing at 0.57. The most frequent reason for injuries was falling from heights. Nornickel's indicators in this area are in line with the average for the global mining industry.

In 2022, we recorded the lowest number of work-related fatalities. The Group reported four fatalities – this is seven cases fewer than in 2021. Two deaths were caused by rock falling in Kola and Norilsk Divisions, one man died as a result of falling from height, and one drift miner died in a mine accident when driving an electric locomotive.

All circumstances of the fatal accidents were thoroughly investigated and reported on to the Board of Directors.

Based on the results of investigations into the accidents involving rock falling in Kola and Norilsk Divisions, the Company developed and implemented technical measures to mechanise underground workings development, purchased a drilling rig for tunnelling (air core drilling) and mechanical posts for temporary supports and took a number of organisational measures to fulfil the requirements of mine surveyors.

To address the causes of falling from heights on work sites, a panel of workers was tasked to carry out an inspection to check the technical condition of overhead cranes, emergency evacuation routes and the available safety equipment. In 2022, the Company commenced the upgrade of overhead cranes to enable safe emergency evacuation of crane operators. These efforts will continue into 2023.

Following the investigation into the accident with a drift miner who was driving an electric locomotive in Kaula-Kotselvaara mine (part of Severny Mine), Nornickel arranged transportation of workers to workplaces, introduced control over unauthorised driving of electric locomotives and revised the mine railway infrastructure programme.

Nornickel expresses its deepest condolences to the families and friends of the victims and reiterates its commitment to making zero workplace fatalities a key strategic priority. The Company will continue with implementing its programmes to prevent workplace accidents.

OHS system development and mitigation of key risks

GRI 403–1, 403–2

As part of our strategic goal to reduce the occupational injury rate, the Company seeks to continuously improve the elements of its occupational health and safety framework. The changes cover all Operating Unit businesses and all production stages – from mining ore to making metals.

In 2022, we revised our cardinal safety rules, OHS incentive programme and employee awareness raising initiatives. From 2023, employees will be paid incentive compensation for identifying risks at their workplaces.

In the reporting year, Norilsk Concentrator (owned by Medvezhy Ruchey LLC) launched a safety culture transformation project underpinned by a risk-based approach. As part of the project, it carried out:

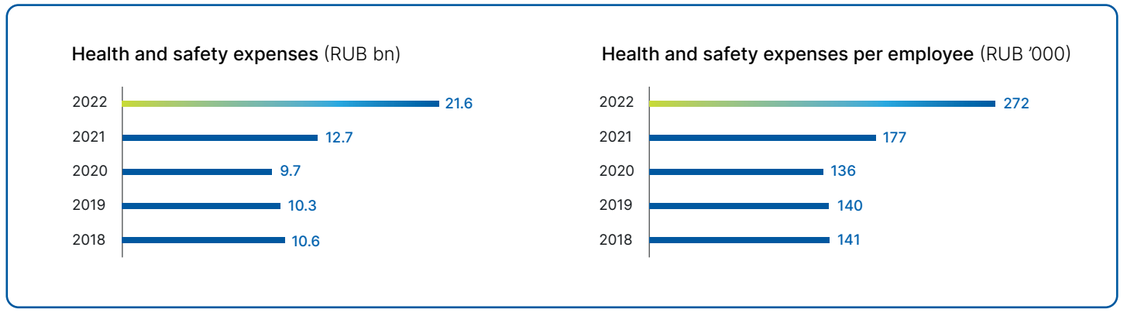
- an audit of its safety culture and relevant processes;
- a strategic session to define key systematic measures;
- training at pilot workshops;
- work to improve its risk identification and assessment system.

The project helped identify 462 risks, out of which 101 were addressed, with 222 risks identified and reported by mining workers. The project will continue into 2023.

Anyone who identifies a life- and health-threatening risk must report it to the relevant senior manager to address it. If it is impossible to minimise the risk and continue to work safely, the exposed worker has the right to refuse to work if their health and safety is at risk. The procedure for refusing to work is established by the standard "OHS Management System. Hazard Identification, Assessment and Management of Occupational Health and Safety Risks at PJSC MMC Norilsk Nickel". An employee who refuses to work is required to fill in a checklist and hand it over to their direct supervisor or, if the latter is temporarily unavailable, the relevant senior manager. To confirm acceptance, the supervisor or manager (as the case may be) must fill in, sign and return the tear-off part of the checklist to the worker and give him/her a new checklist. The refusal to work under life- and health-threatening conditions may not constitute grounds for imposing any sanctions on the worker.

In 2022, we continued our work to improve the Control, Management and Security Automated System (CMS AS) and integrate it into broader IT architecture:

- more than five new algorithms implemented to enable notification of responsible persons via corporate email;
- integration between related systems (SAP ERP, SAP BW) and NIKA chatbot completed;
- The unified indicator framework for the corporate sustainability reporting, which is part of the Corporate Data Storage (CDS), successfully embedded to enable online annual report generation using the unified indicator framework for the corporate sustainability reporting with respect to the Group's injuries data.



In 2022, health and safety expenses increased by 70% y-o-y to RUB 21.6 bn. The increase is due to the development and implementation of additional measures to improve labour conditions, growing headcount and higher costs of personal protective equipment (PPE).

Provision of Personal Protective Equipment

GRI 403-3

Due to the nature of its business, building an efficient operational health and safety system at Nornickel comes with the need to implement a range of organisational safety measures along with providing PPE to its employees exposed to hazardous and harmful workplace factors. Workplaces exposed to hazardous and harmful factors include underground work, operation and maintenance of mining equipment and heavy self-propelled vehicles, extreme climate, etc.

In 2022, the Company purchased personal protective equipment worth more than

RUB **4.6** bn

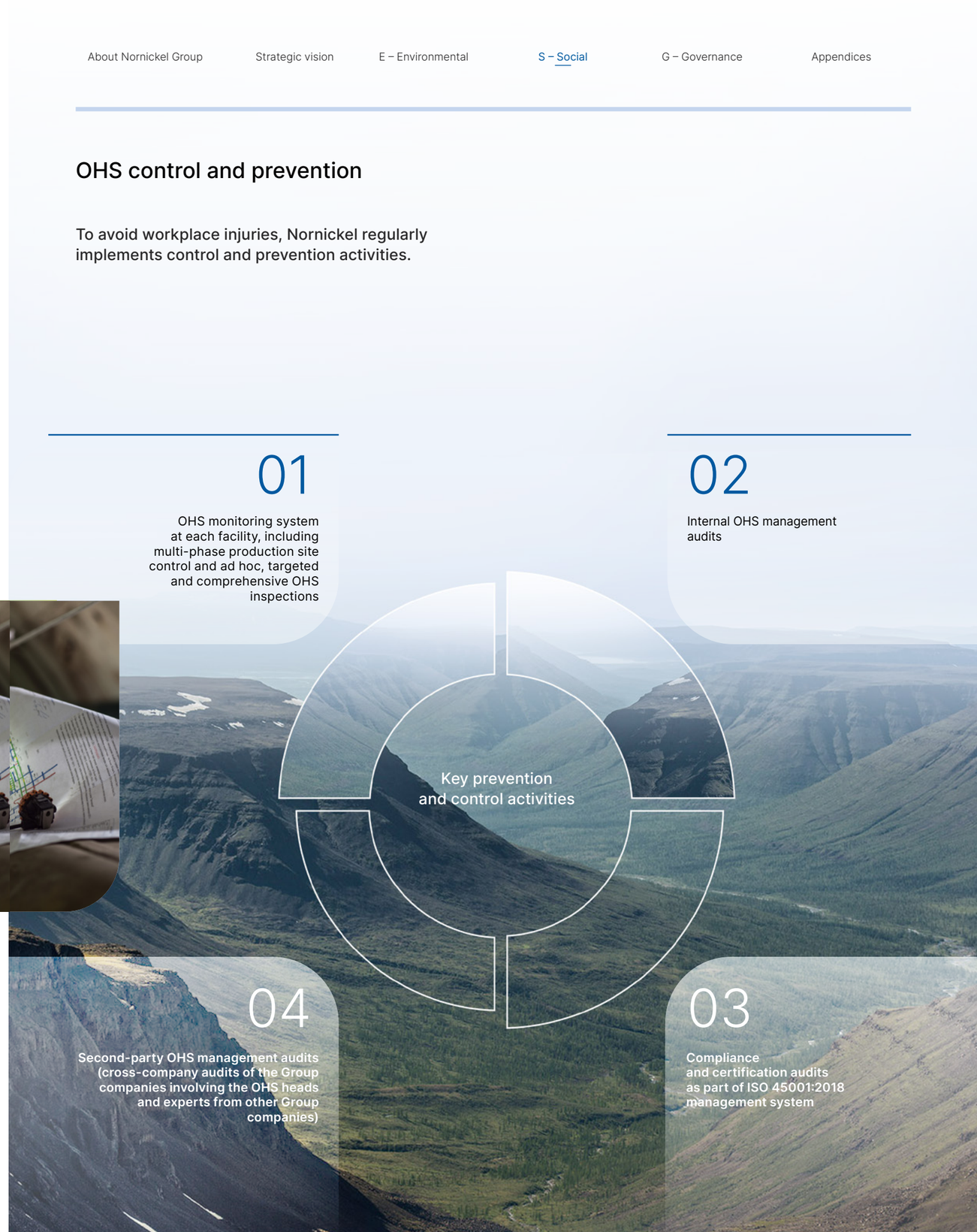
Special assessment of working conditions

In 2022, a special assessment of working conditions covered more than 10,000 workplaces and over 15,000 employees, which amounted to approximately RUB 20.5 mln in expenses for the Group's operations.

A special assessment of working conditions helps identify hazardous production factors. Whenever these are identified, the Company furnishes employees with free personal protective equipment (PPE), including respiratory protection (respirators, gas masks), hearing protection (earmuffs, earplugs), eye protection (glasses/goggles with UV filters, visors), skin protection (gloves, protective and regenerative creams, protective outerwear).

OHS control and prevention

To avoid workplace injuries, Nornickel regularly implements control and prevention activities.



Health and safety competitions

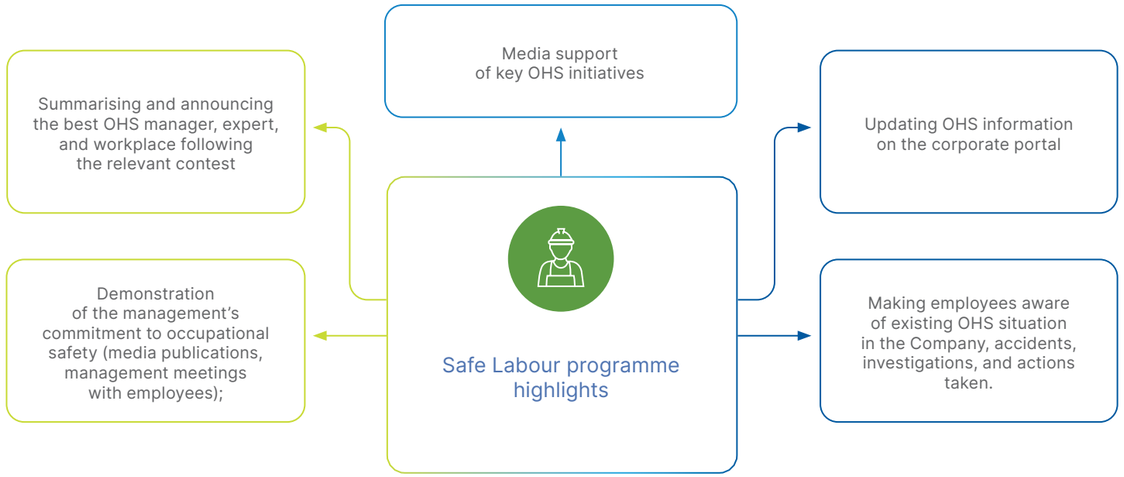
Indicator	2018	2019	2020	2021	2022
Audits conducted:					
• by health and safety committees, '000	>30.9	>29.8	>48.5	>50.3	>47.7
• Target audits conducted by managers, senior specialists and committees of the Group's facilities and business units, '000	9.7	9.6	10.6	11.1	11.4
• Ad hoc audits, '000	15.7	15.5	27.0	23.0	21.9
• Number of comprehensive audits of health and safety and relevant management systems	149	126	164	182	174
Coupons removed from the books of employees violating health and safety requirements, '000	2.2	1.8	1.1	1.1	0.6
Employees subject to disciplinary action for the violation of health and safety requirements, '000	6.8	6.3	5	3.3	2.1
Employees with reduced bonus payments, '000	>13.0	>11.9	>10.0	>8.0	>6.5
• Total, RUB mln	>70.0	>69.0	>59.0	>66.0	>61.5
Employees incentivised for health and safety involvement and lower workplace injury rate as per the audit results, '000	>6.4	>6.5	>5.0	>5.0	>4.0
• Total, RUB mln	>52	>57	>59	>69	>58

In 2022, as has become custom at Nornickel, we held individual and team OHS competitions. Team competitions were held across seven groups of Nornickel's production facilities.

Results of individual competitions were announced with the following awards granted:

- Best Health and Safety Head;
- Best Health and Safety Line Manager;
- Best Health and Safety Specialist;
- Best Health and Safety Compliant Worker.

The Company also runs an ongoing Safe Work communication programme.



Engagement of employees in safety management

GRI 2–26, 403–4

To increase the efficiency of our efforts and promote safety culture, we encourage our employees to get involved in operational health and safety management. Most of the Group companies have in place joint health and safety committees (councils) made up of the management, employees and trade union representatives. The Group companies that have joint committees with trade union bodies employ over 77,000 people (around 97% of the Group's average headcount).

The Head Office does not have a joint committee as there is no trade union in place, but representatives of the Norilsk trade union take part in HSE Committee meetings. Norilsk Nickel Corporate University (an educational institution not involved in production) does not have committees. Contractors are invited to joint committee meetings that deal with matters related to contractor employees.

Authorised representatives of trade unions and staff in occupational health and safety were elected to participate in preventive activities across the Group's production units. In the reporting year, 712 representatives of trade unions and staff in occupational health and safety participated in preventive activities. In 2022, they took part in over 11,500 audits and submitted almost 2,600 health and safety improvement proposals.

Health and safety topics covered in formal agreements with trade unions

SASB EM-MM-310a.1

A majority of production companies of the Group have collective bargaining agreements signed with employee representatives (including trade union organisations). The agreements contain occupational health and safety provisions

They cover more than

77,000

employees of the Group (approximately 94.4% of the Group's average headcount).

OHS training

GRI 403–5, SASB EM-MM-320a.1

In 2022, OHS pre-certification briefing, basic training and certification covered more than

52,000

employees of the Group

RUB **203** mln

The Group's OHS training expenses amounted to over

To improve occupational safety, we implement OHS upskilling initiatives. These include regular briefings on and training courses in occupational health for its employees. We introduced dedicated software modules for specific mining jobs in order to provide health and safety briefings.

In 2022, Nornickel launched a project to create a workplace safety culture coaching system. The project is rolled out at 18 companies employing 42 safety culture coaches. There are two training programmes currently on offer: Dynamic Risk Assessment for mining workers and Behaviour-Based Safety Audit for line managers. The coaches deliver in-person interactive workshops, which are followed by on-the-job training within the real work environment such as a mine or shop. In 2022, more than 5,000 employees completed the Dynamic Risk Assessment programme, which was held 717 times, and 238 employees completed the Behaviour-Based Safety Audit programme, which was held 33 times.

Prevention of occupational diseases

GRI 403–3

In 2022, the Group's costs related to medical examinations amounted to

RUB **471** mln

In 2022, the Group's costs related to maintenance of medical aid posts amounted to

RUB **276** mln

Heath of its employees is a priority at Nornickel. The Company implements regular measures to prevent occupational diseases.

Regular health monitoring of personnel is key to preventing occupational diseases. Employees undergo compulsory pre-employment, regular and ad hoc medical examinations and check-ups. Those who are involved in hazardous production are subject to additional examinations held at least once in five years by occupational pathology centres or other organisations authorised to conduct pre-employment and regular check-ups. These serve to assess occupational health fitness and determine if the disease is job-related.

The Company provides employees working in hazardous conditions with foods, milk, and other equivalent food products for therapeutic purposes in compliance with the applicable laws and corporate policies.

In addition, medical aid posts are in place to perform pre-shift and pre-trip check-ups and provide medical assistance to employees upon request.

Corporate Healthcare project

GRI 403–6

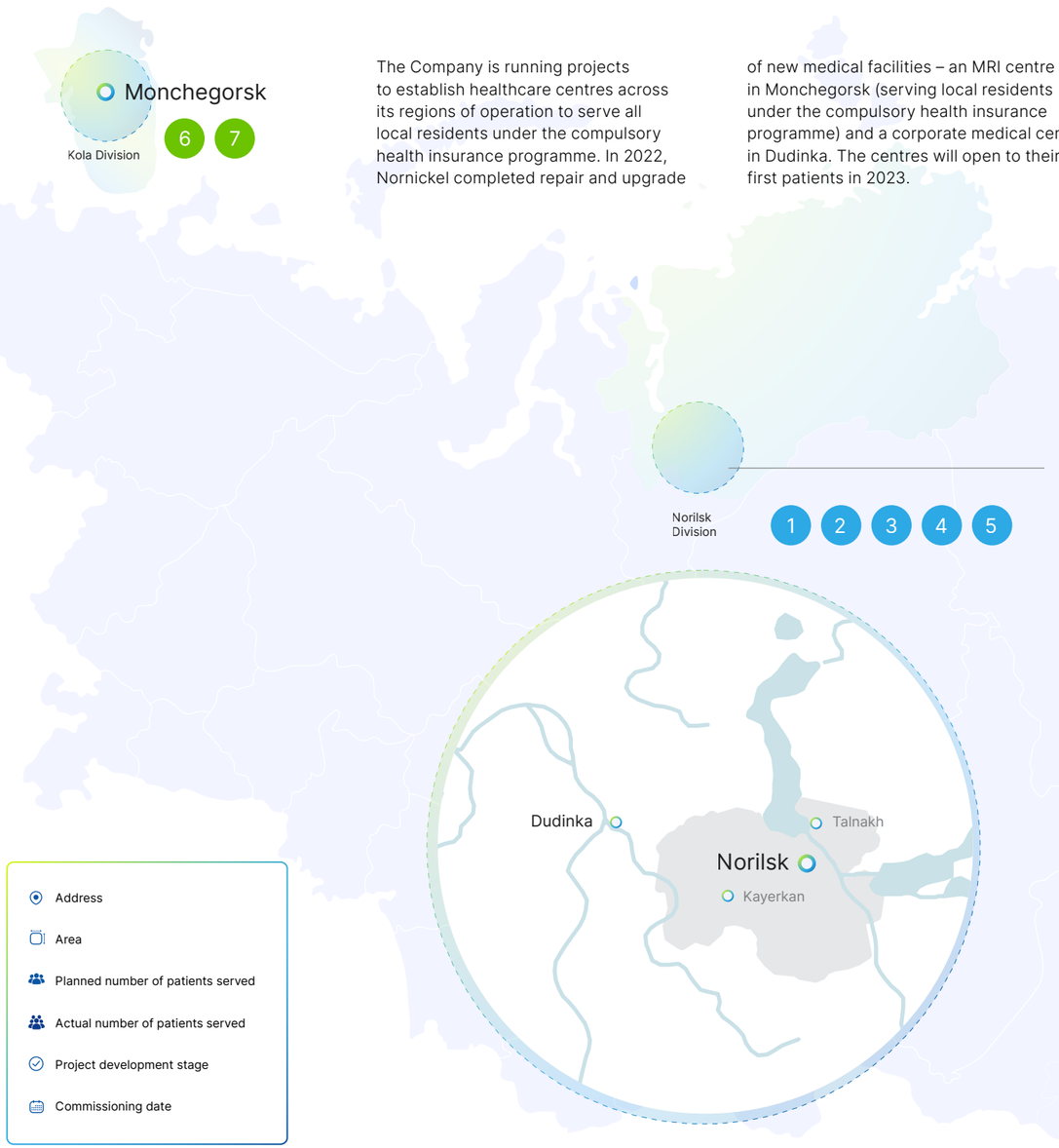
By 2025, Nornickel plans to provide its employees and their families with an easy and quick access to quality healthcare in line with the latest standards.

In 2022, the Company completed the first stage of the programme to upgrade its healthcare facilities and medical examination rooms for pre-trip and pre-shift check-ups. The first refurbished facilities with state-of-the-art equipment, medications, and expendables opened in Nornickel's Polar Division. Primary care is provided by the Workshop Healthcare Service. General Practitioners (GPs) at Polar Division's medical aid posts are responsible for helping those with urgent medical problems and delivering preventive health care to the Company's employees. The service has started work to conduct staff health monitoring linked to job duties and analyse occupational disease factors and ways of mitigating them. The Company plans to open similar facilities at its other divisions in 2023.

Nornickel's corporate healthcare infrastructure

To provide our employees and their families with specialist medical services and highly qualified professionals, we are implementing a project to develop corporate healthcare across the Company's footprint.

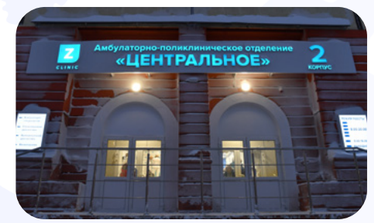
The Company is running projects to establish healthcare centres across its regions of operation to serve all local residents under the compulsory health insurance programme. In 2022, Nornickel completed repair and upgrade of new medical facilities – an MRI centre in Monchegorsk (serving local residents under the compulsory health insurance programme) and a corporate medical centre in Dudinka. The centres will open to their first patients in 2023.



Norilsk Division

In 2021, the Company opened its first corporate healthcare centre under the Z-Clinic brand in Norilsk, which has the most advanced equipment and highly professional medical staff. It provides medical help based on voluntary healthcare insurance (VHI) programme. Today, the centre offers a choice of 246 healthcare services in 12 primary care areas. Over the first year of its operation, it has delivered approximately 70,000 medical services. The waiting times for many specialists vary from seven days to one month, which confirms the high level of demand for healthcare services in the region.

Operating healthcare centre at Norilsk Division



1 Central outpatient facility

- 8/3 Sevastopolskaya Street
- 746.3 sq m
- 16 December 2021
- 200 people per day
- 240 people per day (two-month advance appointment)

Healthcare centres at Norilsk Division – plans

In 2022, we continued to expand our network by including new centres to increase healthcare capacities in the region without replacing existing ones. The Company is getting ready to open two more corporate healthcare centres – in Norilsk's Talnakh District and Monchegorsk. It also keeps on track its programme to develop small-scale healthcare departments in remote locations.

2 Talnakh

- 2023
- Tender announcement
- 16 Kravtsa Street
- 1,863.3 sq m

3 Kayerkan

- 2023
- Terms of reference fine-tuned
- 3A Shkolnaya Street
- 504.2 sq m

4 Dudinka

- 2023
- Tender
- 1 Korotkaya Street
- 400 sq m

5 Central

- 2025
- Terms of reference fine-tuned
- 17 Moskovskaya st
- 4,071 sq m

Kola Division

Healthcare centres at Kola Division – plans

6 MRI module

- Q2 2023
- 220 sq m
- 8a Kirova Street, Monchegorsk (premises of the Kolsky Health and Spa Centre)
- The module and advanced MRI equipment (manufactured by Siemens) delivered, licensing is underway
- The centre will be included in the government guarantee programme
- Project cost – RUB 211 mln

7 Preventive Center KCZ

- 2024
- 1,500–2,000 sq m
- 8a Kirova Street, Monchegorsk (premises of the Kolsky Health and Spa Centre)
- FEED

Digital Medicine

Nornickel has an ecosystem of Digital Medicine services. Employees can use a mobile app for viewing their medical records, booking a medical appointment and finding all the necessary information about healthcare centres. The most popular services were added to the Nika corporate assistant and integrated into Nornickel's superapp. The medical information system has been launched in 2022 in Norilsk and in 2021 in Zapolyarye Health Resort.

Mobile app and chatbot information system

- Patient.Net medical information system
- Chatbot for making medical appointments
- Z Clinic mobile app

Nornickel has also been active in promoting healthy lifestyle programmes. It is planning to launch several services to provide access to employees from all regions to relevant expert advice on healthy lifestyle and disease prevention.

Emergency preparedness

At Nornickel, we take a holistic approach to occupational health and safety, placing a strong emphasis on ensuring reliability of equipment and technological processes, preventing emergencies and addressing their impact on the environment and local communities.

To avoid occupational accidents, Nornickel implements risk-based occupational health and safety management.

For more details, please see the Internal Control and Risk Management section.

In 2020, after the CHP-3 fuel spill, as part of the efforts to mitigate permafrost thawing risks and to prevent such emergencies in the future, NTEC launched the Buildings and Structures Monitoring System project designed to develop and deploy a comprehensive automated monitoring system for foundations and foundation soils in the Norilsk Industrial District. Capabilities under the first stage of the Projects have been successfully put into operation, with the automated monitoring systems covering 165 facilities (over 1,200 sensors deployed) and feeding data to the centralised IT platform. The Project's objective is to ensure comprehensive automated monitoring for the safe operation of the Company's assets, including for assessing the progress of permafrost thawing in the context of global climate change.

For more details, please see the Climate change and energy efficiency section.

Nornickel's facilities remain prepared 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 in their operational processes. Preparedness for emergencies is in line with Federal Law No. 116-FZ On Industrial Safety of Hazardous Production Facilities dated 21 July 1997.

Emergency preparedness system at hazardous production facilities

- Emergency containment and response plans at hazardous production facilities (hazard classes 1, 2, 3)
- Agreements with professional emergency rescue services and organisations across the Company's footprint
- Auxiliary mine rescue teams at Polar Division and Kola MMC Monthly training and exercises in near-real conditions
- Drills involving employee and emergency rescue services
- Provisioning for emergency containment and response at hazardous production facilities
- The Group companies put in place surveillance, warning, communication and support systems in case of emergency

The underlying document for emergency containment and response plans is the Regulations on Containment and Elimination of Accident Consequences at Hazardous Production Facilities approved by Resolution No. 1437 of the Russian Government dated 15 September 2020. They are approved by heads (deputy heads) of production units that operate such facilities, and heads (deputy heads responsible for approving action plans) of professional emergency rescue services and units engaged for emergency containment and response.

To ensure readiness for containment and elimination of accident consequences at hazardous production facilities, Polar Division signed contracts with a professional emergency rescue unit for mine rescue services and the maintenance of auxiliary rescue teams' equipment. Auxiliary mine rescue teams were set up at Polar Division and Kola MMC hazardous production facilities (hazard classes 1 and 2) engaged in underground mining operations. Polar Division, Medvezhy Ruchey, Norilsk Production Support Complex, GRK Bystrinskoe, and Kola MMC hazardous facilities put in place surveillance, warning, communication, and support systems to rely on in case of emergencies. Mines are equipped with radio and positioning systems for employees, and telemetry system for underground machinery to track their locations. Hazard class 1 and 2 facilities operate local warning systems.

The plans are reviewed and approved in a timely manner, their effective periods being:

For underground mining facilities	6 months
For open-pit mining facilities	1 year
For hazard classes 1, 2 and 3 facilities[1]	5 years

At the Group's hazardous production facilities, drills are held regularly and the personnel is trained to deal with accidents, incidents, and emergencies.

[1] Excluding facilities specified in the first two lines of this table.

HR management and social partnership

Nornickel's contribution to the Labour Productivity national project

Relevant UN SDGs

Related federal projects

- Stimulating employment and improving labour market efficiency as a way to increase labour productivity

Key initiatives and focus areas

- Staff training and development
- Promotion of collective bargaining agreements and social partnership
- Development of corporate communities

For more details, please see the Development of Corporate Communities subsection

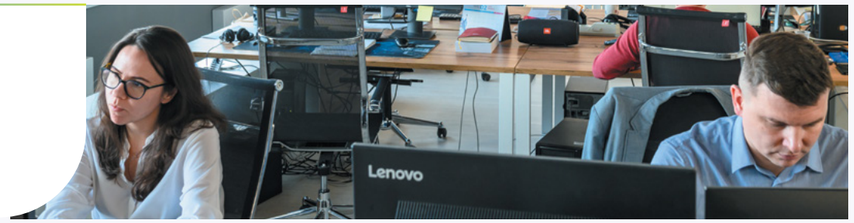
- Programme to improve social and working conditions at production sites

For more details, please see the Social Policy section

- Relocation assistance for new employees

For more details, please see the Social Policy section

HR management



The expertise and motivation of the Company's employees are key to its successful development. With this in mind, Nornickel seeks to create an attractive employee value proposition to help its people fully develop their potential and boost the shared sense of engagement towards achieving the Company's goals.

The Company's strategic goal is to ensure its leadership as an employer among metals and mining companies, which is set out in the Human Capital Development Programme.

Key HR management priorities:

- building a professional and balanced team;
- staff training and development;
- improving productivity and efficiency;
- creating a talent pool;
- enhancing our incentive system;
- implementing our social policy.

With a view to making HR decisions and assessing management effectiveness, the Company leverages digital tools to monitor HR metrics on a regular basis, including staff costs, productivity levels, impacts of its social and adaptation programmes, and employee engagement survey results.

HR management responsibilities are allocated among Nornickel's various governance bodies and business units in line with their terms of reference.

Nornickel's key HR management regulations[1]

- Principles and provisions of the international law, standards of the International Labour Organisation, national laws of the countries of operation;
- Constitution and the Labour Code of the Russian Federation;
- Equal Opportunities Programme;
- Freedom of Association Policy;
- Working Conditions Policy;
- Personal Data Processing Policy;
- Talent Pool Regulation;
- Procedure for Assessing Employee Performance at Nornickel's Head Office.

[1] The Board of Directors approved the above MMC Norilsk Nickel's policies and Equal Opportunities Programme.

Key HR management responsibilities

GRI 2–9, 2–12, 2–13

Board of Directors	Approves key HR policies
Corporate Governance, Nomination and Remuneration Committee of the Board of Directors	• Reviews HR management priorities and key internal regulations • Reviews matters related to human capital development
Senior Vice President, HR, Social Policy and Public Relations	Oversees and coordinates the development and implementation of the HR and social policies
HR Department	• Develops and implements the HR policy • Takes part in the development and implementation of the Company's social policy
Social Policy Department	Develops and implements the social policy, social and charitable programmes
HR functions of the Group companies	Implement HR and social policies at Group companies
Corporate Trust Line, offices for operational, social and labour relations	Register complaints and queries related to employee rights

Staff composition

GRI 2–7, SASB EM-MM-000.B

In 2022, the Group's average headcount was 78,374 employees, of which 99% were employed at its Russian companies. A 6.5% y-o-y growth in the average headcount in 2022 was driven by the investment programme, organisational and technical changes, an expanded scope of works and services, and personnel recruitment.

The headcount of the Group's[1] Russian operations as at the year-end stood at 82,200 employees, with most of them working full time (>99%) and on permanent contracts (>95%). As at the end of 2022, there were 907 employees working under civil contracts.

Locally hired employees

GRI 202–2

The share of locally hired executives was 98.7% across the Group's Russian companies in 2022.

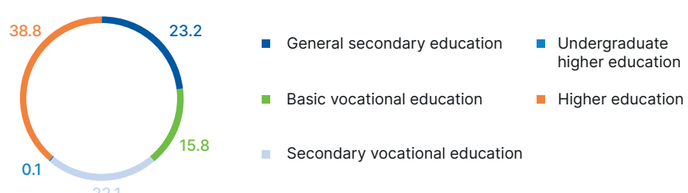
The share of locally hired[2] employees was 99.7% across the Group's companies as at the end of 2022.

Group personnel structure by territory in 2022[3] (%)

The majority of the Group's personnel is concentrated in the Norilsk Industrial District (67%) where most of the Group's production assets are located.

Nornickel takes the responsibility for its impact on the labour markets in the regions where it operates. In hiring personnel, we assess all candidates based on their work experience, qualifications, and education.

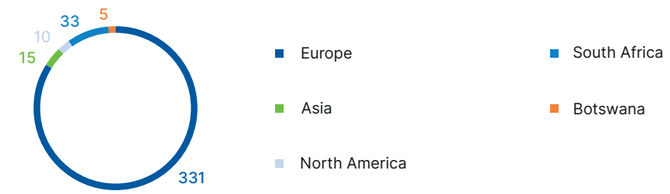
Personnel structure by education in 2022 (%)



More than one third of our employees (39%) have higher education qualifications. Most of them are executives. 23% of employees have secondary education qualifications, 22% – secondary vocational education qualifications, and 16% – basic vocational education qualifications. The share of employees with undergraduate higher education is below 1%.

[1] Including salaried employees and external part-timers.
[2] Locally hired employees refer to the workers who are residents of the country where the relevant Group company is incorporated.
[3] Structure of salaried staff as at 31 December 2022 (including Norilsk Nickel Harjavalta).

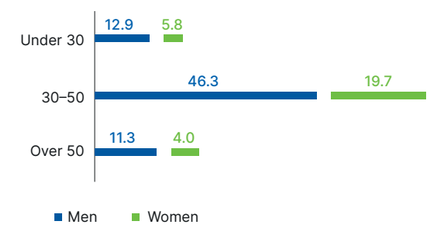
Headcount of the Group's foreign operations in 2022 (people)



In 2022, Nornickel's foreign operations employed 331 people in Europe, 33 people in Africa (South Africa), and 30 people in other regions of the world.

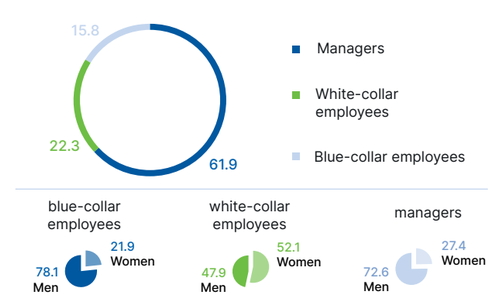
Personnel structure by gender and age in 2022[1] (%)

GRI 405–1



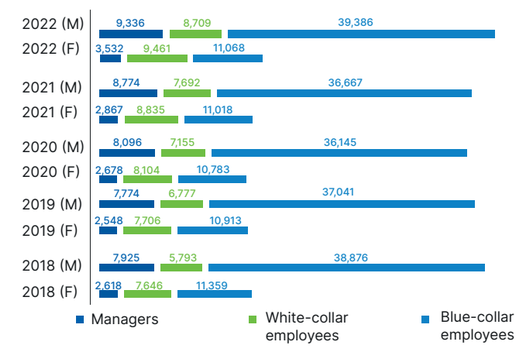
The majority of employees are men aged 30 to 50 (46.3%), whereas women below 30 years old represent the smallest part of the workforce (4.0%). Such breakdown is typical for mining companies.

Personnel structure by gender and categories in 2022 (%)

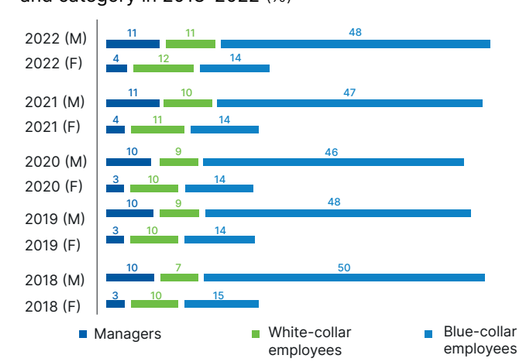


Personnel structure by gender and category in 2018–2022 (people)

GRI 405–1

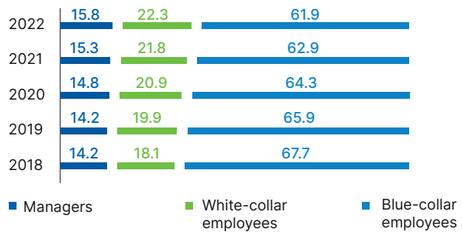


Personnel structure by gender and category in 2018–2022 (%)



[1] Unless otherwise specified, the indicators included in this report represent the Group's Russian operations.

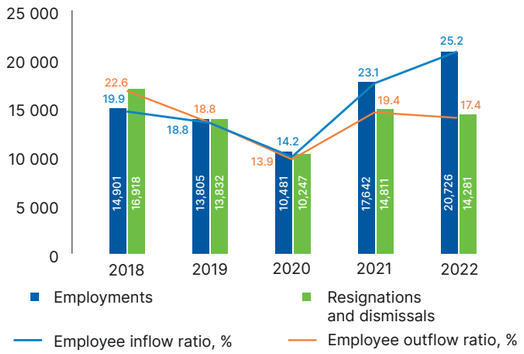
Personnel structure by category in 2018–2022 (%)



GRI 405–1

Blue-collar employees account for the largest part of the workforce (62–68%) due to the nature of the Group's operations. The share of men in the overall headcount in 2018–2022 remained stable at 70–71% due to the harsh working conditions in the climate of the Far North. Female workers prevail in the category of white-collar employees (53–57% in the reviewed historical period).

Key personnel turnover indicators[1]



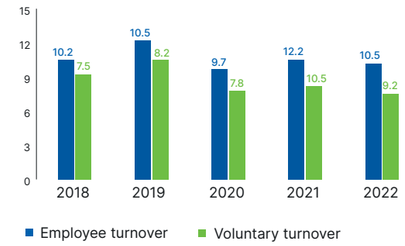
GRI 401–1

In 2022, the number of new hires increased as a result of additional recruitment for shift-camp, permanent and temporary jobs and due to staff transfers within the Group.

To hire out-of-town employees, the Company opened recruitment centres in Orsk, Ufa and Yekaterinburg in 2022.

[1] Russian companies of the Group. Employee inflow ratio: the ratio of new employments to total headcount at the end of the period. Employee outflow ratio: the ratio of all separations to total employments at the end of the period.

Employee turnover (%)



GRI 401–1

Employee turnover[1] as at the end of 2022 came in at 10.5%. Voluntary turnover[2] in 2018–2020 was stable at 7–8%; in 2021, the indicator hit 10.5%, the peak value of the reviewed period, while in 2022 it went down to 9.2%.

Strong employer brand

In 2022, we retained leadership in key rankings of the best employers:

- 6th place (out of 82) in the Best Employer Ranking for November 2022 (RBC. Market research);
- 8th place in the Best Employers among Their Target Audience category in Future Today's ranking, which takes into account the opinions of Russian university students;
- 12th place among the largest companies in the national employer rating by HeadHunter out of more than 1,000 participants (103 finalists classified as major companies), including by category: 1st place in a survey of job applicants from the Industrial Production, Trading and Production Companies sector, 25th place in the Most Advanced Business Processes subcategory, 32nd place in the Choice of Candidates subcategory;
- Best Employer according to the Best Company Award, a ranking compiled by Changellenge based on a survey of students and graduates from the leading universities: 18th place in the Technical Professions nomination, 44th place in the Business Professions nomination, and the 56/57th place in the IT Professions nomination;
- gold prize by Forbes in its best employers rating (Top 50 out of 104 participating companies), platinum prizes in the Employees and Society category and the Corporate Governance category;
- Best in Russia – Companies and Persons of the Year, a list of Russia's most attractive employers based on a survey conducted by the Russian Public Opinion Research Centre (VCIOM) and Anews.

[1] The ratio of resignations, dismissals for breach of labour discipline, and negotiated terminations, to the average headcount for the year.
[2] The ratio of all resignations to the average headcount for the year.

Commitment to employee rights

Nornickel respects employee rights and fully takes them into account in its operations, including by:

- giving its employees equal opportunities to unlock their professional potential, assessing their performance in an impartial and fair manner, employing and promoting people based solely on their professional abilities, knowledge, and skills;
- implementing programmes for the development and social support of its employees, and upholding their rights in respect of social security, education, family welfare, shelter, freedom of artistic expression, and participation in cultural life;

104.9 thsd

queries from the Company's employees(93%), former employees (6%), and other employee categories (1%).

- employing people with disabilities and providing them with the necessary working conditions, including work and rest schedule, annual and additional paid leaves, and financial assistance (according to the employment quotas that vary depending on the region and company size, the share of employees with disabilities starts from 2% of the average headcount, excluding employees involved in harsh, hazardous and/or dangerous work);
- prohibiting women's exposure to harsh, hazardous and/or dangerous working conditions in the mining industry, and showing zero tolerance towards child labour and the involvement of minors below 18 years old in hazardous and/or dangerous work.
- respecting internal labour regulations, which are approved in consultation with the trade union organisation, and formalising employees' working hours:
  - the Company has a standard working week of 40 hours as determined by the applicable Russian laws and regulations;
  - employees involved in harsh, hazardous and/or dangerous activities enjoy a reduced working week of not more than 36 hours;
  - women employed in the Far North and equivalent areas are accorded 36 hours of work per week unless reduced by Russian laws and regulations. The Company arranges for accurate time and attendance control for each employee.

The Company seeks to maintain an ongoing dialogue with employees and to offer everyone an opportunity to be heard. In 2022, in addition to the Corporate Trust Line and an improved complaint review framework, the Group continued to run offices for operating, social and labour relations. The number of such offices increased by 8% y-o-y. They are primarily tasked with response to employee queries, control of their processing, prompt resolution of conflicts and prevention of employee right violations, and regular monitoring of social climate within teams. This enables the Company to address any arising issues in a timely manner.

The offices received

> 52,000

queries with a focus on social and working matters (86%), legal matters (12%) and other topics (2%).

In 2022, the Group's companies operating in the Norilsk Industrial District ran

27 offices

48.6 thsd

employees attended over 2,000 staff meetings

Social partnership framework

GRI 2–26

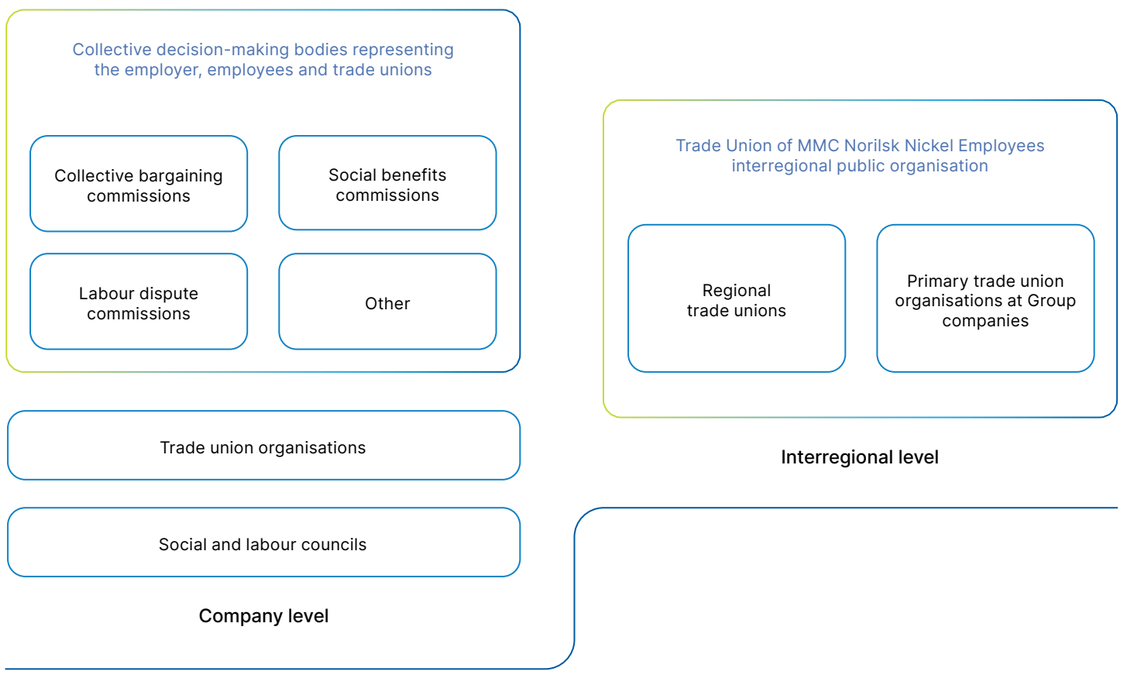
In order to develop interregional social partnerships, in 2019 Interregional Cross-Industry Association of Employers "Union of Copper and Nickel Producers and Their Supporting Industries" and the Trade Union of MMC Norilsk Nickel Employees signed an interregional cross-industry agreement for copper and nickel producers and their supporting industries for 2019–2022. In 2021, the agreement was amended and extended until 2025. This document regulates social and labour relations between employers and their employees, and sets out common approaches to employee remuneration, compensation and benefits, work and rest schedule, health and safety, dismissals and other matters.

As at the end of 2022, the agreement applied to 21 Group companies, covering 89.7% of the Group's employees.

The Company has a system of social partnership in place at its sites to align the interests of employees and employers in terms of the regulation of social and labour relations. The Company fully complies with the Labour Code of the Russian Federation, collective bargaining agreements, the interregional cross-industry agreement for copper and nickel producers and their supporting industries for 2022–2025, and joint resolutions. We also follow the Freedom of Association Policy approved by the Board of Directors.

Thus, the interests of the Group's employees are represented on a local, regional and interregional level.

Mechanisms for the representation of employee interests



In 2021–2022, the trade unions and social and labour councils made regular contributions to the activities of commissions set up by the employer to inspect the sanitary condition of dietary and general food service providers and to assess the quality of food served at the Group's facilities in the Norilsk Industrial District.

As a way to improve understanding of the Company's plans or accomplishments and inform workers about resolutions adopted by the Group's management on social and labour matters, in 2022 trade unionists were invited to take part in an awareness-raising campaign launched by the employer to highlight changes in the corporate approach to bonus payments to employees for their production-related achievements and contributions to the identification and assessment of health and safety risks. The Company believes that such meetings give an opportunity to maintain a constructive dialogue with the representatives of its workforce and receive timely feedback on ongoing corporate changes.

GRI 2–30

The Group companies are parties to 23 collective bargaining agreements covering 94.4% of the Group's headcount. As at the end of 2022, 7.4% of the Group's employees were members of trade unions, while 77% were represented by social and labour councils.

Social and labour relations at the Group companies that do not have collective bargaining agreements (5.6% of Nornickel's employees) are governed through by-laws adopted by such companies in consultation with the employees' representative body (if any) as and when required by the applicable Russian labour laws.

GRI 402–1

As per the Labour Code of the Russian Federation, Nornickel notifies employees regarding significant changes in the Company's activities:

- the minimum notice period is at least two months prior to the start of such changes; or
- at least three months prior to the start of such changes if the redundancy decision may lead to large-scale dismissals.

These standards are formalised in all collective bargaining agreements.

SASB EM-MM-310a.2

> The absence of strikes and lockouts involving the Company's personnel in 2022 testifies to the effectiveness of Nornickel's employee interactions and its social policy at large

Incentives and rewards

To motivate our employees to enhance their productivity and deliver business growth as well as to retain our highly qualified specialists, Nornickel runs a comprehensive employee incentive programme with both financial and non-financial rewards.

The use of financial rewards is governed by the Company's remuneration policy.

The Company prohibits any discrimination in terms of setting and changing wages based on gender, age, race, nationality, origin, or religion.

Nornickel uses a grading system designed to ensure a fair, transparent, and unbiased remuneration framework within the Company. Grading relies on the point factor method of job evaluation that takes into account knowledge and skills, the complexity of tasks, and the level of responsibility.

In 2022, we continued our efforts to improve the bonus system for PMO staff. The updated incentive system is based on progress against key project indicators designed to motivate and retain key talent until the project is completed.

In the reporting year, the Company changed its approach to the calculation of full-year performance-based bonuses paid to the executives, white-collar and blue-collar employees beyond the perimeter of the performance management system.

In line with the updated approach, bonus payments were increased and payment criteria were adjusted, with the final bonus amount now depending on supervisor evaluation.

Changes made to the bonus payment system in 2021–2022 enhanced transparency of the accrual process for employees.

Remuneration policy goals

- Attract talent
- Retain talent
- Promote a productivity mindset

Remuneration policy principles

- **Internal equity –** remuneration management is based on job description and evaluation in line with the existing grading system. Nornickel uses a uniform grading system covering all positions in the Company
- **External competitiveness –** remuneration is set in line with the labour market data adjusted for the company's area of activity and location and depending on the job grade
- **Performance-based incentives –** pay level is reviewed subject to the annual performance assessment outcome
- **Simplicity of the remuneration system –** pay level calculation and review procedures are transparent, and every employee knows how to improve their remuneration

Remuneration package across the Group's Russian operations in 2022 (%)

Remuneration package

- 94% Salaries and wages
- 6% Benefits
- 69% Fixed part
- 31% Variable (bonus) part
- 10% Regular bonus
- 21% One-off bonus

Key compensation indicators in 2022, by region[1]

GRI 202–1

Region	Remuneration package, RUB '000	Average monthly salary, RUB '000	Share of regional payroll in total pay-roll, %	Minimum monthly compensation to statutory minimum monthly wage	Statutory minimum wage, RUB
Group average	**194.7**	**182.5**	**100.0**	**–**	**–**
Norilsk Industrial District (NID)	198.7	185.6	67.9	1.0	39,725
Kola Peninsula Industrial District (Murmansk Region)	139.7	128.3	10.9	1.0	35,142
Krasnoyarsk Territory (excluding NID)	103.5	98.5	2.6	1.0	24,446
Trans-Baikal Territory	179.6	170.4	3.4	1.62	22,919
Moscow	310.7	298.8	15.2	2.47	23,508

In 2022, a company-wide average monthly salary was 150.4% higher than the average nominal monthly salary accrued to the employees of organisations that are not small businesses across Russia. In particular, it was 64.2% and 137.5% higher than salaries at metal ore mining companies and metals companies, respectively[2].

Corporate culture development

To project a positive image of the Company in the market, streamline business processes, boost motivation and engagement, and speed up onboarding for new hires, Nornickel seeks to develop its corporate culture with a focus on improving efficiency and accountability.

Training for management teams in corporate culture

In 2022, we continued to offer training for management teams, with two management development programmes sparking particular interest – Engagement Workshops (12 workshops, more than 40 training sessions) and Corporate Culture Workshop (48 workshops at 36 sites). These workshops improved engagement and involvement of management teams in the corporate culture development programmes.

Engagement

Nornickel runs a series of annual activities for managing personnel engagement, which comprises three stages:

- conducting a survey named "Let Everyone Be Heard. What Do You Think?";
- analysing the results of the survey;
- developing and implementing solutions based on the survey results.

The survey offers the senior management a unique opportunity to receive feedback from their employees, identify key issues and define areas for improvement at each production site. In 2022, 50,500 employees took part in the research (including surveying and focus groups), a 6% increase y-o-y. Its results are subject to review, with corrective actions planned and implemented at all governance levels – from facilities to the Group as a whole.

The engagement index increased by 7 p.p. from 56% in 2021 to 63% in 2022, reflecting concomitant benchmark growth (by 7 p.p. to 56% for the Russian metals industry). In the space of four years, the employee engagement index rose by 19 p.p. from 44% to 63%, ensuring transition to the neutral risk zone. This is the case for 50% of the companies participating in surveys across Russia.

Progressive engagement growth was recorded against the majority of applicable factors.

Factor	Employee engage-ment	Initiatives to increase engagement
Credibility and accessibility of the senior management	up 22 p.p. in four years (from 31% to 53%)	• Nornickel Live stream and Challenges video call with vice presidents • Corporate Dialogues • Forums, corporate training programmes • Leadership by example, words underpinned by actions
Career opportunities	up 18 p.p. in four years (from 32% to 50%)	• Availability of information on job vacancies • Programmes of appointments from the internal talent pool • Active awareness raising about internal promotions • Training and development programmes
Rewards and recognition	up 18 p.p. in four years (from 35% to 53%)	• Progressive higher than average salary growth • Redressing imbalances in the remuneration system • Application of grades • Awareness-raising campaigns on salaries, bonuses and social benefits

[1] The definition of significant regions of operation is provided in the glossary. This table discloses information only for Nornickel Group's key production and administrative BUs with at least 500 employees.
[2] Source: Federal State Statistics Service.

To boost employee engagement, the Company responds to employee queries and takes management decisions seeking to ensure salary indexation, expand the scope of social programmes, provide employees with workplace amenities and voluntary health insurance, and deliver on the Norilsk and Monchegorsk renovation programmes, environmental programmes, and equipment upgrade programmes.

In 2022, Nornickel developed new approaches suggesting the integration of business objectives into the annual cycle of engagement management: discussion of business goals, assessment of the need for closer engagement with target groups, performance analysis of programmes designed to support key business goals, monitoring of progress in supporting business goals, etc. In addition to that, the Company changed its initiative planning and implementation approach in 2022. Before 2021 and throughout this year, communication initiatives outnumbered measures focusing on process and system changes.

Nornickel completed a correlation analysis to match engagement levels with such variables as injury rates (the correlation ratio came in at -0.5) and absenteeism (the correlation ratio came in at -0.5). The findings confirm the hypothesis that the above factors are related to each other: according to Chaddock scale, the correlation is highly negative, which means that continuous efforts to improve employee engagement are still of critical importance.

Employee awards

To foster engagement through non-financial incentives and recognise employee achievements, the Company has put in place the Award Policy closely linked to Nornickel's valuesand strategic priorities. The Company rewards employees for their outstanding professional achievements and contribution, innovations that drive growth and add value, efforts going beyond formal agreements with the Company, and business improvement initiatives.

Corporate incentive decisions are reserved to the remit of the Company's President. In addition to corporate incentives, there are internal incentives awarded to employees on behalf of the enterprises where they work.

The Company awards those employees who showed prodigious operating and management achievements and made a significant contribution to production growth.

Compliance with the Business Ethics Code

To ensure that employees understand and accept the principles and fundamentals of the updated Business Ethics Code (approved by the Board of Directors in 2020), the Company continues to offer its employees training programmes explaining the Code (a training module on the Code was integrated into the Our Values programme, Nornickel Live, and Corporate Dialogues). By the end of 2022, the programmes covered 80% of the Company's total headcount.

Nickelisation

Nickelisation, a non-financial incentive and acknowledgement platform, is designed to build a closely knit team and promote the Company's corporate culture by fostering its values, popularising the roles of mentors and internal coaches, and developing a feedback culture. The Company continued developing the project in 2022.

In the reporting year, Gipronickel Institute joined the platform. In 2023, we are planning to roll it out across the remaining Russian business units of the Company.

In the reporting year, employees earned over 245,000 nickels (in-game currency) and purchased over 2,000 gifts with them. They also said thank you to their co-workers 140,000 times and tagged them with value badges 43,000 times.

The platform won an international corporate communications award at InterComm 2021, an award for achievements in human capital management at Crystal Pyramid 2021, and a prize at IT HR Awards. In spring 2022, the 7th edition of WOW!HR Award named Nickelisation the best platform in the Digital Solutions category (the competitors in this category included Gazprom Neft with its career portal, VK with its virtual assistant, DIXY with its distant learning app Academy, Softline with its Telegram-based educational chatbot, and IVI with its proposed 360-degree assessment tool).

Personnel training and development

Nornickel's contribution to the Education national project

Relevant UN SDGs

Related federal projects

- Young Professionals
- New Opportunities for Everyone
- Social Mobility for Everyone

Key initiatives and focus areas

- Staff training and development programmes, including the development of an educational IT platform
- Corporate scholarships for university students and internships with the Group companies
- Grants for educational institutions and projects through the World of New Opportunities Charity Programme

For more details, please see the Development of Local Communities section

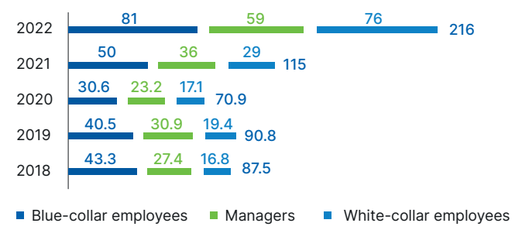
To deliver on the Company's goals and objectives, enhance production efficiency, and improve staff motivation, we pay special attention to the upskilling of our labour force, and the development of new professional and management expertise, competencies, knowledge and communication skills.

The employee training strategy, plans and programmes are developed in an ongoing cooperation with internal stakeholders and are regularly updated subject to their needs and Nornickel's strategic priorities. Thanks to this cooperation, the Company's development programmes are inclusive and work well to achieve its business targets. Our training programmes cover all functional areas and all employee categories.

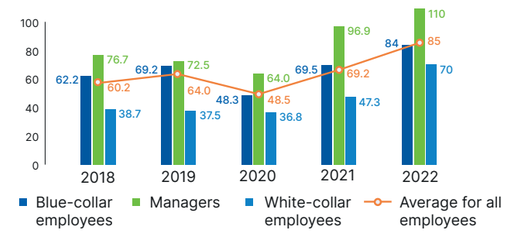
Key personnel training indicators

GRI 404–1

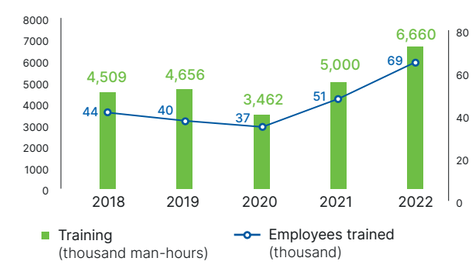
Total training man-sessions, including training, retraining and skill improvement (thousand)



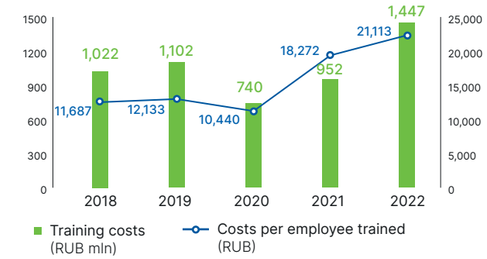
Average annual training hours per employee (based on average headcount)



Total training and the number of trained employees



Training costs



In 2022, we held 216,000 training man-sessions (including training, retraining and skill improvement), up 87% y-o-y. The average number of training hours per employee (based on average headcount) is 85, per male employee – 95, per female employee – 62. The main driver behind the increase in the number of training man-sessions is a surge in remote training due to the growing popularity and further advancement of Nornickel Academy. In 2022, the number of Nornickel Academy's registered users exceeded 81,000, with 62% of them being active users[1]. There was also a marked increase in in-person training due to the lifting of COVID-19 restrictions and return of certain employees to in-person learning. Since 2020, the number of the Company's employees who completed training programmes has been steadily growing, which led to the rise in expenses on educational initiatives.

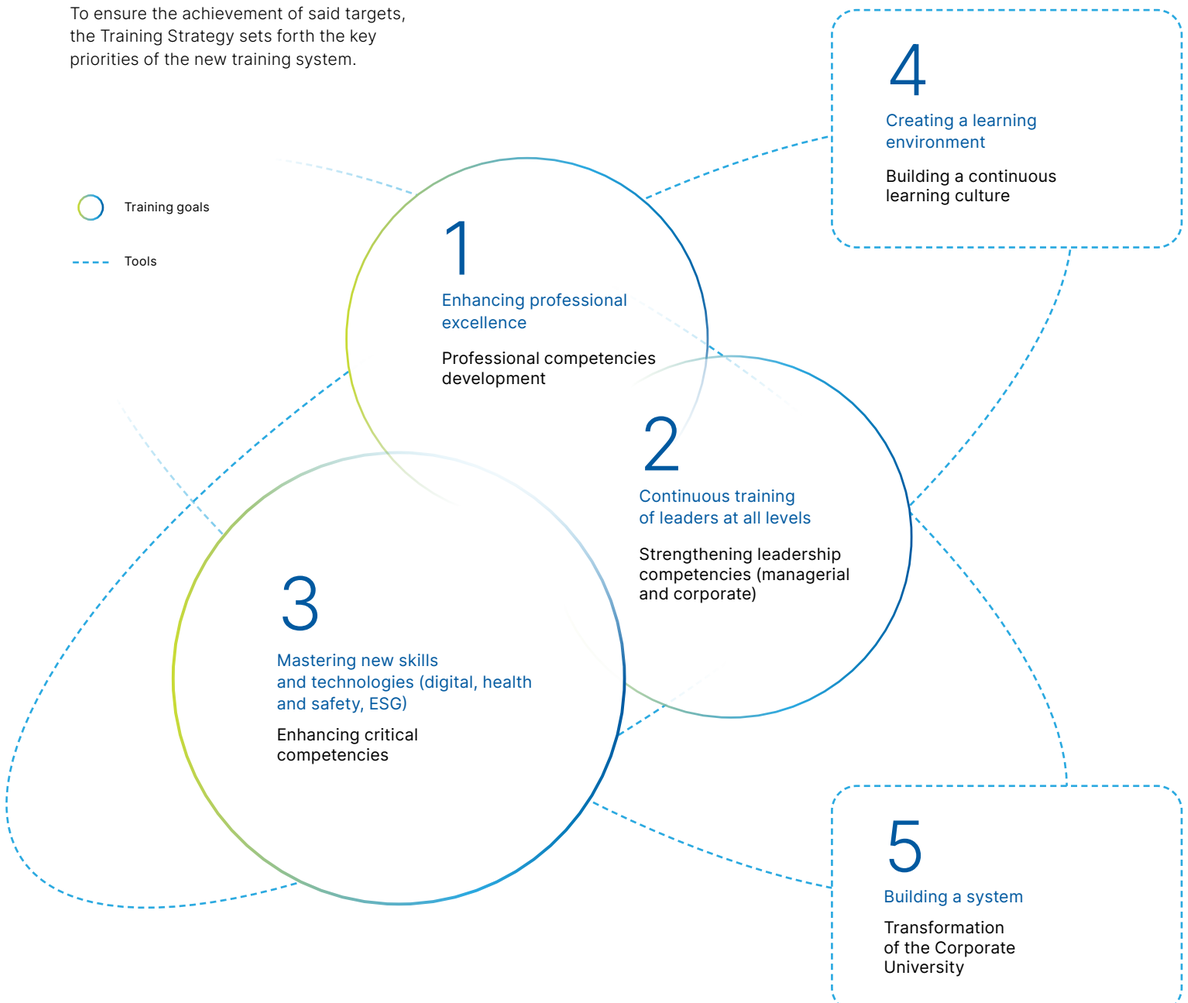
[1] Users authorised in the system.

Training opportunities for all employees

GRI 404–2

One of Nornickel's priorities in 2022 was to build an accelerated training ecosystem to help our staff achieve the Company's business goals. The ecosystem became the centrepiece of Nornickel's Training Strategy for 2022–2025:

To ensure the achievement of said targets, the Training Strategy sets forth the key priorities of the new training system.



Key elements of the ecosystem	Key objectives of the ecosystem
• manager: a role model for employees (mentor, coach, career and development sponsor) • flexible learning environment: digital and in-person learning environments for an informed choice • continuous learning culture: learning as a fundamental principle and a tool for achieving the desired results, development as a driver of personal fulfilment and career growth	• build a continuous learning culture • improve management quality • enhance professional excellence • develop critical competencies (including digital, OHS, ESG)

The ecosystem-based approach enshrined in the Strategy offers significant benefits for all stakeholders: the manager gets profoundly engaged professionals who can deliver strong results by leveraging their knowledge and effective interaction skills, while employees can fulfil their professional and career ambitions and unlock their potential. The Company is building a new generation of leaders who can move our business forward and address global challenges such as sustainable development, social and economic justice, and cultural transformation.

The underlying principles of the ecosystem are relevance, accessibility and innovation, with employees expected to pursue lifelong personalised training. This model requires new organisational capabilities, including transition to digital platforms and networks of educational opportunities, and new regulatory approaches focusing on the engagement of all stakeholders.

In 2022, the number of Nornickel Academy's registered users exceeded

> 81,000

Nornickel's continuous learning

Groups

Area

Examples

Schoolchildren

Career guidance for schoolchildren

1. The Company provides all first graders within Nornickel's footprint with a book titled "The Tale of How Metals Forged Cities". This book is the ultimate ABC of metals and mining, which captures children's attention with a vivid and eye-catching imagery, illustrates Nornickel's operations and explains to kids in a simple way what their parents do for a living. QR integration enables an illustrative and interactive presentation. Each year more than 5,000 schoolchildren receive this book as a gift from the Company.
2. To complement the book, the Company also created a cartoon series titled "Professor Nichrome's Lessons".
3. The initiatives for schoolchildren include the Arctic Wave festival of R&D discoveries, IMAKE engineering marathon, and School Break: Starts with You educational project. Each year more than 8,000 schoolchildren take part in these initiatives.

University students

Career guidance and leadership programmes, internship (including field internship) programmes, national and international business case championships

1. The Company closely cooperate with 30 higher educational institutions across Russia.
2. The Company's internship programme enjoys strong demand, with over 1,500 students applying for enrolment. Top Moscow-based students were invited to take part in paid internships at the Company's Moscow office.
3. In 2022, the Company sponsored CUP Tech 2022 and Metal CUP, nationwide case competitions among students of technical universities.
4. The Conquerors of the North programme (the Company's maiden course to help young engineers develop skills necessary to work in production) registered 2,724 applications from students of Russia's leading engineering universities, with 978 students taking part in the programme and 236 participants recommended for internship and further employment at Nornickel.
5. In 2022, the Company staged over 10 events for the Your Move nationwide student project. These events were attended by Nornickel's experts and external speakers. At the final stage of the project, Nornickel's stand hosted more than 15 master classes and quizzes. Over 1,500 participants visited the Company's stand.
6. Nornickel joined the list of general partners supporting the I am Professional competition. Jointly with Saint Petersburg Mining University, the Company sponsored the Mining section of the competition.

University students

Top 100 managers

Management development programmes

In 2022, Nornickel launched a module-based Energy of Changes corporate development programme. The programme has a mixed format.

Its modules are as follows:

1.Energy of Changes (change management);

2.Leadership Energy (heedfulness of the leader);

3.Team Energy (teamwork);

4.Energy of Results (responsibility for achieved results);

5.Energy of Well-Being.

The training was completed by 105 managers. The programme has three focus areas: the right mindset, development of new skills, and efficient communication methods.

Managers at all levels

Programmes to enhance corporate and management competencies

In 2022, the Company continued running its 360-Degree Management programme with a focus on enhancing corporate and management competencies.

Participants of the programme selected their topics on their own, taking into account the review results and targets set out in their individual development plans. Training covered seven topics:

- managerial decision-making;
- ambitious management;
- leadership that makes a difference;
- expertise in management communications;
- change management;
- resource management;
- team management.

The distinctive features of the programme are its relatively short duration and a focus on practical skills. The programme includes interactive training sessions, business games, and solving of real-life business and management cases.

A total of 250 managers from 17 branches, subsidiaries and the Head Office completed the training.

Middle management

Online training

In 2022, the Company continued to run the Pursuing Efficiency programme in an online format. The programme traditionally includes both theoretical and project-based activities.

Five modules:

- Result-oriented Management ("Manage!");
- Productivity ("Improve!");
- Effective Communications ("Negotiate!");
- Financial Management ("Analyse!");
- Team Management ("Interact!").

Further additions to the programme included master classes on critically important topics such as ESG, Safety Culture and Risk Management.

The training was completed by 113 employees from 22 branches and entities of the Company, including 106 managers and 7 young professionals.

A particular feature of the programme is the transformation of middle managers' online behaviour: they develop the habit of acquiring knowledge in a digital environment and interacting with each other. For many participants, this transformation has meant a dramatic change in their attitude – from passive online listeners to active doers.

Nornickel's continuous learning

Groups	Employees	
	Talent pool	**Blue-collar employees**
Area	Planning the professional and career growth of the Company's employees, building a talent pool for managerial positions, training and promoting pool members	Creating hi-tech learning spaces to improve practical skills
Examples	In 2022, the Company continued to grow and train a pool of junior and mid-level managers at 11 sites of Norilsk and Kola divisions. All along, Nornickel was running pilot projects to update its approaches to forging talent pools for the mining facilities of Polar Division and Kola MMC. The projects focused on the selection of employees with strong development and career growth aspirations, and widening the range of self-promotion opportunities for the staff. We also kept expanding a pool of top managers. In 2022, HR committees held 143 meetings on key functional areas and Top 100 managers, including 35 meetings convened at the level of the Head Office and attended by Vice Presidents. The key focus was on hedging against the shortage of top managers, and building a talent pool not only for the Group's top management positions, but also for the management roles of individual facilities and entities. Over 30% of the pool members are ready for promotion right now or will be ready for it within one year. In 2023, the Company plans to build and roll out a uniform talent management cycle.	1. Blue-collar employees receive ongoing training (including training, retraining and skill improvement): in 2022, the Company held 81,000 training man-sessions, up 62% y-o-y. The average annual number of training hours per employee (based on average headcount) came in at 84. 2. The Company has put in place all the necessary infrastructure for training and developing blue-collar employees, including: • teaching blocks equipped with training simulators and laboratories; an underground training base designed to improve employees' practical skills through the use of VR technologies and dedicated videos; • Process Factory, a training simulation facility offering employees an opportunity to learn more about the efficient management of production flows by using the Lean Production tool; • comfortable modern classrooms and a cutting-edge conference hall for corporate events. 3. The Company plans to further upgrade its training infrastructure: • The construction of a new innovative training centre in Talnakh is slated for completion in 2026. The centre will feature a fleet of simulators to develop hands-on skills. • Training equipment used for imparting safety practices and techniques with staff working at height and in confined enclosed spaces has been manufactured and is ready to be put on stream in 2023.

Development of digital skills

Development of digital skills and improvement of digital literacy remain among the key priorities of our training programmes. That is why the Company continues to run Digital Nornickel, an educational programme focusing on digitalisation and seeking to offer all employees an opportunity to learn the technology and skills required to work in the modern world of digital production and live in a digital environment. As at the end of 2022, 65,500 employees completed the training course.

The Company is looking beyond just providing the existing staff with training opportunities and is trying to expand its target audience outreach. In September 2022, we launched Tsifronikel.Junior, a quest offering our employees' children aged 8 to 12 to learn more about Nornickel's advanced digital capabilities by tackling various challenges and accomplishing different missions. Simple assignments help children understand how digitalisation has burst into our everyday activities and become an indispensable tool on our journey towards progress and development.

The Nornickel Academy platform offers educational courses helping employees to upgrade their professional skills in all relevant areas, while also giving them access to the Reading Room with free books on personal growth and materials on the latest educational trends and practical performance improvement tools.

In addition to providing in-person and digital training opportunities, the Company supports designated events (Library Night, Each Day Is a Knowledge Day, New Life Starting on Monday), organises public lectures and master classes (Tribune, workshops for schoolchildren) and maintains ongoing communication (L&D Digest, posts in social media, mass media publications) as a way to support its continuous learning concept.

In 2022, Nornickel unveiled a multi-platform competency management system, which helped fully automate relevant processes and enabled all participants to work in a shared information environment. The project covers 22 companies of the Group.

To guarantee the transparency of online testing, the Company launched a dedicated system that automatically records violations during exams by analysing the behaviour of those taking the test based on the webcam, desktop and mic data. With this new system, employees can take tests from pretty much anywhere (including their home and office), whereas earlier they had to sit tests in their classrooms.

Social policy

Nornickel's contribution to Russian national projects

Demography national project

Relevant UN SDGs

Related federal projects

- Financial support for families upon the birth of children
- Older generation
- Promotion of public health
- Sports as a way of life

Key initiatives and focus areas

- Co-Funded Pension Plan, a corporate private pension programme
- Nornickel's Veterans programme, which focuses on supporting unemployed pensioners
- Sporting and mass public events programme
- Creation of jobs across our footprint

For more details, please see the HR Management and Social Partnership section

Healthcare national project

Relevant UN SDGs

Related federal projects

- Development of the primary health care system
- Creation of a network of national medical research centres and introduction of innovative medical technologies

Key initiatives and focus areas

- Compensating employees and their families for health resort and vacation expenses
- Providing employees and their families with voluntary health insurance
- Conducting occupational health and safety training sessions (for more details, please see the Occupational Health and Safety section)
- Providing employees with personal protective equipment
- Corporate Healthcare project

For more details, please see the Occupational Health and Safety section

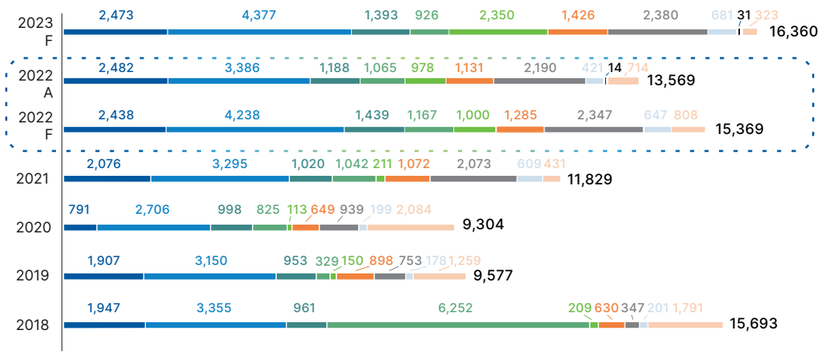
GRI 403-6

To attract and retain skilled employees and improve their loyalty and engagement, Nornickel regularly offers its employees across all of its locations a wide range of benefits and social care support.

The social package includes the following benefits and compensations:

- health resort treatment and vacation to employees and their families at subsidised prices;
- annual payment of return travel to and from a place of vacation for employees in the Far North and equivalent areas, and their families, including associated baggage fees;
- relocation allowances (lump sum payment for resettlement, reimbursement of travel expenses and baggage fees, monthly rental (sub-rental) payment / compensation for dormitory fees);
- VHI for employees and their families;
- one-off financial aid to employees experiencing certain major life events or hardships;
- additional employee pensions and other types of social benefits under the existing collective bargaining agreements and internal regulations;
- redundancy payments.

Social expenses and benefits (RUB mln)



- Health resort treatment and vacations of employees and their families
- Housing programmes
- Voluntary health and personal accident insurance
- Other payments and social expenses (healthcare services, severance pay, etc.)
- Reimbursement of round trip travel expenses and baggage fees to employees and their families
- Relocation assistance to new employees
- Financial aid and additional benefits to retired and former employees and their families
- Pension plans
- Social projects for employees (development of target categories, sporting events and holiday celebrations)
- Relocation programme

In 2022, social expenses and benefits totalled

RUB **13.6** bn

up 15% y-o-y. Travel and baggage (25%) and health resort treatment and vacations (18%) accounted for the largest share in total expenses.

Programme to improve social and working conditions at production sites

Given the industry specifics and the geography of the Company's operations, it is of vital importance to ensure comfortable and safe working conditions contributing to the health of employees, reduction of occupational diseases and injury rate, higher employee productivity and engagement.

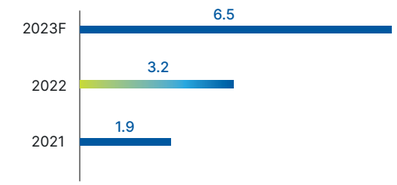
The Group companies operate more than 3,300 sanitary, amenity, sports and fitness, catering, healthcare, and recreational facilities with a total area of over 360,000 m².

In 2022, a programme to improve social and working conditions at production sites launched back in 2003 to ensure a decent working environment, was reorganised into the Made with Care employee comfort programme. The programme focuses on improving working conditions and creating a comfortable environment for each employee through a consistent dialogue and care.

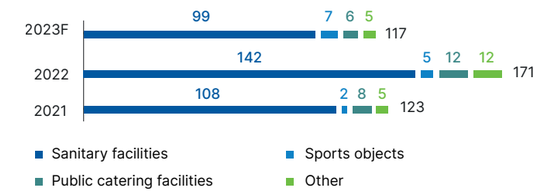
The programme saw repairs of social facilities using modern materials and technologies in line with a group-wide standards handbook. In addition to the facilities themselves, repairs included entrances, corridors and staircases.

2003–2022 results of the programme	Achievements in 2022	2023 targets
• 709 social facilities overhauled • 449 relocatable buildings purchased • Total costs exceeded RUB 13.4 bn	• 9 Nornickel's branches and Russian business units located in the Norilsk Industrial District and on the Kola Peninsula participated in the Programme • Comprehensive overhauls of 171 social facilities, including those of social importance, were completed. The total area of renovated premises amounted to 27,854 m² • A total of 8,786 employees benefitted from improvements to their social and working conditions, with RUB 3.2 bn spent to finance the project	• In 2023, the programme's expenses will stand at RUB 6.5 bn • The Company plans to renovate 117 social facilities

Costs of the programme to improve social and working conditions (RUB bn)



Social facilities overhauled in 2022



Health improvement programmes

GRI 403–6

Given the harsh climate of the Far North and the nature of operations at the Group's facilities, Nornickel pays close attention to improving the health of its employees. In line with its obligations under the collective bargaining agreement, the Company implements rehabilitation and health resort treatment programmes for employees and their family members.

Participants

Key health improvement programmes — **Number of participants**

	2020	2021	2022	2023 F
Zapolyarye Health Resort (Sochi)	**10,779**	**16,592**	**17,852**	**17,060**
Rosa Springs Health Resort (7 days) + Zapolyarye Health Resort (14 days)	2,241	3,650	3,650	3,650
Kolsky Health and Spa Centre (Monchegorsk)	**1,038**	**1,564**	**2,004**	**1,693**
Vacations in third-party health resorts	**1,240**	**1,988**	**4,190**	**2,902**
• Russia and Belokurikha health resorts (Altai Territory)	696	837	895	873
• Primorie Holiday Centre, Golubaya Dal' Health Resort (Gelendzhik)	500	800	1,626	1,026
• Malaya Bukhta Health Resolt (Anapa)	0	0	700	0
• Viktoriya, Tsentrosoyuz-Kislovodsk, Sechenov health resorts (the Caucasian Mineral Waters)	0	0	380	665
• Rosa Springs Health Resort (18 days)	0	324	0	0
• Rosa Springs Health Resort + Imeretinsky Resort	0	0	559	0
• other non-corporate health resorts	44	27	30	338
Vacations for children (Anapa)	**0**	**1,330**	**1,527**	**1,575**
International vacation programme (Bulgaria)	**0**	**3,041**	**14**	**1,120**
Total participants	**13,057**	**24,515**	**25,587**	**24,350**

In 2022, 25,600 people took part in health improvement programmes, up 4% y-o-y. The most popular destination was the Zapolyarye Health Resort (Sochi). Children of the Company's employees spent their summer holidays in a health resort and recreation camp on the Black Sea.

In addition to health resort treatment, the Company promotes a healthy lifestyle by facilitating regular fitness sessions of its employees and holding annual corporate sports festivals and competitions.

For more details, please see the Sporting and mass public events programme section.

Voluntary health insurance

BVHI is an essential part of social support; all of the Company's employees are covered by insurance policies. In addition, Nornickel provides employees with an opportunity to insure a close relative at corporate rates.

Under VHI policies, the Company's employees have a wide range of medical services available to them. Employees living in the Far North can use VHI policies to access healthcare services not only where they live but in all the areas that the policy covers. All insurance programmes offer the same set of services for various personnel categories; the only difference is the level of healthcare centres and the region of coverage.

In addition, the Company's employees have an opportunity to have specialised genome sequencing tests (which help identify and assess potential risks of developing a serious health condition) and get a geneticist consultation.

Co-Funded Pension Plan Programme

GRI 201–3

In 2022, an average participant contribution amounted to 3.7% of the employee's salary, or the Company's monthly average of RUB

6,133

To support employees after they retire, Nornickel has in place the Co-Funded Pension Plan, a corporate private pension programme. As at the end of 2022, it covered 10,400 employees across 23 Group companies, with almost 4,500 retirees already receiving pensions.

The programme provides for two pension plans: Parity and Corporate. Under the Parity Plan, pension savings are co-funded by the employee and the Company on a parity (equal) basis. The Corporate Plan is designed for highly skilled employees and/or employees with highly sought-after occupations; within this plan, Nornickel finances private pension plans for such employees.

Participants of the Co-Funded Pension Plan, by region

Indicator	2019	2020	2021	2022		2023
	A	A	A	F	A	F
Total participants	**12,304**	**11,519**	**10,776**	**12,593**	**10,406**	**10,941**
Norilsk Industrial District	9,972	9,288	8,737	10,483	8,361	8,790
Kola Peninsula Industrial District (Murmansk Re-gion)	2,313	2,215	2,013	2,062	2,015	2,071
Moscow and other regions of Russia	19	16	26	48	30	80

Co-Funded Pension Plan 2022 highlights

Indicator	2022
Total Company costs (RUB mln)	**681.9**
Participant's contribution	
Average contribution per participant (% of wages)	3.7
Average monthly contribution per participant (RUB '000)	6.2
Company's contribution under the Parity Plan	
Average contribution per participant (% of wages)	3.7
Average monthly contribution per participant (RUB '000)	6.1

Programmes supporting former employees and their families

In addition to the non-governmental pension plan, the Company implements the following continuous support measures for former employees:

- the Company's Veterans programme supporting 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 grants financial aid to former employees who retired prior to 10 July 2001 provided they had been employed by the Company's units for more than 25 years and permanently reside outside of the Norilsk Industrial District. The Fund relies on voluntary monthly contributions from employee salaries and charitable contributions from the Company's budget;
- targeted financial assistance for former employees and their family members (paying for medical treatment, medications, funeral services, helping those in financial distress).

Housing programmes

To ensure comfortable living conditions for employees and foster long-term engagement, the Company has been implementing housing programmes (Our Home / My Home and Your Home) for over 10 years now. Under these programmes, participants get the opportunity to acquire ready-for-living apartments located in close proximity to each other on special terms in Moscow and Tver regions, Krasnodar Territory and Yaroslavl.

The programmes' participants are qualified proactive employees of 24 business units and branches of Nornickel Group located in Norilsk, the Taimyrsky Dolgano-Nenetsky Municipal District, Krasnoyarsk, and Murmansk Region.

The housing programmes use a co-financing mechanism: the Company pays up to a half of the apartment cost (but in any case no more than RUB 3 mln), with the rest paid by the employee within a certain period of employment with Nornickel Group (from five to ten years). The main benefit for employees is that the cost of housing remains unchanged for as long as they participate in the programme.

The only difference between the housing programmes is the way ownership is transferred:

- Our Home / My Home – property titles are registered at the end of the employee's participation in the programme, but the employee may move in immediately after receiving the apartment'
- Your Home – property titles are registered from the start of the employee's participation in the programme, but is burdened with a lien to be held until the employee fully pays up the entire cost of the apartment to the seller.

Since the start of the programmes,
5,842 apartments
have been provided to the Company's employees.

Total investments in housing programmes (the purchase of apartments and infrastructure development) exceed
RUB **28** bn

Since the inception of the programme,
1.3 thsd employees
of the Company have benefited from subsidised loans

In addition to Our Home / My Home and Your Home housing programmes, there is a Corporate Social Subsidised Loan Programme aimed at providing interest-free loans to the Company's employees to make a down payment and reimbursing a certain share of interest on their mortgage loan. Employees of 25 entities and branches of Nornickel Group take part in the programme.

Support to new employees

With **1,470** employees
joining the relocation support programme in 2022, it now has a total of 3,224 participants

The Company supports new employees, including young specialists, workers, engineering staff, and managers relocating to Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District from other regions by reimbursing their relocation expenses, baggage fees, and living costs for the first three years. On top of that, the Company also pays a one-time relocation allowance to support employees at the new place of work.

To ensure faster onboarding and support for new employees, special onboarding events are carried out; in 2022, an automated system for employee onboarding was rolled out across 26 Group companies. The system helps everyone involved go through the onboarding process comfortably and efficiently.

To help people immerse themselves in the new working, social and cultural environment, the First Arctic leadership programme offers onboarding and teambuilding events enabling them to get to know each other, the Company, and the city.

Relocation programme

In early 2022, the Company launched the Employee Relocation programme to support an employee when moving to another region due to a change in job duties, either with their current employer or a different employer within the Group. In addition to reimbursing travel expenses, baggage fees, living costs, and providing a one-time relocation allowance and additional leave for an employee to settle in, the programme provides for a relocation benefit (up to 40% of salary). The maximum amount of the relocation benefit depends on the target location (settlement).

Relocation is an opportunity for an employee to grow and develop both personally and professionally. For Nornickel, the programme addresses the problem of filling vacancies in a certain region in the absence of duly qualified candidates in the local labour market and within the company.

Social support to employees facing redundancies due to closure of production facilities

GRI 404–2

The social support programme for employees facing redundancies was developed following the decision to shut down the smelting facility in Nickel in November 2019. The programme includes comfortable relocation to other sites, retraining, and pension plans. Later, it was also extended to employees of the metallurgical shop in Monchegorsk.

In 2019–2022, a total of 995 people at Kola MMC were enrolled in the programme (63% signed employment contracts with the Company and had the same level of pay during the first year, while 37% decided to leave the Company and were dismissed with additional payments); 353 people attended training, retraining and upskilling programmes. In 2020–2022, the Company spent more than RUB 1.6 bn on social programmes for smelting shop employees.

Development of corporate communities

Corporate communities of active experts from the Group companies contribute to greater involvement of employees in the Company's strategic agenda, encourage employees to participate in corporate and social activities in the Group companies and regions of operation and facilitate partnerships with local community representatives aimed at boosting social development of local communities and improving the well-being of local residents.

Those Who Care corporate programme

The Those Who Care change management programme implemented in the Kola and Norilsk divisions targets proactive and engaged employees who aspire to develop and implement projects on boosting the Company's efficiency, even beyond their functional duties.

The project seeks to create a professional and diverse community of like-minded people capable of jointly addressing a wide range of tasks through their skills and knowledge. The website created as part of the project, komunevseravno.ru, serves as a universal platform allowing any manager to indicate an issue to be tackled. After examining it, community members can build a team of specialists and undertake a project.

For the project to be successfully implemented, teams can ask the business customer to provide them with managerial, administrative and financial resources. The implementation of the corporate programme is of great importance for absolutely all stakeholders.

[1] The leadership programme seeks to attract high-potential graduates of industry-oriented educational organisations and the best young specialists to work in Norilsk/Monchegorsk/Zapolyarny, retain young talent, replenish the talent pool with qualified managers and develop a succession pool (duration – 2.5 years)

The Those Who Care programme results

726 employees
from Monchegorsk, Murmansk, Norilsk, and the Pechengsky District applied for the programme

RUB **1.3** 1.3 bn —
the economic impact of the proposed solutions.

10% of active
programme participants changed their careers in the Company

31 managers
became business customers

33 project
solutions were accepted for implementation

33 out of **56**
business tasks were selected as projects

35 project
teams were formed as a result of the selection process

In 2022, the programme won the Employer Brand Award & Summit and was awarded for Human Resource Management in the People Investor: Companies Investing in People category.

LamaLocation project

In 2021, representatives of the Storm regional sports organisation, who have been participants of the Plant of Goodness project for more than three years, were invited to an eco-summit as volunteers. At the Krasnoyarsk Pillars National Park, they drew everyone's attention to the use of solar panels. Having consulted technical specialists, Storm representatives concluded that volunteering activities (clearing litter from Taimyr's water bodies) increase the carbon footprint due to the use of gasoline and diesel electric generators during trips to remote areas, maintenance, repairs and systematic supply of fuel for continuous operation. Together with partners, volunteers decided to set up the LamaLocation project to investigate the possibilities of using alternative energy sources in the Taimyr during the summer season. The project was supported by the Company in 2021 as part of the World of New Opportunities' Socially Responsible Initiatives Competition; the active phase of the project took place in 2022.

Students of the Polar State University were involved in the project. With support from the partners, they obtained diver certificates and successfully completed PADI training, which enabled them to assist the volunteer group in installing solar power stations at Lama Lake. The partners donated a wind turbine generator and several solar panels to add to the project's efficiency.

The project proves that using the location's green resources helps minimise the carbon footprint. The environmental impact can be mitigated through a sustainable and wise outdoor recreation and use of the project's facilities.

In 2022, the project became a destination for locals, tourists, athletes, scientists, and visitors from other Russian cities:

- more than 600 employees of Norilsknickelremont were guests and participants of the project, where they learned about green energy in the Arctic;
- a clean-up day on Lake Dolgoye with over 200 participants yielded three trucks of various rubbish removed;
- Master of Sports and Russian champion in various extreme water sports, Alexey Vasiliev held a five-day master class in standup paddleboarding with regular and big boards for guests, partners, students, and others;
- Plant of Goodness' participants and volunteer divers had the opportunity to use the project's infrastructure for their volunteering functions.

The project aims to save not only nature but also people's lives. In 2022, a small vessel sank near the LamaLocation base during a violent storm. Thanks to the infrastructure created by the project, victims received all the necessary help and support.

The project's infrastructure, combined with the knowledge and experience gained, laid the ground for a new initiative. LamaLocation 01 will be the first volunteer fire-fighting outpost in the Arctic. A fire-fighting boat will operate on Lama Lake, and certified fire-fighters will volunteer round the clock during the fire season in summer. The project is supported by the Company and is planned for implementation in 2023.

In Good Company, a corporate youth programme

The programme seeks to bring together young Nornickel employees under 35 years old to promote their professional and creative growth and unlock their potential. An additional objective of the programme is to identify gifted students and young professionals outside the Company and involve them in Nornickel's operations, ensuring their quick and efficient adaptation in the Company.

The In Good Company programme was established with the needs of young employees in mind. These needs were identified through an analysis of employees' expectations, which included recognition, self-fulfilment, and experience. Additionally, the programme takes into consideration the needs of the Company, such as increased involvement, the development of talent and skills, and other individual development.

The programme offers versatility by allowing each participant to choose projects from four different tracks.

In addition to tracks, the programme includes open communication workshops where participants will learn how to create and promote their expert brand from scratch, become a confident public speaker, expand one's professional and social contacts and (if need be) represent the company at conferences, meetings and online public events.

The programme is expected to be implemented in cycles as part of official corporate events and beyond. Participants will also be able to kick start and deliver their own projects and earn points that can be later exchanged for merchandise or one-on-one advice from Nornickel's top managers.

As part of the programme, the Company developed a proprietary secure online app – a social network in which users are free to choose any number of tracks and activities and can find new friends and interests, as well as interact with each other regardless of position, profession or location. All young employees received an invitation and instructions on how to sign up. During the first few months of the pilot, the mobile platform attracted over 4,495 new users.

The programme was launched in late 2022 in a hybrid format – an online talk show and two face-to-face meetings in Norilsk and Monchegorsk.

It is expected to encourage young employees to take greater interest in the Company's practical agenda, develop new communication channels and horizontal connections, lay the foundation for self-fulfilment and expand the range of opportunities for them.

Professional Practice track

Promoting out-of-the-box thinking. Building a team of like-minded people in a themed community. Participants are innovators and facilitators aiming to boost the Company's efficiency and their own professional progress.

Growth track

Providing our young employees with an opportunity to achieve career and life success. Participants are active, engaged and loyal young employees ready to develop and learn new things.

Social Practice track

Involving young employees in territory development projects and retaining them in the regions where the Company operates through the creation of a social corporate community. Participants are employees who are ready to address regional problems and are looking for new opportunities and approaches to do so.

Creativity track

Fostering the development of young people's creative, intellectual and sports skills. Involving people in the joint development and implementation of corporate events. Participants are smart and creative people or anyone who wants to know more about the Company and the region.

Plant of Goodness

The Plant of Goodness corporate volunteering programme is available in all regions where Nornickel operates. The programme covers a wide range of volunteer and charitable projects, which help build a corporate culture, bring together employees around shared values, and strengthen teamwork and communication between business units.

For more details, please see the Corporate Volunteering section

Sporting and mass public events programme

Promoting corporate sports and healthy lifestyle among the Company's employees contributes to an improved quality of life, higher motivation and involvement, faster adaptation to new working conditions, effective team- and community building.

Nornickel has a separate corporate sports mechanism in place. There are officers responsible for sports development appointed at each of its Group companies in every region where it operates.
The Company has an annual activities plan, including a schedule of training sessions, competitions, round tables and press conferences featuring distinguished athletes. There is also a Sports Promotion Council comprised of representatives of Nornickel's branches and entities, which approves the plan and addresses relevant issues. Information on the Company's mass sports events is published on the corporate portal and social networks.

Corporate sporting events run on a permanent basis and cover such regions as the Trans-Baikal Territory (Chita), Krasnoyarsk Territory (Norilsk, Krasnoyarsk), Murmansk Region (Murmansk, Monchegorsk, Zapolyarny, Nickel), the cities of Saratov, Moscow, and Sochi. The Company cooperates with many sports federations (including the International University Sports Federation, Russian Futsal Association, Russian Ice Hockey Federation, etc.) to support sports in the regions where it operates by organising workshops, coach training sessions, procurement of equipment and implementing other initiatives.

The most prominent events of the sporting and public events calendar are corporate contests geared towards employees and local residents. In 2022, the following events were held:

- the 61st Nornickel Spartakiad comprising 14 sports in the Spartakiad proper and six sports in the Spartakiad for retired athletes. A total of 4,024 people took part in the 2022 Spartakiad;
- corporate competitions in alpine skiing and snowboarding, ice hockey, futsal, basketball, volleyball, etc., as well as "Dad, Mum and I – a Sporty Family" family competition;
- Zabeg.Nornickel in the Norilsk and Kola divisions (jointly with the Hero Race autonomous non-profit organisation), which gave a fresh impetus to the event and attracted more participants;
- various tournaments in the following leagues: Champions League of Business, Labour Reserves, Night Hockey League, Homo Ambulans, Zabeg.RF, etc.;
- training sessions in various sports.

Our sporting and fitness events drew a total of
24,000
participants in the reporting year

In 2022, all our corporate competitions were streamed online

Garnering over
60,000 views

Corporate volunteering

Volunteering is a significant part of employees' social well-being and a tool for developing human capital. It is linked to human resources management aimed at promoting employee involvement in social issues, fostering corporate horizontal ties, charity and volunteering, communication and emotional skills, offering each and every employee opportunities to fulfil their personal potential, and helping build partnerships between employees.

Plant of Goodness

The Plant of Goodness corporate volunteering programme is implemented in all cities where Nornickel operates. The programme brings together the Company's expertise and its vast track record of social and environmental initiatives.

Each year, more than 3,500 Company employees, representatives of non-profit organisations and passionate citizens take part in the project with a variety of volunteer events, including educational programmes, environmental marathons, eco-shifts, a charity fair, and a personal donation programme. Nornickel's volunteers attend international and Russian forums and expert platforms as participants, speakers, moderators, and experts.

After being volunteers for some time, our employees often come up with their own initiatives. The skills and expertise they obtain doing this kind of work help them not just in everyday life, but also in their extra-professional skills and career pursuits.

2022 saw part of the Plant of Goodness project

> **3,500**
corporate volunteers

> **40**
partners involved

> **370**
events implemented

Icebreaker educational programme

Icebreaker is a comprehensive training project to develop the skills of leaders of the Plant of Goodness volunteering association. It allows volunteers to improve corporate communication and social design and offers a deeper and wider understanding of initiatives' creation in small towns.

The programme aims at developing the extra-professional skills of the Company's employees to address social issues and making the leaders of the volunteer movement better learn the region's context and objectives. In 2022, there were 20 events in Moscow, Zapolyarny, Monchegorsk, Norilsk, Chita and at Bystrinsky GOK.

It was a unique opportunity for employees to be the architects of the programme so it could meet their most pressing needs: through questionnaires and regular surveys, they collected and analysed feedback from volunteers interested in improving the programme. Being in Touch was a key message of 2022 highlighted during all Icebreaker events.

In 2022, a Map of Useful Actions information platform was launched, where programme participants can find like-minded people from their region and jointly implement a project for the benefit of society and the city.

Let's Do It! Environmental marathon

Having started out as just a series of clean-up days, the marathon has come to include environmental awareness initiatives in addition to litter picking, landscaping, and urban improvement.

The marathon is held annually from May to September and features prizes for both accomplishing general environmental tasks and coming up with complex individual projects.

The initiative is implemented in four stages, namely a communication stage, a project stage, a nature reserve stage and a partnership stage.

Results achieved:

- since the project's inception, there have been 576 volunteer teams (including 184 teams in 2022);
- the marathon has seen more than 6,000 employees (including 1,200 in 2022);
- 932 environmental projects have been implemented (including 200 in 2022);
- more than 40 partners join the project every year.

In 2022, an educational interactive lesson called "Seven Wonders of the Arctic" was developed to foster greater awareness of the Arctic nature and the issues of its conservation.

The lesson can serve as a universal educational tool for the Company's corporate volunteers to use it in educational institutions in person or online. It can be easily adapted for different age groups as there are different tasks and lesson plans for primary and middle school students.

The Arctic in Your Hands regional ecological shifts

The eco-shifts are aimed at building partnerships, increasing motivation, learning more about the Company and environment, socialising, sharing experience and working for the benefit of specially protected natural areas (national parks and reserves):

- the Lapland Nature Reserve (Murmansk Region) – installing benches, landscaping in the tourist reception area;
- the Pasvik Nature Reserve (Murmansk Region) – creating recreation areas along the Glukhaya Plotina new nature trail, laying 80 metres of nature trails, installing a viewing bench and a viewing pier;
- the Putoransky Nature Reserve – improving the nature trails at the isthmuses of Kapchuk Lake and Lama Lake (installing directional signs, marking a safe route, anchoring a cable to dangerous rocky areas);
- the Krasnoyarsk Pillars National Park (Krasnoyarsk Territory) – creating a meteorological site, installing a weather visualiser, improving the Zhivoy Klyuchik spring;
- the Daursky Nature Reserve (Trans-Baikal Territory) – implementing a project "Plants of the Daursky Nature Reserve" to introduce tourists to nature and raise environmental awareness;
- the Darovoye estate (Moscow Region) – planting fruit trees to recreate historical gardens;
- other projects across the Company's footprint.

Over 300 volunteers from the Murmansk Region, Norilsk, Chita, Saratov and Moscow attended the 2022 eco-shifts.

Partner projects

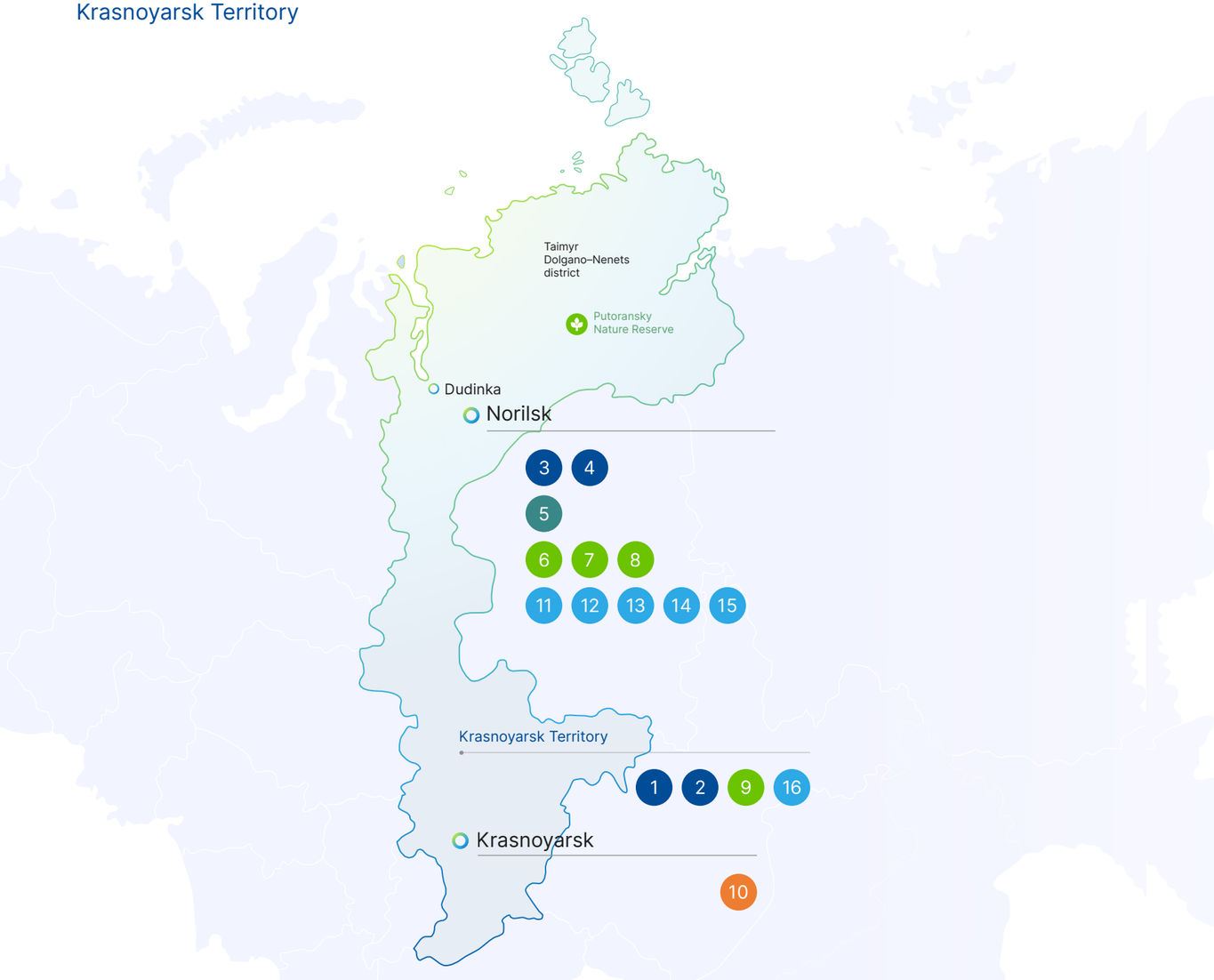
In 2022, Nornickel's volunteers took part in the following events:

- the Siberian Perspective eco-summit is an expert platform for discussions on strategy and synergy in implementing environmental volunteering projects and partner events. It brings together more than 50 international experts and over 70 most active corporate volunteers from Nornickel and other companies;
- the #WeAreTogether 2022 International Forum was devoted to working in partnership for the sake of achieving common goals and outcomes when addressing most challenging social and public problems; Nornickel's volunteer team set up a corporate stand where any visitor to the forum could learn about the Arctic and also discover mechanisms for building corporate culture, bringing together employees around shared values, and strengthening teamwork and inter-city relations through real-life cases of activists from cities where the Company operates. The forum also offered a venue for a session titled "Volunteering – Competencies of the Future", which was organised with the assistance of Nornickel and its partners;
- the Garden of Memory international campaign seeks to commemorating everyone who died during the Great Patriotic War. Every year, more than 100 corporate volunteers take part in the campaign;
- the all-Russian "Save a Forest" campaign is the world's largest reforestation project. Nornickel's volunteers are reforesting the Kola Peninsula by planting over 2,000 pine seedlings each year.

Development of local communities

Key regions of operation[1]

Krasnoyarsk Territory



Area[1]

2,366.8 sq km²

13.9% of Russia's territory

Population

2,846 thsd people

Mineral resources	Industry	Nornickel's performance in the Krasnoyarsk Territory:
• Oil, gas, coal, platinum and PGMs, copper, nickel, cobalt, lead, zinc, bauxite, gold, silver, iron	• Non-ferrous metallurgy • Mining • Solid fuel–based power and hydropower generation	• Taxes and other payments: **RUB 89.8 bn**[2] • Headcount: **55,8 thsd employees**[3] • Average monthly salary: **RUB 179,8 thsd** • Employee-related social expenses: **RUB 4.3 bn**

Key areas of cooperation with the Krasnoyarsk Territory

Economic	Social	Environmental
• Implementation of major investment projects in the Krasnoyarsk Territory • Heat and power supply to the communities and companies in Norilsk, Dudinka and Igarka • Participation in the Northern Supply Hau programme in the Arctic • Development of a tourist cluster • Promotion of commercial activity of indigenous communities of the North – creating conditions and infrastructure for the traditional use of natural resources • Development of transport and the telecommunication infrastructure	• Implementation of the Programme for Promoting Social and Economic Development of the Taimyrsky Dolgano-Nenetsky Municipal District in 2020–2024 • Assistance in containing the spread of COVID-19 • Support for vocational and supplementary education • Implementation of the World of New Opportunities charitable programme, the World of Taimyr and the Students of Taimyr initiatives, and the Plant of Goodness corporate volunteering programme; supporting and promoting local and regional public initiatives	• Implementation of major investment projects in the Krasnoyarsk Territory • Heat and power supply to the communities and companies in Norilsk, Dudinka and Igarka • Participation in the Northern Supply Hau programme in the Arctic • Development of a tourist cluster • Promotion of commercial activity of indigenous communities of the North – creating conditions and infrastructure for the traditional use of natural resources • Development of transport and the telecommunication infrastructure

Key projects in the Krasnoyarsk Territory

Social and economic partnership

1. Projects implemented under the Cooperation Agreement with the Krasnoyarsk Territory
2. Projects implemented under the Agreement on Air Passenger Transportation
3. Projects implemented by the Norilsk Development Agency
4. Convention of Social Entrepreneurs from the North

Transport

5. Reconstruction of bridges in the Norilsk Industrial District

Quality of life

6. Comprehensive plan of social and economic development of the city of Norilsk
7. Our Home / My Home and Your Home employee housing programmes
8. We Are the City! social technologies forum
9. Agreement on cooperation aimed at providing support to the indigenous peoples of the North

Sports

10. Federation of Northern Multisport Races

Ecology

11. Increase of the Taimyr HPP Cascade capacities
12. Sulphur Programme (SO_2 capture at the Company's existing and planned facilities)
13. Programme to build local treatment facilities
14. Zero Negative Environmental Impact campaign
15. Land rehabilitation programme
16. Release of the juveniles of valuable fish species into water bodies

[1] Source of population data: preliminary estimate of the permanent population as at 1 January 2023 by the Federal State Statistics Service of Russia.

[1] Krasnoyarsk Territory Today.
[2] Including those paid to the consolidated budget of the Krasnoyarsk Territory and the budget of Norilsk.
[3] Krasnoyarsk Territory and Norilsk Industrial District.

Murmansk Region

Area[1]
144.9 sq km²

Population
657,950 people

Mineral resources

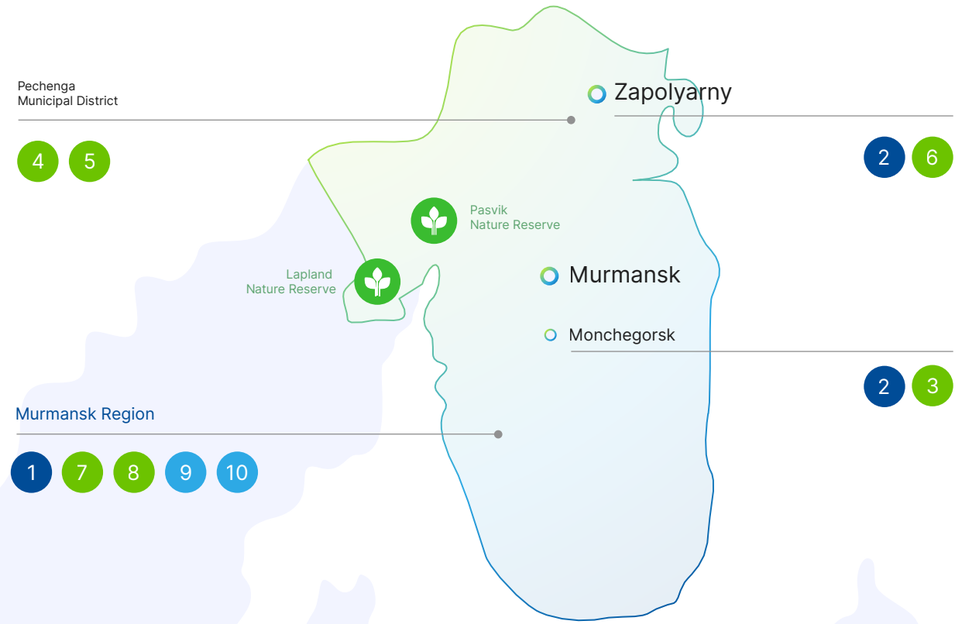
- Apatite, nickel, iron, copper, cobalt, palladium, platinum and PGMs, peat.

Industry

- Mining
- Metallurgy
- Fishing

Nornickel's performance in the Murmansk Region

- Taxes and other payments: **RUB 13.8 bn**
- Headcount: **12,1 thsd employees**
- Average monthly salary: **RUB 128,3 thsd**
- Employee-related social expenses: **RUB 989.8 mln**



Key areas of cooperation with the Murmansk Region

Economic

- Implementation of investment projects and development of production capacities
- Social and economic development of municipalities that are home to Kola MMC's operational activities
- Development of the transport infrastructure in the Arctic
- Development of a new tourism-driven economy along with the catering and hotel sector

Social

- Assistance in containing the spread of COVID-19
- Implementation of the World of New Opportunities charitable programme and the Plant of Goodness corporate volunteering programme; supporting and promoting regional public initiatives
- Development of social entrepreneurship

Environmental

- Cooperation on environmental protection, preservation of the Kola Peninsula's natural ecosystems and landscapes
- Organisation and backing of environmental campaigns

Key projects in the Murmansk Region

Social and economic partnership

1. Projects implemented under the Cooperation Agreement with the Murmansk Region Government
2. Convention of Social Entrepreneurs from the North (Monchegorsk, Zapolyarny)

Quality of life

3. Projects implemented by the Monchegorsk Development Agency (Monchegorsk)
4. Second School Centre for Community Initiatives of the Pechengsky District
5. Social and Economic Development Programme for the Pechengsky Municipal District of the Murmansk Region for 2021–2025 (Pechengsky Municipal District)
6. We Are the City! social technologies forum (organiser) (Zapolyarny)
7. Programme of supporting the Murmansk Region in social infrastructure development in 2020–2024 (the Murmansk Region)
8. Cooperation agreement with the Kola Sámi Association of the Murmansk Region (the Murmansk Region)

Ecology

9. Zero Negative Environmental Impact campaign (the Murmansk Region)
10. Release of the juveniles of valuable fish species into water bodies

[1] General information about the Murmansk Region.

Trans-Baikal Territory

Area[1]
431.5 sq km²

Population
992,202 people

Mineral resources	Industry	Nornickel's performance in the Trans-Baikal Territory
• Copper, uranium, molybdenum, titanium, gold, tungsten, iron, zinc, silver, lead, coal	• Mining • Production and distribution of electricity, gas and water • Non-ferrous metallurgy • Machinery and equipment manufacturing • Food production	• Taxes and other payments: **RUB 2 bn** • Headcount: **2,8 thsd employees** • Average monthly salary: **RUB 170,4 thsd** • Employee-related social expenses: **RUB 94.8 mln**

Key areas of cooperation with the Trans-Baikal Territory

Economic	Social	Environmental
• Bystrinskoye Deposit development • Social infrastructure development	• Assistance in containing the spread of COVID-19 • Training of mining industry employees • Improvement of urban areas • World of New Opportunities charitable programme	• Cooperation on environmental protection, preservation of natural ecosystems and landscapes • Release of the juveniles of valuable fish species into water bodies • Organisation and backing of environmental campaigns

Key projects in the Trans-Baikal Territory

Social and economic partnership

1. Projects implemented under the Cooperation Agreement with the Trans-Baikal Territory
2. Projects implemented under the Agreement on SME Support in the Trans-Baikal Territory
3. Projects implemented as part of the Programme of Social and Economic Development of the Trans-Baikal Territory in 2017–2026
4. Projects implemented under the Agreement to Support and Develop the Volunteer Movement in the Trans-Baikal Territory

Education

5. First technological cluster for kids in the Trans-Baikal Territory (Chita)

[1] General information about the Trans-Baikal Territory.

Other Russian regions

Moscow

Moscow Region

- Russian Ice Hockey Federation (partner)
- Russian Futsal Association (general partner)
- CSKA professional basketball club (general sponsor)
- All Russian Federation of DanceSport and Acrobatic Rock'n'Roll (partner)
- Night Hockey League (general partner)
- World Legends Hockey League (partner)
- Russian Curling Federation
- Multimedia Art Museum (patronage assistance)
- Golden Mask theatre festival (partner)

Sochi

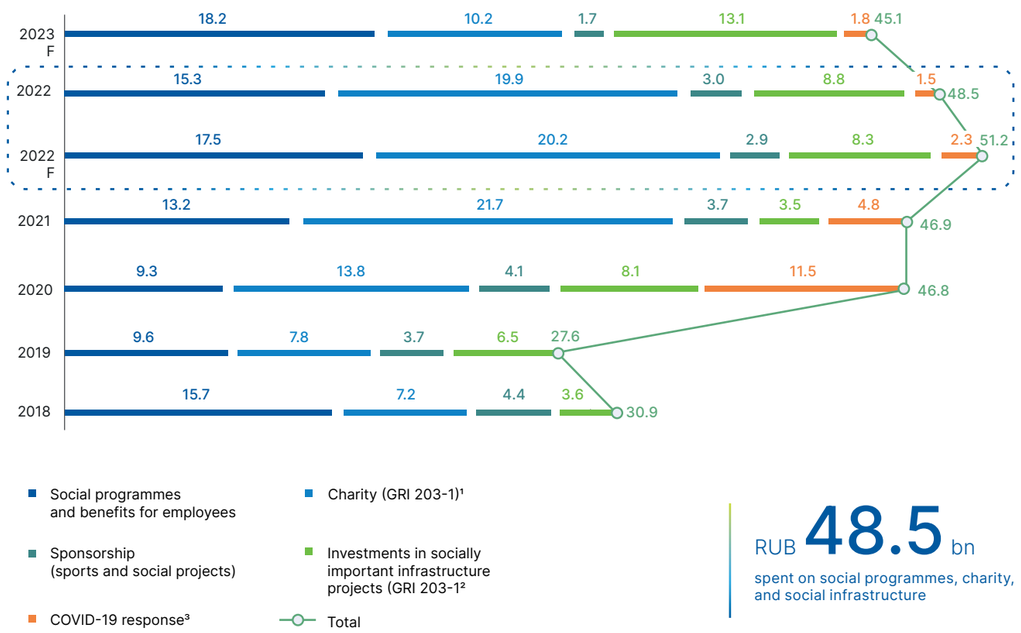
- Zapolyarye Health Resort
- Rosa Khutor Ski Resort (sponsor)
- Sochi Autodrom
- Corporate sports competitions

The Company's contribution to the development of local communities

The Group's key areas of operation in Russia include the cities of Norilsk, Dudinka and Monchegorsk, the Pechengsky District of the Murmansk Region, and the Gazimuro-Zavodsky District of the Trans-Baikal Territory. We make a sizeable contribution to the social and economic development of our regions of operation by implementing a wide range of social and infrastructure projects.

We are one of the leaders among Russian metals and mining companies both in terms of absolute social expenses and their share in revenue.

Nornickel's social infrastructure, social, charity and sponsorship expenses (RUB bn)



RUB **48.5** bn

spent on social programmes, charity, and social infrastructure

[1] Charity expenses exclude other social expenses, and accrued social liabilities in the amount of RUB 2.3 bn in 2022 and RUB 49.7 bn in 2021. Starting from 2021, the indicator includes the expenses of the Group's foreign companies.
[2] Investments in socially important infrastructure projects are expenses in the amount of RUB 7.8 bn in 2022A (actual) and RUB 10.9 bn in 2023B (budgeted) related to the GRI 203–1 disclosure standard.
[3] COVID-19 expenses include amounts allocated by the Group to prevent and combat the spread of the coronavirus infection.

Key focus areas for the development of local communities

Contribution to economic development

- Budget payments
- Employment of local population
- Cooperation development
- Development of social infrastructure as part of the Group operations (power, transport, food retail)

Infrastructure development

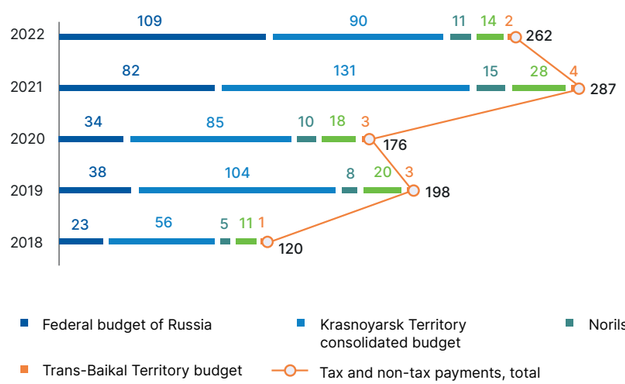
- Bridge and road reconstruction
- Land improvement
- Housing construction
- Construction and reconstruction of healthcare, sports, cultural, entertainment and research facilities
- Provision of access to high-speed internet connection in Norilsk
- Improvement of efficiency of utility services (Smart City initiative)

Improving the living standards for local communities

- Regular charitable programmes
- Promotion of sports and culture
- Corporate volunteering
- Vocational training sponsorship
- Activities of territorial development agencies

Contribution to economic development:

Tax and non-tax payments to local, regional and federal budgets[1] (RUB bn)



Budget payments

In 2022, Nornickel's tax and non-tax payments to budgets of various levels totalled RUB 262 bn, down 9% y-o-y. Most of the Group's taxes are paid by its key production facilities and go to regional budgets across their operations.

Employment of local population

GRI 203–2

Nornickel pursues an active employment policy across its key regions of operation. The Company and Norilsk Employment Centre signed an agreement aimed at retraining those out of work for the most needed blue-collar jobs.

We build partnerships with educational organisations, supporting engineering training and boosting interest in blue-collar jobs and occupations in the metals and mining industry. One example is GRK Bystrinskoye's cooperation with educational institutions in order to build its talent pipeline, with agreements on practical training of students signed with the Tomsk State University, Trans-Baikal Mining College, Chita Technical College of Sectoral Technologies and Business, Trans-Baikal State University, Irkutsk National Research Technical University, and Siberian Federal University. In 2022, about 100 students were enrolled in Bystrinsky GOK's internship programmes.

Nornickel also provides financial support to Norilsk's institutions of secondary and higher vocational education by buying books and specialised equipment for students, contributing to the maintenance works, and thus improving the quality of training. The Company actively focuses on the training of specialists for the most in-demand jobs.

[1] Tax and non-tax payments include all taxes paid, net of VAT, as well as insurance payments and customs duties.

Unemployment in key communities[1] (%)

Region of operation	2018	2019	2020	2021	2022
Norilsk	0.7	0.6	1.4	0.3	0.2
Taymyrsky Dolgano-Nenetsky Municipal District	0.9	0.8	1.2	0.7	0.5
Krasnoyarsk Territory	0.8	0.8	3.5	0.8	0.8
Monchegorsk	2.2	2.2	2.2	1.7	1.2
Zapolyarny	2.1	2.0	1.9	1.6	0.8
Nickel	2.5	3.3	3.0	2.2	1.4
Murmansk Region	1.5	1.7	2.7	1.4	0.8

The Company's regions of operation have consistently low levels of unemployment that saw a y-o-y decline in 2022. The unemployment rate across Russia came in at 3.9% in 2022, way above the level registered in the Company's regions of operation[2].

Supporting local suppliers

GRI 203–2

Nornickel's contribution to the Small and Medium-Sized Businesses and Support for Individual Entrepreneurs national project

Relevant UN SDGs

Related federal projects

- Promotion of entrepreneurship;
- Expansion of SMEs' access to financial resources.

Key initiatives and focus areas

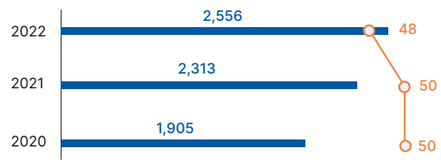
- Integration of local businesses into the Group's production chain;
- Programme to promote the social and economic development of Taimyr;
- World of New Opportunities charitable programme.

In accordance with the terms of its social and economic cooperation agreements, Nornickel develops mutually beneficial relationships with local businesses in the regions where it operates. The Company actively interacts with local suppliers and contractors, uses domestic technologies to support economic and industrial development in the regions of its operation, and plans to keep doing so going forward.

The integration of local businesses into the Group's production through long-term contracts results in synergies based on cooperation, which contributes to the economic development of the regions, support for small and medium-sized enterprises in the Krasnoyarsk Territory, Murmansk Region, and Trans-Baikal Territory, and the achievement of SDG 8 "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all".

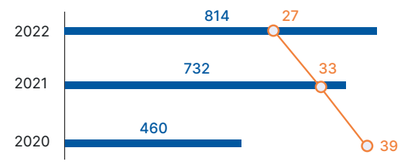
[1] As at the end of the reporting year.
[2] Source: Federal State Statistics Service.

Procurement tenders held by Polar Division (Krasnoyarsk Territory)



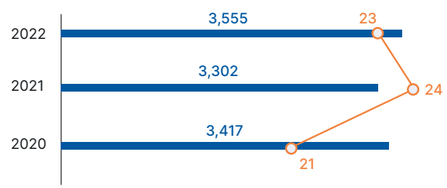
■ Procurement tenders for goods and services held by the Company

Procurement tenders held by Kola MMC (Murmansk Region)



Locally awarded procurements as a share of tenders held by the Company (%)

Procurement tenders held by GRK Bystrinskoye (Trans-Baikal Territory)



■ Procurement tenders for goods and services held by the Company

Locally awarded procurements as a share of tenders held by the Company (%)

The number of procurement tenders for goods and services held by the Company in the Krasnoyarsk Territory and the Murmansk Region was up 10.5% y-o-y to 2,556 tenders and up 11.2% y-o-y to 814 tenders respectively. Local businesses won almost 50% of the Nornickel's tenders in the Krasnoyarsk Territory, and 27% of those in the Murmansk Region. The Company's procurement expenses in 2022 were up 71.6% y-o-y to RUB 58 bn, which was due to both geopolitical challenges and the implementation of large-scale capital construction projects.

The Group's spending on local procurements (RUB bn)

Indicator	2020			2021			2022		
	Krasnoyarsk Territory	Murmansk Region	Trans-Baikal Territory	Krasnoyarsk Territory	Murmansk Region	Trans-Baikal Territory	Krasnoyarsk Territory	Murmansk Region	Trans-Baikal Territory
on local procurements, RUB bn, including:	22.3	1.6	0.7	29.0	3.3	1.5	51.5	5.0	1.5
• services	18.6	0.2	0.6	23.4	3.0	1.3	38.7	4.8	1.1
• materials	3.0	1.4	0.1	4.8	0.3	0.2	11.9	2.0	0.4
• food supplies	0.7	–	–	0.8	–	–	0.9	–	–

Developing local social infrastructure

GRI 203–1

Nornickel's contribution to the Housing and Urban Environment national project

Relevant UN SDGs

Related federal projects

- Mortgage lending
- Housing
- Creating a comfortable urban environment

Key initiatives and focus areas

- Our Home / My Home and Your Home housing programmes

For more details, please see the Social Policy section

- Projects to develop infrastructure across the regions of operation
- Measures to improve reliability of the fibre optic communication line in Norilsk
- Projects to upgrade power and heat generation, electrical grids and heat networks

For more details, please see the Climate Change and Energy Efficiency section.

Joint efforts of the business and stakeholders make it possible to create a comfortable living environment. Companies become proactively involved in developing single-industry towns, helping them leverage their promising growth drivers and become attractive destinations both socially and business-wise.

Creating and developing an accessible and comfortable urban environment for people working and living in the regions where we operate is one of the Company's priorities that we seek to achieve through social programmes addressing current and future challenges.

In 2022, Nornickel's investment was at its highest, as the Company was on track to implement its key social programmes aimed at developing cities, offering better working conditions and healthcare for our people, supporting culture and sports, and improving the environmental situation.

Vladimir Potanin,
President of MMC Norilsk Nickel

Krasnoyarsk Territory

Norilsk and Taymyrsky Dolgano-Nenetsky Municipal District

In 2022, the Company continued implementing a four-party Agreement on Cooperation for Comprehensive Social and Economic Development of Norilsk for the period through 2024 and further through 2035[1].

Agreement on Cooperation for Comprehensive Social and Economic Development of Norilsk for the period through 2024 and further through 2035 (dated 20 February 2021)

- renovation of Norilsk's housing
- upgrade of utilities, initiatives to rehabilitate the engineering and utilities infrastructure
- development of local social infrastructure
- assistance to residents of Norilsk and Dudinka relocating to regions with better climate and socioeconomic conditions
- land improvement initiatives in the municipal district of Norilsk
- safety enforcement in the municipal district of Norilsk

Total financing for the comprehensive social and economic development of Norilsk for the period through 2035 amounts to ~ RUB **120** bn

RUB **81.3** bn provided by Nornickel

RUB **23.9** bn allocated by the federal budget

RUB **14.7** bn provided by the regional budget

As part of the Agreement, the Russian Government approved a Comprehensive Plan of Social and Economic Development of Norilsk[2], with the following measured implemented in 2022:

- construction (reconstruction) of residential buildings in the Central District of Norilsk (RUB 66.6 mln allocated by the Company);
- provision of social payments for the purchase of housing to the residents of Norilsk relocating from Russia's Far North region (RUB 830 mln allocated by the Company);
- thermal stabilisation of soils under apartment buildings and social facilities (RUB 153.8 mln allocated by the Company);
- demolition of three dilapidated residential buildings in multiple occupation (RUB 60 mln allocated by the Company).

[1] For more details about the Agreement, please see the official website of the city of Norilsk.
[2] Order of the Russian Government No. 3528-r dated 10 December 2021.

Activities under the Comprehensive Plan of Social and Economic Development of Norilsk in 2022

Project	Progress in 2022
Construction of two multi-storey residential buildings located in 50th October Anniversary St. in Norilsk	The Company's contractor commenced construction
Integrated territory development in the Oganer municipal area of Norilsk (construction of multi-storey residential buildings, a school for up to 1,100 children and a kindergarten)	The contractor commenced survey and design work for the project facilities
Construction of four mid-rise residential buildings in the Central District of Norilsk at 29 Laureatov St., 31 Laureatov St., 23 Pavlova St., and 7/10 Kirova St.	The contractors commenced survey and design work
Construction of a polyclinic for 1 thsd visits per shift	Engineering surveys at the future construction site were completed; architectural and structural designing is underway
Construction of a water intake on the Norilskaya River	The buildings and structures of the existing water intake were inspected, and engineering and environmental surveys performed. Comprehensive engineering surveys were completed with the main technical solutions developed.
Overhaul of Norilsk's existing utilities infrastructure	The drafting of design and engineering documents for the overhaul of three city sewers was completed, with the sewer section in Mira St. being the first priority. The overhaul of this section comes as the first stage of a major project implemented by the Norilsk Administration for the creation of a pedestrian shopping area in Mira St. ("Model area").
Construction of a prefabricated fire station in the Oganer municipal area of Norilsk	The construction was completed and the fire station building commissioned; the Company's investment in the project totalled RUB 306 mln
Overhaul of the Integrated Social Service Centre	The overhaul was completed

Integrated Social Service Centre

The newly overhauled Integrated Social Service Centre features:

- Norilsk Integrated Social Service Centre;
- Victoria Rehabilitation Centre for Disabled Children, Children and Adolescents with Special Needs;
- Norilsk Family and Children Social Support Centre.

The integrated facility may now serve more than 6,000 Norilsk residents, offering urgent social care, rehabilitation, courses for family carers (a joint project of the Krasnoyarsk Territory Ministry of Social Policy and a major local pharmacy network Gubernskie Pharmacies), psychological assistance, rental of rehabilitation equipment (walkers, wheelchairs and multifunctional beds), etc.

In addition, since the launch of the Comprehensive Plan of Social and Economic Development of Norilsk, the Company has financed the design, survey, overhaul and refitting of social infrastructure institutions (schools and the Norilsk Industrial Technology and Service College), maintenance of the Norilsk Residential Housing Renovation Fund and research support for permafrost monitoring of soil, buildings and structures. The Company's total investment in these projects exceeded RUB 1.3 bn.

In addition to the Comprehensive Plan activities, the Company finances other socially important initiatives implemented at the request of Norilsk Mayor and identified in a survey of Norilsk residents conducted by the Norilsk Development Agency and the Norilsk Administration.

Additional activities to support Norilsk's development

Initiatives	Investment in 2022 (RUB bn)
Reconstruction of the Polar State University	1.9
Creation of the Arctic Museum of Modern Art	10.4
Construction of a multidisciplinary innovative children's education centre in the Central District of Norilsk (up to 1,100 students)	2.6
Construction of a new swimming pool in the Central District of Norilsk (Khantayskaya St.)	0.1
Construction of a 2,500-seat Ice Arena in the Central District of Norilsk	0.5

In 2022, the statements of work for the design and engineering surveys to implement these initiatives were drafted, with the design work now underway for all the facilities. The Company's total costs to finance these projects amounted to RUB 15.5 mln.

In addition, the Company financed further initiatives aimed at the social and economic development of the city and implemented at the request of the Norilsk Administration, including:

- survey and design work for the construction of residential buildings replacing demolished soviet-era buildings of Stalinist style;
- repairs of dilapidated roofs and porches of two schools;
- repairs of the roof of the Norilsk Industrial Engineering and Service College;
- upgrade of the heat and water supply and sewage utilities for the construction of a new polyclinic;
- research support for permafrost monitoring of soils and structures for 57 buildings;
- maintenance of the Norilsk Residential Housing Renovation Fund.

The total financing provided by the Company as per the case-by-case requests of the Norilsk Administration amounted to RUB 623 mln.

In 2022, the Krasnoyarsk Territory Government, the Norilsk Administration and Nornickel entered into a memorandum of intent to upgrade healthcare facilities in Norilsk. As part of the initiatives included in the memorandum, the Company allocated RUB 300 mln for the repairs and purchase of equipment for healthcare facilities in line with the approved updated priority list.

Nornickel's Polar Division implemented a number of projects aimed at sustainable social development of Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District, in particular:

- supply of medical goods and special medical equipment to healthcare facilities of Norilsk and Dudinka; in 2022, additional funds were allocated to provide healthcare facilities with privately owned vehicles for home visit appointments;
- development of the Norilsk Production Association for Passenger Transport with a view to maintaining and expanding the existing regular passenger bus services in Norilsk;
- distribution of food certificates to low-income households as per the request of the city Mayor;
- purchase of equipment (appliances) and furniture for the kitchen of the Norilsk Orphanage;
- repairing and fitting out the residential premises at the disposal of the Fedorovsky Polar State University;
- repairing and fitting out the canteen of the Polytechnic College of the Fedorovsky Polar State University;
- developing the material, technical and academic potential of Norilsk's educational institutions;
- improvement of the yard at 10 Leninsky Prospekt, which has an architectural heritage status;
- upgrading the hockey ice rink of the Arktika Sports and Recreation Centre and providing hockey teams with hockey uniforms and gear;
- building schoolchildren work teams, supporting their activities in the summer of 2022 and proceeding with preparations for the summer of 2023;
- repairing, upgrading and/or constructing the utilities infrastructure in Norilsk as part of the municipal Programme to Upgrade the Utilities Infrastructure and Improve Energy Efficiency;
- design work for the upgrade of the dilapidated main sewer along Ozernaya St. in the Oganer municipal area of Norilsk in order to ensure it can properly serve all the facilities planned for construction;
- projects and programmes implemented jointly with non-profit, public and religious organisations of Norilsk, and as part of the Secure City initiative;
- projects and programmes run in partnership with the Dudinka Administration, regional and federal public institutions operating in Taimyr, and non-profit organisations, as well support for the development of Tazovsky and Turukhansky districts, including:
  - construction of a prefabricated building in Dudinka for emergency rescue services, and the purchase of equipment and other inventory for the Dudinka Arctic Search and Rescue Unit;
  - preparing and carrying out activities to arrange summer employment opportunities for the youth in the Taimyrsky Dolgano-Nenetsky Municipal District;
  - organising and preparing for the international curling tournament in Dudinka;
  - organising and preparing for the festivities to mark the 85th anniversary of the Taimyr Museum of Local History and the 85th anniversary of the Dudinka port;
  - repairing the obelisk commemorating the 50th anniversary of Soviet power and the monument to Vladimir Lenin located on Dudinka's Embankment Square;
  - purchase of sports gear and technical equipment for the Nosok Secondary Boarding School.

Krasnoyarsk

In 2022, the Company supported the following projects in Krasnoyarsk aimed at promoting culture, arts and a healthy lifestyle locally:

- a contest for professional architects and design companies to develop a concept for the renovation of the Krasnoyarsk State Opera and Ballet Theatre and the development of the adjacent territory. Nornickel acted as a financial partner of the contest, with its representatives sitting on the jury;
- purchasing new musical instruments for the Krasnoyarsk Academic Symphony Orchestra of Krasnoyarsk Regional Philharmonic. The Company allocated RUB 210 mln for this purpose in 2021–2022, making it possible to fully renew the set of musical instruments used by the region's main orchestra;
- building the Yudinskaya Valley eco-park in Krasnoyarsk, a new recreational area in the vicinity of the Krasnoyarsk Region's administrative centre, in the depth of a natural forest. The creation of the eco-park is being financed entirely through the Company's charitable donations;
- development of a strategic master plan of the Krasnoyarsk metropolitan area until 2035. The master plan covers the territory of Krasnoyarsk, its suburbs and satellite towns.

Murmansk Region

In 2022, the Company continued implementing the cooperation agreement between the Government of the Murmansk Region and Nornickel to foster the development of the Murmansk Region and enhance its attractiveness for tourists and investors. Public-private and municipal-private partnership projects were chosen as the key instruments to implement the cooperation agreement.

As part of the agreement, in 2020–2022 Nornickel supports healthcare, culture, education and sports projects, as well as measures to improve the urban environment in Monchegorsk, Zapolyarny and Nickel.

To improve the well-being of residents and ensure its sustainable development, Nornickel participated in developing the Programme for Social and Economic Development of the Pechengsky Municipal District for 2021–2025. It envisages 50 initiatives across four main focus areas: new economy, social sector, housing and infrastructure upgrades, and comfortable urban environment.

Initiatives implemented in 2022 as part of the Pechengsky Municipal District Social and Economic Development Programme (with support of the Second School Centre for Community Initiatives)

Initiatives	Financing (RUB mln)
Signing of the agreement to develop design and cost estimate documents for the reconstruction of a water intake in Nickel	15
Establishment of the Tourist Information Centre in the Pechengsky Municipal District	2
Development of a programme to implement the Nickel master plan in terms of residential quarters renovation	7
Development of a programme to upgrade and enhance the healthcare system in the Pechengsky Municipal District	15

Nornickel Group actively participates in the life of local communities across the municipalities of its operation in the Murmansk Region by implementing social, cultural, housing, and other development projects. In 2022, we completed the following initiatives:

- implementation of public space improvement projects in Monchegorsk (RUB 144.5 mln);
- drafting of design and estimate documents for the construction of healthcare facilities in the Murmansk Region (RUB 70 million);
- renovation of sports facilities in Monchegorsk (RUB 35 mln);
- implementation of social projects in the municipalities of the Pechengsky District (RUB 15 mln).

Trans-Baikal Territory

GRK Bystrinskoye strongly supports the development of the Trans-Baikal Territory by implementing social programmes and projects that contribute to the sustainable growth of the region of is operation.

In 2022, we continued implementing the Social and Economic Cooperation Agreement between the Trans-Baikal Territory Government and Nornickel.

Initiatives implemented as part of the Social and Economic Cooperation Agreement in 2022:

- implementation of priority culture, education, and utilities projects and initiatives in the Gazimuro-Zavodsky District;
- the 9th Trans-Baikal International Film Festival, Russian Boxing Championship, and Oleg Lundstrem Jazz Festival commemorating the 100th anniversary of the arrival of jazz in Russia (financed jointly with the Trans-Baikal Territory Government);
- drafting of research-based design documents for the restoration of the Church of the Assumption of the Blessed Virgin Mary in the village of Kalinino, Nerchinsky District, which was declared a federal cultural site in 2022;
- promoting children's and youth sports to support athletes in achieving new levels of sports excellence:
  - financing the Rugby Federation of the Trans-Baikal Territory;
  - holding ice hockey tournaments, purchasing equipment and protective gear; procuring flooring for the gym of the BayRus Martial Arts Club;
  - repairs at the Molokovka summer recreation camp;
  - building of new multi-purpose sports grounds at the Trans-Baikal Teachers College, Trade and Culinary School, and the Chita Centre for Children without Parental Care;
- share-based financing of the Young Geologist club activities aimed at promoting the profession of geologist among children and teenagers.

Interaction with indigenous minorities

GRI 203–1, 411–1, SASB EM-MM-210a.3, EM-MM-210b.1

Key results for 2022

- No violations of the indigenous minorities' rights were recorded
- The Company's first-ever Free, Prior, and Informed Consent (FPIC) process for representatives of indigenous minorities in the settlement of Tukhard was launched
- The programme, aimed primarily at supporting and developing traditional livelihoods, enhancing housing, social and medical infrastructure in the settlements as well as promoting education, science and culture, was underway

RUB **412** mln

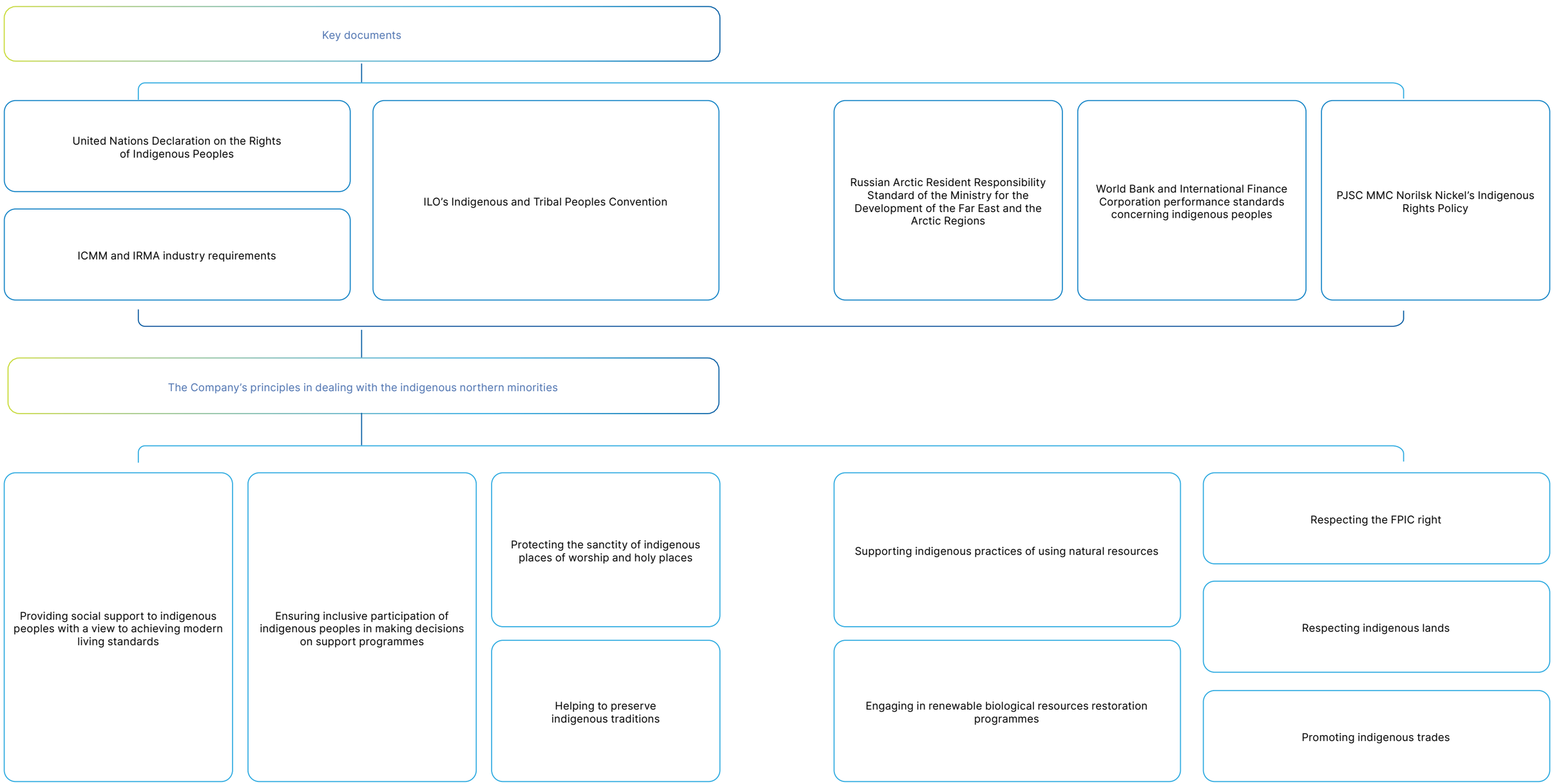
allocated by the Company on projects to support the indigenous northern minorities in 2022

Nornickel respects the rights of indigenous peoples which derive from their political, economic and social structures and from their cultures, spiritual traditions, histories and philosophies, especially their rights to their lands, territories and resources. The Company directs its efforts towards strengthening and developing neighbourly relations with indigenous minorities in the regions of operation:

- in the Taimyrsky Dolgano-Nenetsky Municipal District, the Company interacts with representatives of all the indigenous minorities, including Nenets, Dolgans, Nganasans, Enets and Evenks, and manages the relationship with their associations of Taimyr;
- on the Kola Peninsula, Nornickel works together with the Kola Sámi Association.

The Company has adopted the Indigenous Peoples' Rights Policy that defines Nornickel's key commitments in this aspect. The policy is based on principles and rules of international law, the Constitution, federal laws and international treaties of the Russian Federation.

Key principles, standards and regulations



Responsibilities in interacting with indigenous northern minorities

(GRI 2–9, 2–12, 2–13)

Board of Directors

- Approves the Indigenous Peoples' Rights Policy of the Company (on interaction and cooperation with indigenous peoples of the North)
- Approves Norilsk Nickel's Sustainability Report which, among other things, contains the information on interaction with the indigenous northern minorities

Sustainable Development and Climate Change Committee of the Company's Board of Directors

- Provides the Board of Directors with an opinion on the effectiveness and quality of the key projects developed and implemented in respect of the indigenous northern minorities
- Monitors the quality and effectiveness of any major amendments made to the strategies, goals, programmes, projects, and other important initiatives approved in the area of respecting and protecting the rights of the indigenous northern minorities
- Drafts recommendations for the Board of Directors on the implementation of regulatory and legislative instruments, standards, and association requirements in the field of respecting and protecting the rights of the indigenous northern minorities

Federal and Regional Programmes Department

- Analyses the viability of entering into partnership agreements with indigenous northern minorities and directly interacts with such minorities, their representatives, opinion leaders and economic agents
- Studies the social and economic landscape of indigenous peoples and the impact of economic, environmental and biodiversity factors on their sustainable development
- Assesses international practices for engagement with indigenous peoples
- Analyses issues considered at events, participates in consideration and resolution of the indigenous northern minorities' complaints and petitions
- Coordinates interaction with the indigenous northern minorities during the development and implementation of sustainability programmes and projects and at the stage of proposal collection
- Implements due diligence procedures and ensures inclusive participation of indigenous peoples in making decisions on drafting and implementing support programmes. Forges engagement with indigenous peoples to establish procedures for indigenous participation and representation in interactions with Nornickel

Sustainable Development Department

- Monitors and analyses changes in legislation and international standards in the field of sustainable development
- Provides methodological support, conducts stakeholder analysis for inclusion in the Stakeholder Engagement Plan, and develops this plan

Coordinating Council of MMC Norilsk Nickel for Interacting with Family (Tribal) Communities of Indigenous Northern Minorities

- Reviews the implementation of the Taimyr social and economic development programme
- Participates in the development of social design proposals in Taimyr as part of Nornickel's projects
- Develops practices and standards for engagement between an industrial company and local communities

Internal Control Department

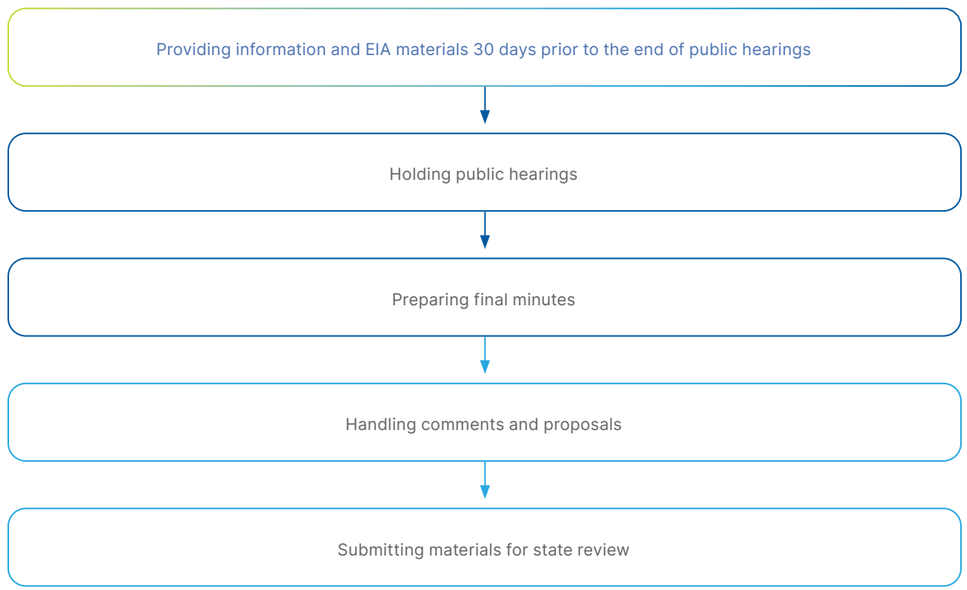
- Handles complaints and petitions of the indigenous northern minorities through the Corporate Trust Service, monitors the status of control activities

Public discussions of projects with representatives of indigenous northern minorities

According to the international and Russian laws, making decisions to proceed with projected activities requires identifying and taking into account the opinions of stakeholders (including indigenous northern minorities whose interests can be potentially affected). To this end, environmental impact assessment (EIA)[1] is conducted to help prevent or mitigate environmental impact and associated social, economic and other implications.

EIA materials, including incoming comments and proposals, are added to the documents submitted for a state environmental review, which is a mandatory procedure in Russia to receive an official approval before a project is launched.

Procedure for public discussions



[1] Order of the Ministry of Natural Resources No. 999 dated 1 December 2020 On Approving Requirements for Materials Used in Environmental Impact Assessment

Activities of the Coordinating Council of MMC Norilsk Nickel for Interacting with Family (Tribal) Communities of Indigenous Northern Minorities

GRI 2–26

In order to effectively interact with indigenous minorities of Taimyr, facilitate constructive dialogue based on the parties' mutual respect, and offer targeted assistance to indigenous peoples, the Company has established and supports the Coordinating Council for Interacting with Family (Tribal) Communities of Indigenous Northern Minorities. The minorities, now consisting of 53 communities, have traditional livelihoods on the Taimyr Peninsula.

The Council secures the Company's interaction with the communities, also with a focus on the Programme for Promoting Social and Economic Development of the Taimyrsky Dolgano-Nenetsky Municipal District in 2020–2024. Designed with the communities' active and direct involvement, the Programme covers social, economic, cultural and linguistic impacts on indigenous minorities and factors in needs and requests, values and views, national traditions and culture of indigenous minorities of Taimyr. The Programme comprises more than 40 initiatives related to such focus areas of support for indigenous northern minorities as building homes and social facilities in Taimyr settlements, bringing affordable healthcare, developing education, culture, sports and tourism. The funding of the Programme totals RUB 2 bn.

The Company's new format of direct and constructive dialogue with the communities of indigenous northern minorities has significantly contributed to expanding the scope of interaction and facilitated its steady development. This includes improving the infrastructure of settlements as well as enhancing the economy of the communities by launching new production operations, based on traditional practices of using natural resources. Such operations help process agricultural products, deliver higher added value and preserve historical traditions and cultural heritage.

Thus, in 2022, we additionally allocated more than RUB 100 mln for community development. As requested by the family (tribal) communities of Taimyr, in the summer of 2022, Nornickel purchased quad bikes, motor boats, Orionboat boats and an inflatable raft and handed them over to users. A family (tribal) community in Volochanka were provided with equipment for woodworking. We launched a large project to promote online education in eleven schools in Taimyr and are finalising both the design and cost estimate documents and the contractor selection process for constructing three rural community centres.

Free, Prior and Informed Consent process

Fine-tuning the formats of interaction with indigenous northern minorities, Nornickel was the first company to launch the Free, Prior and Informed Consent (FPIC) process in the Russian Arctic with respect to the Tukhard relocation and development programme. In order to improve the housing conditions in Tukhard, the Company proposed considering the construction of a new settlement and the residents' relocation thereto. Although the FPIC process is not directly integrated into the national laws of the Russian Federation, Nornickel came up with a solution to address the relocation issue in accordance with the international standards set out in the UN Declaration on the Rights of Indigenous Peoples. Tukhard residents agreed to join the FPIC process subject to certain conditions. These involved decision making on the relocation, choosing the site for their new settlement and determining its social infrastructure, selecting the best architectural designs as part of an architectural competition, as well as participating in all stages of the relocation programme through the elected Council of Representatives of the settlement residents.

The Company plans to roll out this practice and obtain the FPIC of representatives of indigenous northern minorities living in the Lovozero District of the Murmansk Region as regards the development of the Kolmozerskoye lithium deposit.

Key projects in support of indigenous northern minorities in 2022

All the initiatives run by Nornickel in the interests of indigenous minorities are joint activities which will be effective only if implemented through constant liaison and interaction with both indigenous minority communities and families based on a shared understanding and regular discussions, as well as inclusive participation.
In 2022, the Company invested RUB 196 mln in the Programme for Promoting Social and Economic Development of the Taimyrsky Dolgano-Nenetsky Municipal District in 2020–2024 and completed the following initiatives:

- purchasing five flats in Dudinka for orphaned indigenous children;
- constructing eight residential buildings in Volochanka and Ust-Avam;
- purchasing prefabricated buildings for first aid and obstetric facilities in Volochanka, Ust-Avam and Ust-Port (the construction to be completed in 2023);
- drafting design and estimate documents for a community centre in Nosok (the construction to commence in 2023);
- providing financial assistance to rent land plots from settlement administrations and providing these free of charge to those wishing to improve their housing conditions;
- delivering agricultural products (northern species of fish, reindeer meat) by air from settlements to retail chains in Norilsk;
- promoting online education in Taimyr and creating a single news channel in a messenger to broadcast news and videos;
- adding Volochanka, Ust-Avam, and Khantayskoye Ozero settlements to an ecotourism development project, establishing an ethnic visitor centre in Ust-Avam and teaching a hospitality course to several communities;
- introducing a Nganasan language nest in Novaya, a village of the Khatanga rural settlement; arranging the release of several linguistic and literature textbooks, in particular, the publication of 400 sets of the Treasuring up the Lessons from Ancestors book; designing educational routes on the history, culture and traditions of indigenous northern minorities;
- involving representatives of indigenous northern minorities in the congress, forums and festivals under the International Decade of Indigenous Languages.

The Company is not only consistent in honouring its commitments to the indigenous minorities of Taimyr. Our efforts go beyond the five-year programme and extend to ongoing support focused on the following initiatives:

- strengthening the infrastructure of indigenous northern minorities' communities, and preparing them for the autumn-winter hunting and fishing season;
- making helicopter flights to transport passengers and cargoes to Taimyr settlements;
- promoting the Reindeer Herder's Day and the Fisherman's Day, the most socially important holidays of indigenous minorities, to preserve their national traditions and culture;
- carrying out design and survey at the Taimyr Interregional Hospital (as requested by the Taymyrsky Dolgano-Nenetsky Municipal District authorities);
- procuring computers and laptops for supplementary education based on online learning technologies for children from low-income families;
- partially repairing the gym in a sports centre in Dudinka and replacing ventilation systems in the Arctic leisure and cinema complex.

In 2022, Nornickel continued implementation of the Students of Taimyr programme launched by the Company in 2020. The programme focuses on organising studies at the Fedorovsky Polar State University for representatives of indigenous minorities living in the Taimyrsky Dolgano-Nenetsky Municipal District. There are currently 40 indigenous students studying at the university under this targeted programme. The Company covers the costs for tuition, accommodation in Norilsk while studying, and travel to and from the place of studies, and also pays a scholarship of RUB 20,000 (on a monthly basis to those studying on-campus and only during examination periods, requiring full-time presence in Norilsk, to those studying in a mixed mode).).

World of Taimyr project competition

In 2021–2022, Nornickel hosted the World of Taimyr, a dedicated project competition seeking to support socially important projects and promote sustainable development of territories historically inhabited by indigenous minorities of the peninsula. A special feature of the competition is the grant funding system which welcomes only the indigenous minorities of Taimyr and non-profit organisations implementing projects in the interests of indigenous peoples.

Nomination	Purpose	Grant amount, RUB mln	Applications funded in 2021–2022	Requested funding in 2021–2022, RUB mln
Taimyr's Ideas	Preserving and reviving the cultural heritage and languages of indigenous minorities of Taimyr; developing new methods and techniques in engaging with children; providing career guidance to teenagers and young adults; preserving and developing national sports; nurturing environmental awareness	2 max	17	15.6
Taimyr Development	Creating public spaces and social infrastructure facilities, enabling online learning, developing and promoting alternative energy sources and fuels	6.5 max	6	18.3
Taimyr's Opportunities	Supporting and developing traditional livelihoods; creating, selling and promoting own local products, fostering domestic tourism, creating (seasonal and permanent) jobs for representatives of indigenous minorities of Taimyr	6.5 max	3	9.2
Taimyr Promotion	Exchanging successful experiences among the indigenous minorities of Taimyr and those living in the Russian Arctic; improving skills and enhancing professional competencies of teachers	2.5 max	2	3.0
Total			**28**	**46.1**

The winners embarked on the projects in June 2021 and delivered them by November 2022. The funding totalled RUB 46.1 mln covering 28 social projects. The success of the first project competition in 2021–2022 proves the initiative to be relevant and sought after.

For more details, please see the World of New Opportunities charitable programme section.

Interaction with indigenous minorities in the Murmansk Region

Nornickel held prior task force consultations with representatives of indigenous minorities in Lovozero and Krasnoshchelye of the Murmansk Region to enable two-way communication between the Company and indigenous minorities, to inform representatives of local communities about the upcoming project on development of the Kolmozerskoye lithium deposit in the Murmansk Region and further processing of lithium feedstock.
The communication involved the Sámi, Nenets and Komi as well as representatives of reindeer herding farms and independent experts in the rights of indigenous minorities.

The parties discussed the main approaches to ethnographic and sociological research, as Nornickel confirmed its intention to promptly collect and verify all possible information about entities, nature and scale of traditional livelihoods, sacred sites and burials, to identify the pool of persons potentially affected by the project and to make detailed maps of the territory. The research will involve leading research institutions and cooperation with indigenous minorities.

The Company's planned approach to dealing with the indigenous northern minorities will help protect the rights and prioritise the interests of indigenous minorities in the region. There is a lot of work

ahead of us on discussing the project details and reaching an agreement with the Sámi and the Nenets and Komi reindeer herders, who could potentially be affected by the project. The Company finds it important to factor in and minimise any and all potential adverse consequences of the project for the indigenous peoples of the region. Nornickel has extensive experience in supporting reindeer herding in Taimyr, and this knowledge and competencies will be also relevant in the Murmansk Region when implementing the lithium deposit development project.

At the moment, we are shaping up a system for interacting with indigenous northern minorities in the Murmansk Region at the sites of the Kola Division and Kola MMC. In particular, we have signed the Cooperation Agreement between the Kola Sámi Association of the Murmansk Region and PJSC MMC Norilsk Nickel. In 2022, according to the above agreement, the Company supported the Sámi people in developing their culture and preserving their traditional lifestyle relying on the best practice that proved effective on the Taimyr Peninsula. Nornickel, in particular, provided funding to prepare a single Sámi alphabet, publish pre-school Sámi language textbooks and arrange an open-air Sámi museum in Murmansk. The World of New Opportunities programme is also vital in supporting indigenous northern minorities. The programme focuses on implementing public projects and initiatives as well as fostering social competencies of local communities.

GRI 203–1, 203-2

Transport accessibility in remote locations

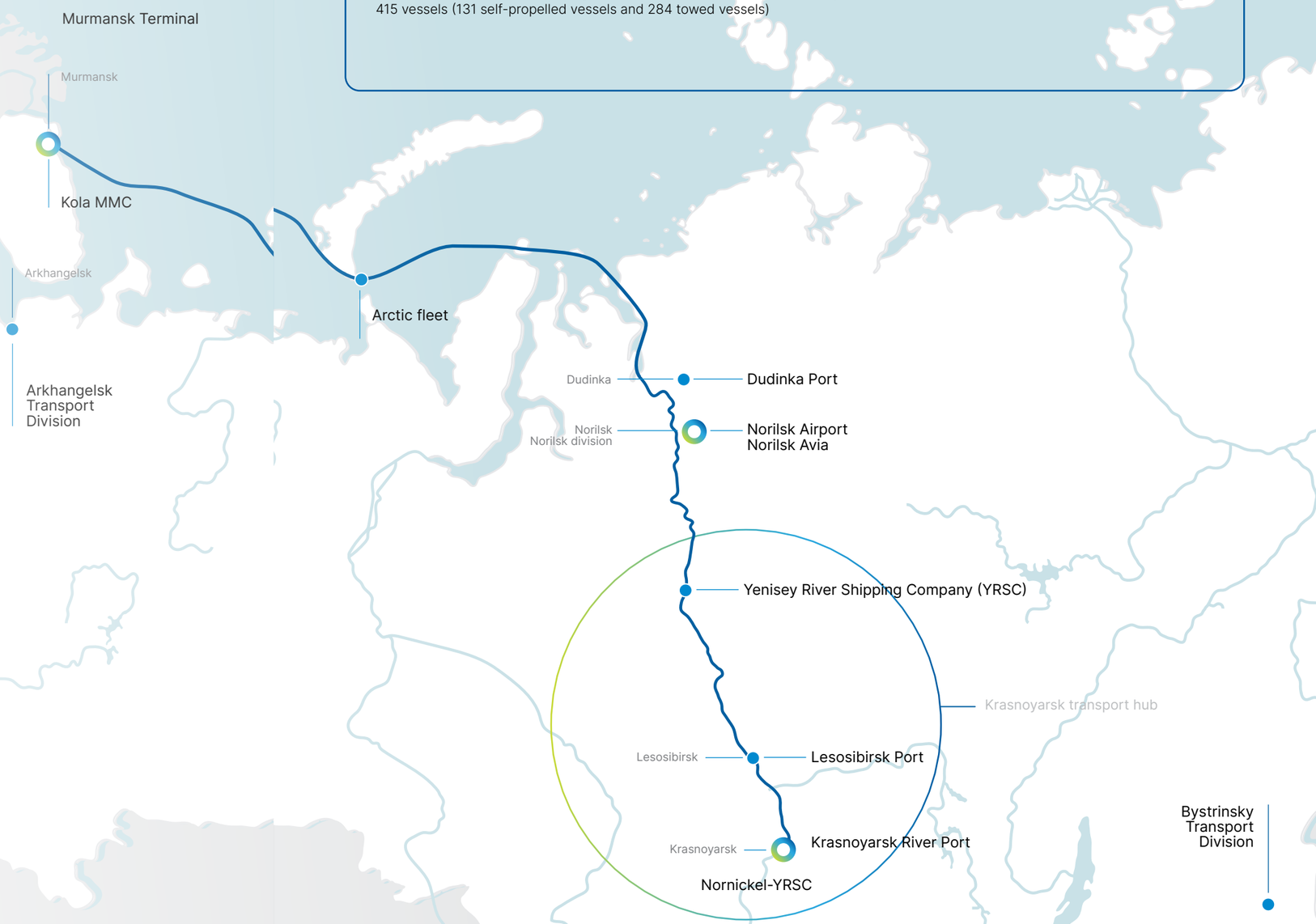
Our transportation and logistics assets:

Arc7 **Arctic fleet** (5 dry cargo vessels and 1 tanker), 2 port icebreakers (Dudinka and Avraami Zavenyagin)

River fleet of 633 vessels (200 self-propelled vessels and 433 towed vessels), including the active core fleet of 415 vessels (131 self-propelled vessels and 284 towed vessels)

Traction and rolling stock: 117 container flatcars, 2 switch locomotives, 1 switch locotractor

Port infrastructure for transshipment of cargo of all types (including dry bulk and heavy lift) from any means of transport, including a site for processing explosives (one of a kind for the Yenisey river)



Nornickel's contribution to the Comprehensive Plan for Upgrading and Expanding Core Infrastructure national project

Relevant UN SDGs

Related federal projects

- Russia's seaports;
- Northern Sea Route;
- Railway transport and transit transportation;
- Regional airports and routes;
- Internal water routes.

Key initiatives and focus areas

- Provision of year-round freight shipping services between seaports as well as transportation and handling of cargoes in the Arctic region;
- Operation and maintenance of railway infrastructure, with transport accessibility ensured in remote locations;
- Development of passenger transportation in the local regions of operation.

With our reliable state-of-the-art transport infrastructure, we are capable of meeting any freight logistics challenges and ensure continuity and sustainability of operations and well-being of local communities.

Our dry cargo fleet provides year-round freight shipping services between the Dudinka, Murmansk and Arkhangelsk sea ports while also covering other destinations and delivering socially important cargoes for the Norilsk Industrial District. In 2022, dry cargo transported by the Company's fleet amounted to 1.9 mt, up 19% y-o-y.

The Yenisey tanker is used to bring in petroleum products to Taimyr and to take gas condensate, a by-product of gas extraction at the Pelyatkinskoye Field developed by Nornickel, out for exporting. This way we help reduce pollution from these by-products and improve the local environment.

In addition to sea shipments made by our own fleet of ARC-7 ice-class vessels, the Company involves a fleet of ARC-4/5 ice-class vessels to ship additional volumes of cargo as required for large investment projects (investment cargoes) in Taimyr. From November to May, ARC-4/5 ice-class sea vessels in the Yenisey, the Yenisey Bay and the Kara need to involve three icebreakers to lay the route (with a period of involvement of at least 5–7 years). For ARC-7 ice-class vessels, it is strategically sufficient to regularly involve one icebreaker for laying the route and maintaining ice channels in the Yenisey and the Yenisey Bay. This allows for keeping up the commercial speed of vessels.

In order to make sure that the Company's strategic needs for ice-breaking services are covered, Nornickel signed a long-term charter contract for a Project 22220 serial nuclear icebreaker, with the engine shaft power of 60 MW, in 2022. (The contract is effective until 2041 and may be extended until 2051.) The Company has positive experience of involving icebreakers of this type based on a short-term contract in 2022.

After the end of lifetime and scheduled decommissioning of other icebreakers involved by the Company (until 2027–2029), the contracted Project 22220 icebreaker will be a guarantee of stable icebreaking support for the Company's vessels and reliable transportation of the Company's cargo.

MMC Norilsk Nickel's divisions and Group companies handle cargo in the ports of Dudinka, Murmansk, Lesosibirsk and Krasnoyarsk.

Dudinka Port (Polar Transport Division) is the world's only port flooded every year during spring high water and accessible by both sea and river vessels.

The port is the main cargo gate of Taimyr, which has no alternative available. In 2022, Polar Transport Division's cargo traffic exceeded the average for the recent years by more than 25% (3.5 mt). Given the large investment projects underway in the Norilsk Industrial District, the cargo traffic is expected to continue growing, which will require an expansion of Dudinka Port. The Company has allocated over RUB 6 bn for the port facilities upgrade and ramp-up over the past four years.

YRSC takes an active part in providing municipal districts of the Krasnoyarsk Territory with socially important cargoes. During the short period of spring floods, it delivers fuels and lubricants, food and other goods to locations with limited transport accessibility on the Podkamennaya Tunguska and Nizhnyaya Tunguska rivers and in other areas, including Dikson, Russia's northernmost settlement. Also, YRSC operates its own search and rescue fleet and takes part in emergency response missions on internal water routes of the Yenisey Basin.

Murmansk Transport Division is responsible for local shipments in the lower reaches of Yenisey, to the north of Dudinka Port. Dudinka Port receives agricultural products and delivers socially important cargoes for local residents, including indigenous peoples of the North, ships cargoes for the EMERCOM and transports residents of remote coastal areas.

Aviation

In March 2022, we closed the sale of 100% shares of NordStar Airlines, previously a subsidiary of MMC Norilsk Nickel, to the airline's management pursuant to the Company's decision to focus on the core business. With a view to maintaining reliable and uninterrupted air travel to and from the Norilsk Industrial District, key conditions of the transaction included ensuring seamless air travel to and from Norilsk, completing 100% of the flight programme, and following the terms of the agreement on the base air carrier of Norilsk Airport.

Railway transportation

Bystrinsky Transport Division is responsible for the entire cargo traffic of concentrates produced by the concentrator as well as the maintenance of the 227 km Naryn (Borzya) – Gazimursky Zavod railway line (Trans-Baikal Territory). In May 2022, the line saw a record high transportation volume of more than 300,000 t. Following the Company's decision, the division became part of Trans-Baikal Division. The Company plans to ramp up the transportation volume and complete the construction of a railway line connecting to the tracks of the Borzya railway station, which will reduce the train dispatch time.

Improving the well-being of local communities

Nornickel's contribution to Russia's national projects

Tourism and Hospitality Industry national project

Related federal projects

- Tourist infrastructure development
- More affordable tourist products

Key initiatives and focus areas

- Covering round-trip travel to a holiday destination for employees in the Far North and equivalent areas, and their families, including associated baggage fees
- Projects of the Norilsk Development Agency, the Monchegorsk Development Agency and the Second School Centre to promote tourism and recreation initiatives

For more details, please see the Social Policy section

Culture national project

Related federal projects

- Cultural environment
- Creative individuals

Key initiatives and focus areas

- Construction and reconstruction of cultural and entertainment facilities
- Support and development of social and cultural projects
- Contributing to preservation of national traditions and culture of indigenous northern minorities
- World of Taimyr grant competition
- Support of professional sports

The Company's activities in improving the well-being of local communities focus on developing human potential, meeting physical, social and spiritual needs of people in the regions of operation, and creating comfortable living conditions. We conduct surveys of local communities, study feedback and, when running activities in the regions of operation, take into account interests, views and preferences of local residents, as well as their history, culture, traditions, lifestyle and heritage.

In 2022, Nornickel's key programmes aimed at improving the well-being of local communities included:

- World of New Opportunities charitable programme;
- Plant of Goodness corporate volunteering programme;

For more details, please see the Corporate Volunteering section

- programmes to support sports and fitness.

For more details, please see the Sports sponsorship and the Sporting and mass public events programme sections

World of New Opportunities charitable programme

GRI 203–1, 203–2

In order to create a favourable climate for sustainable development across the regions of its operation, the Company runs the World of New Opportunities charitable programme, with a focus on supporting and promoting public initiatives, developing social partnerships, new social technologies and soft skills among local communities.

In 2022, Nornickel ran online, offline and phygital activities as part of the programme using a World of New Opportunities application, online platforms and other tools. The online space allows you to promptly inform participants about events, take part in interactive events (quizzes, surveys), and facilitate communication in the community.

In 2022, approximately 40,000 people from the Company's regions of operation took part in the World of New Opportunities events. The Company allocated RUB 382.6 mln for the World of New Opportunities programme.

Key dimensions of the World of New Opportunities programme in 2022:

Dimension	Goal	Programmes and projects
DEVELOP!	Support of public initiatives and development of local territories through building partnerships	• We Are the City! social technologies forum • Socially Responsible Initiatives competition • World of Taimyr project competition • Travel grant competition • We Are the City social engineering workshop • We Are the City! picnic • Mobile E-education digital learning platform in the Murmansk Region • School Break educational project
INVENT!	Fostering of R&D creativity and the spirit of invention	• IMAKE engineering marathon • IN'HUB international forum of innovators
ACT!	Development and growth of service-based economy	• Accelerator for regional entrepreneurs and investment session
CREATE!	Advanced development of regions	Projects of regional development institutions: • Norilsk Development Agency • "Second School" Centre for Community Initiatives of the Pechengsky District • Monchegorsk Development Agency

DEVELOP!

The projects and activities are implemented using an ecosystem of interdependent components: education – expert community – support for initiatives. A systemic approach to dealing with the local community brings about steadfast results such as advancing competencies, promoting new social technologies, supporting public initiatives, as well as rolling the experience out through national and regional expert platforms. Experts and the Company's employees witness positive results of the created ecosystem.

We Are the City! social technologies forum

The city event brings together stakeholders to discuss mechanisms of addressing social issues in the regions of operation, analyse trends and best practices in charity and volunteer initiatives, and showcase successful solutions to social issues.

The key theme at the 8th Forum in 2022 was Sustainable cities amid turbulence. The Forum events (including talk shows, the Norilsk on the World Map futuristic hackathon, etc.) brought together experts and other participants, who discussed development prospects, trends and tendencies both for the regions and the Company, analysed professional and personal strategies and new technologies, presented projects of territory development (promoting unmanned technologies, navigation solutions and pit stops in transport logistics in Taimyr; constructing waste processing plants, etc.) and exchanged experience.

The forum was attended by more than 500 active citizens.

Socially Responsible Initiatives competition

To support public initiatives in the sustainable development of local communities, the Company stages the annual Socially Responsible Initiatives competition.

Since the project's inception, the competition registered 2,885 applications, out of which 749 were selected for funding, with a total of RUB 822.5 mln allocated by the Company.

In 2022, Nornickel announced its support to 106 public benefit initiatives from Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District (Krasnoyarsk Territory), from Monchegorsk and the Pechengsky District (Murmansk Region), and from Chita and the Gazimuro-Zavodsky District (Trans-Baikal Territory). The pool of grants totalled RUB 154 mln. The projects will be implemented in 2023–2024.

The winners' initiatives cover various facets of community life in the regions, such as opening an interactive children's climbing wall, creating a state-of-the-art centre for environmental education and tourism, holding a robotics competition for children, running a career guidance club and helping navigate a professional journey, collecting and recycling waste and garbage in the tundra.

We Are the City! social engineering workshop

The workshop welcomes participants for a three-day training course to take them all the way through from generating an idea to implementing a project. The main impetus of the event is to demonstrate that every single person can make a difference for the quality of environment and the quality of life.

In 2022, the programme first included a Sustainable Development Goals and Local Community module to bring the 2030 Agenda home to the attendees. The experts drew the participants' attention to three key components of sustainable development, i. e. environmental, social and governance aspects.

We Are the City! social engineering workshop:

- in Khatanga attracted 46 people from Khatanga and neighbouring settlements, more than 200 residents joined the campaign, and, most importantly, a team of change leaders came into being;
- in Monchegorsk, attracted 25 people, more than 300 residents joined the campaign.

World of Taimyr project competition

In 2020, the Company piloted the World of Taimyr project competition designed with a two-year cycle and aimed at supporting local initiatives and promoting sustainable development of northern territories historically inhabited by indigenous minorities of Taimyr.

The nominations cover various aspects of life such as developing traditional livelihoods, fostering online education, preserving and reviving languages and cultural heritage, identifying and supporting gifted children, etc.

The competition registered 84 applications, out of which 28 were selected for funding, with a total of RUB 46.1 mln in funding. The grants ended up going to six projects by family (tribal) communities, two projects by non-profit organisations, and 20 projects by municipal and public institutions.

The selected outstanding projects, unique in terms of the content and impact on the target group, include School of Drone Racing N 72, Legends of the Avam Tundra. Ust-Avam. Volochanka, Mission: Clean Shores, etc.

In December 2022, Nornickel announced another launch of the World of Taimyr project competition, with projects to be implemented in 2023–2024.

We Are the City! picnic

The main idea of We Are the City! picnic is to offer city residents a platform for communicating and bonding, promoting a healthy lifestyle, presenting social projects and initiatives to foster responsible consumption, and proposing environmental solutions in Norilsk, Monchegorsk, Zapolyarny and Chita.

In 2022, the project attracted more than 15,000 residents and included various activities such as sports grounds, creative workshops, flashmobs, etc. 415 people participated in the Walk to Do Good challenge, 4.5 t of recyclable materials were collected and handed over for processing, and 396 km of a marathon were covered by project participants in Chita.

Travel grant competition

The competition focuses on bringing in new social technologies and practices to the regions of the Company's operation, implementing public initiatives, rolling out successful experience, enhancing professional competencies, strengthening social partnerships and interregional ties.

As an outcome of the competition, 81 people from Norilsk, Taimyr and the Murmansk Region received grants for a total of RUB 9.4 mln.

Teachers, schoolchildren, athletes, public figures and entrepreneurs had the opportunity to complete internships and advanced training courses in Moscow, St. Petersburg, Krasnoyarsk, Novosibirsk, Sochi, Penza, and Khanty-Mansiysk.

School Break educational project

The School Break educational project aims to facilitate communication among children, their parents, and teachers in a joint effort to improve the education process. In 2022, the project attracted 2,142 people from 13 localities and included the following initiatives:

- a series of offline educational modules for teachers and schoolchildren in remote areas (Potapovo, Ust-Port, Khatanga and Dudinka);
- interaction with graduates and young professionals to provide information and career guidance. The initiatives helped make school a fully-fledged element of the School-University-Business educational cluster;
- School Break.Urban marathon focused on introducing schoolchildren to practices of social design and change of the urban environment. During 88 days, 27 school teams were developing project ideas, visiting non-profit organisations, and communicating with corporate volunteers and the Company's employees. The best marathon teams had an opportunity to take part in the summer academy;
- School Break.Urban Academy (summer course): during 10 days, 50 schoolchildren were gaining knowledge and experience in urbanism, social design and event production for local communities. The participants organised a My Thoughts Also Have a Face art festival for the residents of the city with the support of the City Children's Library. The event attracted more than 200 residents of Monchegorsk, who had a choice of more than 10 creative sites to visit;
- field internship for 25 active and motivated teachers. The participants visited educational institutions, analysed the best educational practices in the regions in order to integrate new experience into their activities and develop method-based cases. The School Break educational project received recognition at the Graduate Award competition in The Best Programme for Working with Schoolchildren nomination and was included in the collection of best practices following an open competition run by the UN.

Mobile E-education learning platform in the Murmansk Region

In 2022, the Company extended support to 15 educational institutions in Monchegorsk and the Pechengsky District to join a project to deploy Mobile e-education, a digital educational platform aimed at in-depth study of selected subjects and preparation for exams and academic competitions. Based on the agreements with Administrations of Monchegorsk and the Pechengsky District, RUB 35.5 mln were allocated to purchase office equipment and supplies (computer classes), as well as licences for children and teachers. As noted by teachers, the digital platform makes a positive influence by increasing the schoolchildren's interest in education due to the new method, facilitating the learning process through home assignments checked automatically, and assisting in the preparation for lessons and personalisation.

INVENT!

IMAKE engineering marathon

The key idea of the IMAKE marathon is to foster and promote engineering developments and projects, unlock research and creative potential in children and adolescents, as well as shape up a community of aspiring engineers and scientists. The project helps build a system to engage children in the process of research and invention, stimulating their interest and motivation to develop in this area.

In 2022, the marathon participants presented their scientific and engineering inventions at various meetings and online events. During the reporting period, the IMAKE CAMP shift in Vladivostok, the IMAKE engineering marathon (immersion courses and seminars in the cities of the Company's operation, consultations, online protection of inventions and prototypes), IMAKE. Mayevka sessions (family invention), invention forums and festivals were held. The participants proposed such projects as A Device for Remelting Plastics, A Jacket with an Electric Power Generator, Equipment for Balancing Dry and Moist Air Airrin, etc.

More than 3,500 schoolchildren from the regions of the Company's operations took part in the project activities.

IN'HUB: international forum of innovators

The international forum of innovators IN'HUB is a series of events for inventors and innovators (employees of industrial companies, students and postgraduates, schoolchildren and teenagers) which provides an opportunity for intersectoral interaction of inventors, industrial companies and investors for the joint development of future technologies.

The event was organised by the Ministry of Industry and Trade of the Russian Federation, the Government of the Novosibirsk Region and MMC Norilsk Nickel in collaboration with international and Russian partners such as International Federation of Inventors' Associations (IFIA), the Centre for International Industrial Cooperation of UNIDO in the Russian Federation, Gorodissky & Partners, an intellectual property law company, etc.

In 2022, the IN'HUB project included the following initiatives:

- The inventive projects competition allows experienced and novice inventors with breakthrough ideas to present an innovative project to potential investors, get recommendations and advice from an expert jury, take part in a world-class exhibition, and receive recognition and support. In 2022, the winners were such projects as Interval Train Traffic Control System, Hybrid 5D Printer Stereotech, BIO Industrial Air Cooling System, etc.;
- The international forum of innovators IN'HUB 2022 was a three-day international exhibition. The agenda included the final round of the Inventive Projects Competition with an international jury, presentation of the finalists' projects, a business and discussion programme, and master classes, public lectures and activities popularising invention. Among the forum participants there were individual inventors and industrial companies, national and regional innovation associations, representatives of small, medium and large businesses, venture funds, and international public organisations.

Applications for the inventive projects competition can be submitted at www.inhubforum.com, the portal which also renders assistance to inventors in patenting matters and provides access to educational programmes (webinars, lectures). In 2022, the IN'HUB marketplace was launched, with a virtual catalogue of projects by the finalists of the inventive projects competition. This service provides an opportunity for quick contact and organisation of business meetings with authors of innovations. In 2022, the competition registered 1,300 applications, of which 490 underwent a formal review, and 204 were presented at the Forum and posted on the marketplace. At the IN'HUB international forum, 30 foreign inventors from Switzerland, Austria, Israel, Egypt, Iran, Indonesia, Kazakhstan and Belarus presented their projects. Russian inventions and developments were presented by residents of 42 regions of the Russian Federation.

Arctic Wave festival of R&D discoveries and inventions

The Arctic Wave festival, organised by Nornickel in cooperation with the Administrations of Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District, Monchegorsk and the Murmansk Region, aims to cultivate interest in science and technology among the youth, supporting creative engineering ideas and innovative thinking in schoolchildren, and demonstrating the latest domestic and global scientific achievements.

It was first held in 2015 in Norilsk and Monchegorsk and after several years reappeared in 2022 in a new format. The Festival covered five cities of the Company's operation, starting in Norilsk, then moving to Dudinka, visiting Nickel and Zapolyarny and ending in Monchegorsk. In total, the event lasted 20 days.

In 2022, the Festival brought together more than 4,000 people at various educational events such as shows, quests, lectures and engineering workshops, with eminent scientists and modern researchers as speakers. Schoolchildren and students were offered to:

- take a course at the Educational Hub (more than 1,000 schoolchildren and students from Norilsk and Monchegorsk acquired new knowledge and skills);
- visit Arctic Explorers quests, immersive scientific and educational events dedicated to the history of great Arctic discoverers and basic instructions on how to prepare for an Arctic expedition, developing the skills necessary for a scientist (more than 1,200 schoolchildren of 8–14 years of age gained the Arctic Explorer skills; the programme was held 40 times during the Festival);
- participate in a special programme for future engineers (more than 50 junior IMAKE legionnaires whose age did not let them go to the IMAKE Science Camp in Vladivostok had an opportunity to take an express course in invention in the IMAKE Laboratory in Norilsk and Monchegorsk;
- attend an evening lecture hall (with short popular science lectures and talks, scientists' recommendations on mitigating COVID-19 consequences, and discussions about the latest technologies);
- see an interactive scientific show (chemical and physical experiments), a large-scale opening and closing ceremony of the festival (exhibition of unique technical inventions, lectures, a multimedia and laser show).

Preserving the environment in the Arctic and reflecting on the Great Arctic Dream (conquer, explore, master) were the main themes of the festival. Dedicated videos told the audience about the explorers developing this unusual territory, about the challenging present of the Arctic and an amazing future that can be created by scientists and innovators who are working on new solutions for the region.

ACT!

The ACT! initiatives and projects focus on developing the service economy, improving the business climate, and creating opportunities for the development of small and medium-sized businesses, including social entrepreneurship (social investments in small and medium-sized businesses to address local social problems).

Since 2014, Nornickel has funded 34 business projects for a total of over RUB 110.1 mln, helping create more than 156 new jobs. Over 32 business projects were launched by the graduates of the Social Entrepreneurship course and the intensive Business Projects Accelerator programme on their own. There are social entrepreneurship clubs up and running on a permanent basis in Norilsk and Monchegorsk.

Business Projects Accelerator

The Business Projects Accelerator is an acceleration programme for small businesses organised by Nornickel in partnership with the Centre for Regional Development and Business Technologies of the Russian Union of Industrialists and Entrepreneurs in the regions where Nornickel operates. The programme aims to boost entrepreneurial initiative and accelerate the development of small businesses and projects seeking to address social and environmental issues.

Participation in the accelerator enables small businesses and NGOs to scale up financially, boost performance in terms of achieving better qualitative and quantitative results, engage the most motivated employees in the development of new products, and use available resources more effectively, while also entering new markets, and improving the perception of their organisation.

The accelerator programme commenced in November 2021 with a kick-off workshop featuring training sessions in market analysis and product development, marketing and product promotion, business economics and finances, personal effectiveness of an entrepreneur, effective team building, and specifics of small-sized businesses in extreme northern conditions. Its curriculum includes a series of thematic workshops that will be held throughout its course (for example, training on drafting a presentation for the demo day and investment session).

Individual work of the participants implies the consolidation and application of the acquired knowledge and skills, as well as recommendations from mentors based on the results of the first month of the accelerator programme. As part of next active tracking the participants can use their newly gained experience to adjust their business project.

In April 2022, the annual investment session was held, featuring the final presentation of business projects by the programme participants. It brought together entrepreneurs and invited experts from Norilsk and the Murmansk Region. During the investment session, eight business projects were presented, claiming funding from Nornickel, and seven projects received support in the form of two-year interest-free loans for some RUB 17.4 mln.

The funds provided by the Company will be used towards business development in Norilsk, including the Shandy Candy eco-showroom, the purchase of training cars for the Autocourses No. 1 driving school, and the construction of the She-Bear Putorana Glamping site. Other initiatives that won the Company's support are well-known city projects, including the Coffee Friends coffee shop and the DANCE PLACE choreography school. In Zapolyarny, the winning projects were a to-be-built SteamOK family bath and health house, and a new location of the northernmost barbershop.

Over the course of the Business Projects Accelerator training, the participants' projects showed solid growth, with the number of their clients, revenue and profit up 1.2x, 1.3x and 1.4x, respectively, and the aggregate profit of all participating projects up by RUB 2 mln in absolute terms. Their planned KPI targets were also achieved.

A total of 74 entrepreneurs were enrolled in the Business Projects Accelerator sessions, with 35 participants from Norilsk, Dudinka, Monchegorsk, Zapolyarny and Nickel successfully completing the programme. For the first time in 2022, the accelerator welcomed startup project leaders and representatives of the non-profit sector among its participants.

Participant feedback

My project is about offering travellers comfortable accommodation on the unique Putorana Plateau, which is not a mass tourism destination. To do this, I plan to purchase temporary accommodation units, in particular, summer glamping tents or yurts. These are quick-to-set-up structures that can be dismantled for the winter. I plan to offer Norilsk residents, city guests, travellers, bloggers and tourists individual tours costing around RUB 200,000, as well as weekend getaway programmes.

Leonid Kaushan,
She-Bear Putorana Glamping project owner

Thanks to our participation in the accelerator programme, we realised that we needed to act to get our products into retail chains, moving forward from the preliminary supply agreements that we already had. Further on, we expect to see our sales grow at a rate of 500 kg per month, and will use the loan we hope to receive from the Company to purchase packaging equipment.

Sergey Serbin,
Coffee Friends project owner

After completion of the accelerator programme, we launched two additional groups for children, with revenue and profit going up by 29%. Now we need funds to repair one more dance hall. Our school offers a comprehensive choreography programme, which includes eurhythmics, dancing games, physical training, and floor gymnastics.

Lilia Yakupova,
DANCE PLACE choreography school project owner

CREATE!

The CREATE! dimension focuses on creating infrastructure for advanced development of the service economy, improving the quality of life in the regions where the Company operates, and helping local businesses sell their products and services to external markets. These initiatives are implemented by territorial development institutions, including the Norilsk Development Agency, the Second School Centre for Community Initiatives in the Pechengsky District, and the Monchegorsk Development Agency.

Norilsk Development Agency

Since 2017, the Norilsk Development Agency, established by the Norilsk Municipality, Nornickel and Vladimir Potanin Foundation, has been promoting favourable conditions for sustainable social and economic development of Norilsk, creating a favourable investment climate, and implementing economic diversification and urban transformation projects.

The Norilsk Development Agency carries out its activities in cooperation with representatives of local communities and Nornickel as the city's largest organisation, with a focus on:

- promoting investment and developing the business environment;
- fostering tourism;
- developing the urban environment;
- implementing social, cultural and educational projects.

In 2022, a total of 42 face-to-face meetings were held across all focus areas and were attended by 4,200 participants, including community and business representatives, the Company's employees and experts. Over the past five years, more than 160 projects improving the well-being of Norilsk residents have been implemented by the Norilsk Development Agency or with its involvement.

Focus area	Projects
Promoting investment	• Development of a Sustainable Waste Management Concept (including the use of circular production technologies at the Eco-Industrial Park) • Creation of an industrial park with a building materials production cluster • Support for investment projects in the service economy
Development of the business environment	• Training sessions and master classes
Fostering tourism	• Development of the Arctic tourist and recreation cluster • Development of the Ol-Gul ski lodge tourist and recreation area • The Taimyr Hospitality project implementation • Holding sports events: the Norilsk leg of the X-WATERS Open Water Swimming World Championship held on the Putorana Plateau; the Norilsk Trail run • Participation in Russian and international tourism exhibitions
Developing the urban environment	• International competition to create an architectural and space planning concept for Norilsk renovation until 2035; • Project to create an architectural and space planning concept for the development and improvement of public spaces along the Lake Dolgoye embankment; • City-wide major cleanup of Lake Dolgoye; • Improvement of public lighting and development of a new, modern-look design for public transport in Norilsk; • Benchmarking of available roofing materials designed for various types of roofs.
Implementing social, cultural, and educational projects	• Big Argish festival 2022; • Academy of Creative Industries project; • School of Urban Moderation training course; • Transformation of the Fedorovsky Polar State University; • Concept of the Dolgikh Lyceum.

Promoting investment

As at the end of 2022, the Norilsk Development Agency was supporting 64 investment projects, 22 of which have the Russian Arctic residency status. The supported projects include the construction of an Arctic data processing centre, the launch of a children's entertainment centre, the opening of a bakery, the production of rubber coatings, and more.

Statistics for projects with the Russian Arctic residency status in 2022

Indicator	Value
Total investment, RUB bn	2.3
Expected tax payments (over 10 years), RUB bn	7.6
Expected new jobs	502
New jobs actually created by 2022	52
Subsidies to compensate employee social benefits paid by employers with the Russian Arctic residency status[1], RUB mln	2

Economy Projects in Cities, with participants discussing the creation of an Industrial Park featuring a building materials production cluster and an eco-industrial park in the Norilsk Industrial District. This is an example of investor coordination taking into account the priority development areas in Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District.

Development of the business environment

The development of small and medium-sized businesses helps strengthen social and economic well-being in Norilsk, provide incentives, opportunities, and conditions for doing business, inspire Norilsk residents to unlock their potential, shape the local management culture and business climate, and create an SME support platform powered by information technologies.

The following events to support entrepreneurial activity in Norilsk were held in 2022:

- public discussions held on the development of small and medium-sized businesses, attended by 675 people in person (including 52 representatives of the Company);
- training sessions and master classes held for 257 Norilsk entrepreneurs.

Fostering tourism

Efforts in this area are focused on promoting tourism and increasing the tourist flow in Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District.

[1] Subsidies are provided to four entrepreneurs (with a total of 22 jobs).

Projects to promote tourism in 2022

Goal	Projects and initiatives in 2022
Creation and development of tourist infrastructure	• Development of the Arctic tourist and recreation cluster (bringing together more than 80 entrepreneurs and the tourist community of more than 300 people, including NGO representatives and experts). The tourist flow in 2022 exceeded 12,000 people (up from 2,900 people in 2019) • Development of the Ol-Gul ski lodge tourist and recreational area (a small circle of skiing and walking trails was built) • Creation and approval of the Concept to develop the Schmidt Mountain tourist and recreation area. The construction of the longest tourist staircase in Russia (5.6 km) is planned with three covered viewing platforms and educational integrations
Facilitating the emergence of new forms of tourism and the local tourist offering	• Registration of two new tour operators, creation of three ethnographic villages, development of 19 new tourist routes, registration of 70 self-employed entrepreneurs engaged in tourism projects • Participation of eight Norilsk and Taimyr producers in the Arctic Souvenir country-wide competition to support Arctic trades and souvenir artisans • Participation of nine Norilsk facilities in the Open Industry country-wide industrial tourism accelerator, with plans to launch 16 package tours including industrial site visits
Assistance in improving the quality of tourism and hospitality services	• 36 events held; 180 guides and instructors trained and certified, and eleven tourist routes certified as part of the Taimyr Hospitality project • Training professionals from the tourism industry in various areas. RUB 800,000 spent from the regional budget to provide training to the cluster members, with 28 guides and instructors trained
Promotion of tourist attractions and products, including digital promotion	• The Norilsk leg of the X-WATERS Open Water Swimming World Championship held on the Putorana Plateau, with 27 swimmers from across the country taking part, and a record set for the most massive cold water swim in Russia • The Norilsk Trail run, the first off-road trail-running event in the history of Taimyr, which brought together some 40 participants • The MITT-2022 international travel exhibition, featuring seven tour operators from the Arctic cluster, sightseeing tour agencies and local product manufacturers among participants. The cluster's stand was awarded the grand prix as the most creative stand and drew more than 9,000 visitors as part of the exhibition's three-days programme • The Travel Ventures video project exploring the regional travel potential (19 episodes released in 2022) • Promotion of the region as a travel destination as part of the Route of the Year All-Russia Tourist Awards, the Bering Strait International Festival (Anadyr, Chukotka), the 2nd Russian Travel! Forum (Moscow), and others

During the reporting year, public discussions on tourism development issues were held, as well as other face-to-face events involving the city residents, that were attended by a total of 791 participants, including 212 representatives of the Company.

Developing the urban environment

In 2022, the Norilsk Development Agency, jointly with the Norilsk Administration, representatives of Nornickel, and the CENTRE Lab international urban laboratory, held an open international competition to create an architectural and space planning concept for Norilsk renovation until 2035 that drew 27 bids from across 13 countries.

Three consortia made of Russian and foreign architectural organisations, including the Higher School of Economics, State

Research and Design Institute for Urban Development of the City of Moscow, and Krasnoyarskgrazhdanproyekt Territorial Institute of Urban Planning were shortlisted for the final round. Each finalist proposed solutions for making the city a better place to live, study and work in, improving the efficiency of pubic use of the city's spaces, as well as landscaping, and enhancing transport and engineering infrastructure. The final stage of the competition resulted in Nornickel obtaining as much as three architectural concepts at once.

In addition, the following initiatives were completed in 2022 with a view to creating comfortable open urban spaces:

- a project to create an architectural and space planning concept for the development and improvement of public spaces along the Lake Dolgoye embankment;
- the first city-wide major cleanup of Lake Dolgoye, which brought together representatives of the city administration, Nornickel, sports communities, entrepreneurs, and active citizens (a total of more than 130 people);
- improvement of public lighting and development of a new, modern-look design for public transport in Norilsk;
- benchmarking of available roofing materials designed for various types of roofs, with the materials transferred for further use as part of repairs in municipal projects.

In 2022, public discussions were held on the development of urban infrastructure (including co-design) in Norilsk, in which 729 people participated in person (including 189 representatives of the Company).

Implementing social, cultural, and educational projects

In 2022, the Norilsk Development Agency, with the support of Nornickel and the administrations of Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District, organised Big Argish, the main ethnic festival of the Taimyr Peninsula. In the reporting year, it focused both on the nomadic and village lifestyle of the local indigenous peoples. Participants of several research expeditions, as well as representatives of the Nganasan, Evenk, Dolgan, Enets, and Nenets communities themselves, shared their experiences of village life on the vast expanse of the Taimyr tundra, as part of events in Norilsk and Dudinka. More than 10,500 guests had the opportunity to immerse themselves in the culture and way of life of the Taimyr ethnic groups, and explore their philosophy. The festival featured ten chums, two reindeer sled caravans, and a creative space with a large programme, including lectures, master classes, and performances.

As part of the School of Urban Moderation training course developed and held in 2022 for media representatives and public opinion leaders, seventeen Norilsk residents interested in learning the technology of urban moderation were trained to skilfully initiate and lead an urban dialogue. A three-month training programme offered them an opportunity to moderate meetings, workshops, discussions, and other activities (including five city-wide activities) under the online guidance of the course author.

In the field of education, 2022 saw the continued transformation of the Fedorovsky Polar State University. The architectural and space planning solutions for the new campus were developed, and a series of training events were held for the university managers and staff (22 people). Additionally, the concept for the Dolgikh Lyceum was developed and approved, with a range of training activities organised for the project team members.

Overall, the social and cultural events held in 2022 as part of the CREATE! dimension were attended by 1,783 people in person.

Second School Centre

Following the shutdown of smelting operations in the town of Nickel, the Company partnered with members of the local community and Russia's Monotowns Development Fund to identify the key priorities of a strategy to support continued social and economic development in the Pechengsky District. They include creating new businesses based on ready-made business models, opening a universal industrial park, developing the service economy and tourism, and transforming the social and cultural environment.

The Second School Centre for Community Initiatives in the Pechengsky District was set up to integrate the efforts toward the implementation and support of the Programme for Social and Economic Development of the Pechengsky Municipal District for 2021–2025 and the Conceptual Framework for the Social and Economic Development of the Pechengsky District. The centre is located within a public space.

In addition to supporting the social and cultural transformation, the centre acts as an integrator for the development of economic diversification projects focused on business development, urban environment, tourism, as well as increasing the social activity of the population and shaping a new image of Nickel and the entire region.

Second School Centre's projects in 2022

Focus area	Key projects and outcomes in 2022
Tourism	• Gastro Industry Fest festival featuring industrial technology and gastronomic shows, technology workshops, works of art, and music (the event was attended by 2,229 guests, 15 restaurateurs, and 12 industry participants) • Creation of a tourist information centre (premises to accommodate the centre were renovated, and an online travel catalogue of the Pechengsky Municipal District was developed) • Spire 555 eco-industrial route (a new eco-industrial travel route was created and improved, now featuring two viewing platforms, one resting point, one camping site, and two works of arts)
Promoting investment	• Creation of a Recreation and Extreme Sports Park in Nickel (a research of the market and target audience was conducted, topographical surveying completed, and the business case developed) • Drafting a development strategy for the Pechenga Polytechnic College (terms of reference for the project strategy development were drafted)
Business	• Business Residence project (fairs, entrepreneur meetings with experts and master classes were held, and the Women of the North club set up) • Business Goes to School project (workshops on developing leadership and communication skills were held for high school students, teachers were trained to use modern technological devices in education, and an online training course on starting an IT career was held in the Pechengsky District) • Competition for interest-free funding of business projects (a total of RUB 212 mln was allocated in 2020–2022 to support local business projects, with 60 local residents employed as part of these projects, including BROD bakery and confectionery, the Atlas multifunctional complex, and others. In 2023, the opening of the Polaria hotel and an eco campsite in the Pechengsky District is planned)
Culture and education	• Nikel2Art project (works of art were designed and installed, with exhibitions of paintings and works of art held) • Nickel-Tourism-2025 project (a professional retraining programme "Arctic destinations management and Arctic tourism product development" was run) • Camp World Tree volunteer camp project (work was carried out to clean up the Kolosyoki riverbed, improve the area around the pedestrian bridge, etc., with a total of 208 tonnes of waste collected and prepared for removal) • Northern Hospitality Volunteers project (theoretical and practical sessions were held for teenagers from the Pechengsky District, and 20 volunteers participated in the Northern Wind and Gastro Industry
Urban environment	• Demolition of Dilapidated Buildings in Nickel project (demolition of buildings that had been in a dilapidated condition for 20 years were completed in 2022) • Festival Square project (utilities connections were built, and installations, stands and the stage mounted; the works are planned to be completed in 2023) • Development of a programme to implement the Nickel master plan in terms of residential quarters renovation (inspections of residential buildings were carried out, the strength of structures assessed, and the prospective population study for the town of Nickel developed) • Oktyabr Community Centre reconstruction in Zapolyarny (specifications, the land plot layout and architectural and technical solutions were developed, with engineering surveys and inspections completed) • Reconstruction of the water supply network and sewage treatment facilities in Nickel (development of design and estimate documents for the water intake commenced) • Development of a design project for a pedestrian shopping area in Nickel (two design projects were developed and submitted for voting to be included in the Creating a Comfortable Urban Environment government programme for 2023. Almost 3,000 people took part in the voting).

Monchegorsk Development Agency

Monchegorsk Development Agency is a single centre for Monchegorsk development founded by Nornickel and the Monchegorsk Administration. Its mission is to create conditions conducive to the growth of Monchegorsk's economy, with the aim of reducing its dependence on Nornickel as the city's largest enterprise, improving the quality of life for local residents, and creating a comfortable urban environment.

Since 2021, the Agency has been focusing its activities on five key areas: tourism, urban environment, social and cultural development, business and investment, and branding.

Tourism

Imandra Tourist and Recreation Cluster

At the initiative of the Monchegorsk Development Agency, the Imandra Tourist and Recreation Cluster is being created to unlock the local tourism potential, boost the profile of Monchegorsk and its surroundings, increase the tourist flow, take the local tourism industry to a new level, and improve the quality of life in the region.
As at the end of 2022:
- the master plan for the Imandra Tourist and Recreation Cluster was developed and approved;
- four meetings with the tourism community representatives were held, drawing 65 permanent participants;
- 50 cooperation agreements were signed (including those with regard to collaboration in holding the Imandra Fest events, their marketing support and other activities);
- communication channels were established, including the Imandra Cluster Telegram channel and regular quarterly offline meetings.

Imandra Fest

Imandra Fest is a large-scale festival organised by the Monchegorsk Development Agency, which lasts for a full year. It features multiples events held in Monchegorsk and its surroundings that combine environmental activities, sports, and recreation.
In 2022, the Agency and its partners organised and held a total of nine events, including the X-WATERS Imandra international open water swimming series, the Imandra Viking Fest (an international family festival of Nordic culture in the format of a Viking hiking camp), the Mystery of 1,000 Lakes quest (an automotive team quest), the Moncha Night Trail (a night run under the northern lights in the rugged terrain of the Kola Peninsula), the Garazhane festival (centred around the culture of the garage owner community and combining it with urban activities), and more.

Marketing Monchergorsk as a tourist destination

Marketing communication channels were set up to effectively reach out to tourists, including the Visit.Imandra website and social media groups (VK, Telegram, etc.). Their total audience amounted to 2.7 million people.

Tour Operator School

In 2022, the Tour Operator School offered eight training modules and 33 theoretical classes on the basics of tour operator activities. The training was free of charge, with guides, tour operators, activists, and entrepreneurs from Monchegorsk and the Murmansk Region learning to create and promote popular tourism products.
At the end of the training, the students created ten presentations showcasing local travel and tour products. The product cards were posted on the region's tourism website (visit-imandra.ru).
A total of 49 people applied for the training programme, with four tour products making it to the final stage, and three new jobs created in the Monchegorsk District.

Urban environment

City Dweller School in Monchegorsk

The City Dweller School helps residents learn how to implement their ideas for creating and improving public and courtyard spaces in Monchegorsk. The school experts also share insights into trends and successful case studies related to urban improvement and the development of small towns in Russia. Furthermore, residents are trained to leverage government and grant programmes that will be helpful in implementing urban projects.
In 2022, the school held 15 lectures on various aspects of urban development.
Following the completion of the 2022 training course, the school partners selected two initiatives proposed by the course participants and provided financing for their implementation.

Improvement of the Revolution Square in Monchegorsk

In 2022, a concept for the improvement of the Revolution Square in Monchegorsk was developed.
A set of drawings (master plan, transportation scheme, surfacing layout, landscaping and lighting plans, etc.) and graphic visuals were prepared in line with the proposed design solutions, and a transportation model was developed for the movement of vehicles and pedestrians based on the chosen layout option (circular traffic movement).

Social and cultural development

Management strategy for the development of School No. 5 in Monchegorsk

The project aims to create a modern learning environment in Monchegorsk, leveraging the existing schools and addressing the expected decline in the number of students. The management strategy for the School No. 5 development can be used as a model strategy to develop other schools in Monchegorsk, helping improve public satisfaction with the quality of education and overall well-being in the city, while also contributing to the effectiveness of utilising school buildings.

ArtArctica residence
The project seeks to create a favourable pubic environment to attract and bring together creative individuals and drive the creative industry development in Monchegorsk.
In 2022, six master classes were held by the ArtArctica residents for the Monchegorsk locals, and a mobile app was developed, featuring the Murmansk Region's first ever augmented reality park (ArtArctica AR Park) with six unique works of arts highlighting the local natural and cultural heritage.
The project helps foster a greater sense of community and ownership by involving residents in the creation of local attraction points.

Monchegorsk creative cluster development concept
The project seeks to advance the creative industries in Monchegorsk by promoting the production and provision of goods and services with high added value derived from intellectual property items.
In 2022, a community of potential cluster residents was formed, the Creative Cluster Telegram channel was joined by more than 300 members, and applications for the cluster residency were submitted by entrepreneurs from Moscow, Yaroslavl, St Petersburg, the Krasnodar Territory and the Republic of Altai as well as from the Baltic states.

Social and cultural development

Drafting a development strategy for the Monchegorsk Polytechnic College
The college's strategy and management team development is focused on ensuring the training of highly qualified professionals for the key sectors driving economic growth in the Monchegorsk Municipal District and the Murmansk Region in line with their forecast technology-driven growth and demand for skilled professionals.
The management team is tasked with developing new basic principles and requirements for leading the college in a changing environment, designing flagship training programmes, and holding meetings with partners. A series of strategic sessions is planned for 2023 to implement the developed strategy.

Business and investment

Arctic startup
Thanks to the successful launch of the Youth Startup project in 2021, Monchegorsk benefited from several new business ideas being brought to life. In 2022, the project continued with minor adjustments, welcoming not only young, but also more mature and experienced entrepreneurs willing to start a business in Monchegorsk.
The participants attend workshops on motivation, marketing, promotion, niche search, and funding, communicate with mentors, develop business plans, present their ideas to experts and potential investors, and receive feedback on the viability of their projects.
As part of the project, 36 funding applications were developed and submitted, with 11 ones being selected by development institutions and receiving financial support in the amount of RUB 25.2 mln.
Also, Monchegorsk entrepreneurs can receive a subsidised loan of RUB 50 mln to finance their projects as part of the Arctic Investor programme. In 2022, five investment agreements were concluded for a total of RUB 151.6 mln

Monchegorsk investment portfolio
In 2022, promising investment opportunities were presented to entrepreneurs from all over Russia with a view to taking the city's economy to a new level.
The investment portfolio features 16 projects in the spheres of tourism, service, and other small-scale business ideas (food truck, glamping site, houseboat, a Viking port, cold storage, ice cream factory, and others).
Each of the proposed projects will enjoy consumer demand in Monchegorsk as confirmed by a large-scale survey of the target audience and its needs.
The Monchegorsk Development Agency provides administrative, organisational and informational support to potential investors.

Business House School for young entrepreneurs
In 2022, a business reality show was launched for young people from the Murmansk Region aged 16 to 25 and keen on entrepreneurship. A total of 130 applications were submitted, with 21 candidates selected to participate in the show, and 20 experts invited as mentors. The winner of the project chose training at the Arkady Novikov Culinary and Restaurant Management Schools as the main prize.

Franchise Fair
The Franchise Fair aims to introduce both novice and experienced entrepreneurs to the franchise model opportunities for business development, which include subsidies, loans, crisis management insights, and more.
In 2022, the fair was held for the second time, and in addition to franchise presentations from different regions, it also featured training modules, themed workshops, and discussions. It also leveraged social surveys conducted prior to its launch.

Branding

Monchegorsk brand communication strategy

In 2021, a global project was launched to develop a brand strategy, graphic design style, unique map of the city, and design code for Monchegorsk.
The surveys, focus groups and in-depth interviews were carried out to get to know Monchegorsk residents better, identify the unique features of the city and explore its historical background, which became the cornerstone of the region's brand strategy.
As at the end of 2022:
- a communication strategy was developed;
- a website (knowledge base, guidelines) for the use of city's brand was developed (monchebrand.ru) (the website is being filled with content as new city projects arise);
- a series of lectures and consultations on branding were delivered.

Lakes Around Us multimedia project and interactive lake map
Monchegorsk is home to picturesque northern lakes. The "lake land" brand of the city is designed to highlight the natural beauty of the region and unlock its unique potential.
It seeks to position Monchegorsk as a modern city, shifting the focus away from its industrial profile and unveiling local life through the lens of its connection with the lakes, offering a single visual and semantic context for the entire variety of the city's projects.
To achieve this, in 2022, lake maps were developed with the input of the local residents, and a project was launched to shoot a video series featuring personal stories of townspeople related to the lakes (directed by Nikita Filatov). In addition, the Sounds of Monchegorsk project was authored and launched in collaboration with the Summer Garden music band.

MDA Academy

One of the longest-standing projects of the Monchegorsk Development Agency, MDA Academy offers training programmes for the city residents helping them enhance existing or acquire new competencies across five areas.

It seeks to engage locals in projects that advance the city's development, as well as boost their competencies, foster community spirit, and enhance service quality in the business and service economy. The MDA Academy offers training sessions, workshops and lectures led by experts and top coaches. At the end of the programme, a video archive of the training materials is created and uploaded on social media, being freely available to those interested.

By the end of 2022, over 40 training events and activities were delivered by ARM Academy, drawing more than 1,000 local participants. It plays a significant role in inspiring more Monchegorsk residents to pursue entrepreneurship and become self-employed.

Sports sponsorship

Nornickel has an extensive experience in implementing sponsorship programmes, which is our long-standing commitment and an important part of the Company's positioning both externally and internally.

Our approaches to sponsorship and its geographic coverage are aligned with the Company's sustainable development strategy aimed at driving positive change and improving the quality of life for employees and the population across our footprint.

The key principles of managing sponsorship programmes are:

- leveraging sponsorship and partnership opportunities to improve the quality of corporate projects and events focused on sports and a healthy lifestyle;
- enhancing the Company's image by benefitting from synergies between the sponsor and the sponsored brands and building long-term associative connections between the sponsor and the sponsorship projects;
- maximising the social impact of the existing partnerships with a focus on the Company's geography in implementing sponsorship projects.

Nornickel is committed to promoting sports and a healthy lifestyle in the regions where it operates and across Russia. By implemented our dedicated comprehensive programmes and projects, we seek to contribute to the sustainable development of local communities and drive social and environmental innovations.

For several years, the Company has been a partner of the Russian Football Union, the Russian Futsal Association, the Russian Ice Hockey Federation, the Night Hockey League, the Russian Curling Federation, the Russian Chess Federation, and other associations and unions. Nornickel also owns the CSKA professional basketball club and the Norilsk Nickel futsal club.

In 2022, the Company continued with its sponsorship projects in partnership with leading sports federations and associations.

CSKA professional basketball club

For many years, Nornickel has been the owner and general sponsor of the CSKA basketball club, the champion of the EuroLeague and VTB United League in the 2018/2019 season, and one of the strongest sports brands in Russia. With the Company's support since the 2002/2003 season, the club made it to the EuroLeague's Final Four 17 times out of 18 and won it four times.

In collaboration with the CSKA Professional Basketball Club, the CSKA Junior project is being implemented, which features sports and training events and activities for young basketball players.

In 2023, the flagship Russian basketball club will celebrate its 100th anniversary. The jubilee festivities will involve both fans and athletes and be held with the active support of Nornickel.

Russian Ice Hockey Federation

The cooperation agreement between Nornickel and the Russian Ice Hockey Federation, which was signed in 2018 for a period of four years, has been extended for the 2022/2023 season. At this stage of cooperation, the Company has become an official partner of the Federation and the general partner of the Red Machine national ice hockey development programme.

Starting from the 2022/2023 season, Nornickel also acts as an official partner of the U25 young stars team made of hockey players under 25 who are playing in Russia. The project has been put together with the target of increasing the popularity of ice hockey in the country and boosting the pubic profile of Russian national youth and junior teams.

Another important dimension of this cooperation is the Polar Region Hockey social and sports programme implemented across the Polar geographies accommodating the Company's production facilities. It is aimed at supporting sports schools and the training and professional development of coaches and referees, as well as holding youth tournaments and master classes for young hockey players.

Over 20 joint events have been held since the programme's launch, including four children's training camps in the Murmansk Region, eight training modules for coaches and referees from Norilsk, Dudinka and the Pechengsky District, two Nornickel Cup youth tournaments, and three sports and academic shifts in the Sirius Educational Centre.

As part of these events, over 30 coaches and referees from Norilsk and the Pechengsky District were trained and improved their professional qualifications. The programme helped boost the number of children engaged in hockey by 28% in Norilsk and 55% in the Pechengsky District. The children's ice hockey teams across the Company's regions improved their playing skills and were runners-up in regional competitions in the 2021/2022 season. More than 100 sets of sports gear, game and training equipment were provided to the sports schools.

In 2022, the Company continued to implement joint programmes and projects with the Russian Ice Hockey Federation, including sports and recreation camps in Volgograd, an intensive Ice Hockey sports programme at the Sirius Educational Centre, a training workshop for coaches and referees in Norilsk, the Nornickel Cup youth tournament for players under 13 years of age, and a children's training camp in Zapolyarny.

Night Hockey League

The Company is the general partner of the Night Hockey League, implementing a number of large-scale joint projects aimed at developing and promoting amateur ice hockey. The Night Hockey League brings together thousands of ice hockey enthusiasts and is the largest amateur sports project both in Russia and globally. It drives the development of sports infrastructure, with the cities where the winners of the National Night Hockey League Teams' Festival play seeing new ice rinks built every year.

An important part of Nornickel's cooperation with the Night Hockey League are the annual charity hockey games in Norilsk, featuring world-renowned hockey stars. The funds raised from these games are matched by Nornickel and used to support the development of children's sports schools in the region. Over the years of holding these charity games, more than RUB 16 mln has been raised.

Throughout the entire history of the Night Hockey League, the 2021/2022 season saw the largest number of participants, with 21,467 players from 1,151 teams, and 75 regions taking part.

By collaborating with the Night Hockey League, Nornickel is able to support the progressive development of local hockey teams participating in the League's current tournament.

Football Union of Russia

Nornickel is a partner to the Russian Football Union's development programmes, with the respective cooperation agreement signed for 2021–2023. A major element of the partnership is the Succession ("Nasha Smena") talent pool programme aimed at supporting children's coaches in the regions and helping them enhance their qualifications, as well as sourcing and nurturing young talent, which is a strategic priority for Russian football.

In 2022, the following events were held in partnership with the Russian Football Union:

- a football festival was organised in Monchegorsk, along with selection camps for young athletes. Football legends, who are also ambassadors of the Russian Football Union, led a series of master classes for young football players, participated in an open meeting with fans, and hosted a football marathon, in which over 350 young athletes took part;
- over 200 coaches from across Russia participated in a conference organised by the Russian Football Union. The event sought to help Russian children's and youth football coaches improve their training qualifications and develop stronger professional skills and competencies. The conference participants discussed the updated system of coaching education, approaches and issues related to talent sourcing, interaction with parents, specifics of physical training, and principles of training mixed teams.

Norilsk Nickel Futsal Club

Nornickel is the owner and sponsor of the Norilsk Nickel Futsal Club, the only professional sports club in Norilsk and the only professional futsal club in the Krasnoyarsk Territory.

The team has repeatedly become the winner of the top, second and third prizes in the Russian Futsal Superleague and has won the Russian Cup.

In 2022, a second team made up of graduates of the sports school was set up. This helped the club finalise its own talent sourcing and training model as follows: children's sports club → sports school → youth teams → second team → first team.

The club's home arena – the Aika sports and recreation centre built with funding from Nornickel – is one of the best futsal venues in Russia ready to host matches of the highest level held under the auspices of UEFA. Since the opening of the Aika sports arena in 2020, it hosted over 40 official matches of the Russian Futsal Superleague and the Russian Cup, including 20 games in the 2021/2022 season, with the Norilsk Nickel Futsal Club wining the bronze medals of the Superleague.

Russian Futsal Association

For eight years, Nornickel has been one of the key partners of the Russian Futsal Association that hosts the Russian Futsal Superleague and the Russian Cup competitions among professional clubs. The association also supports children's and youth tournaments.

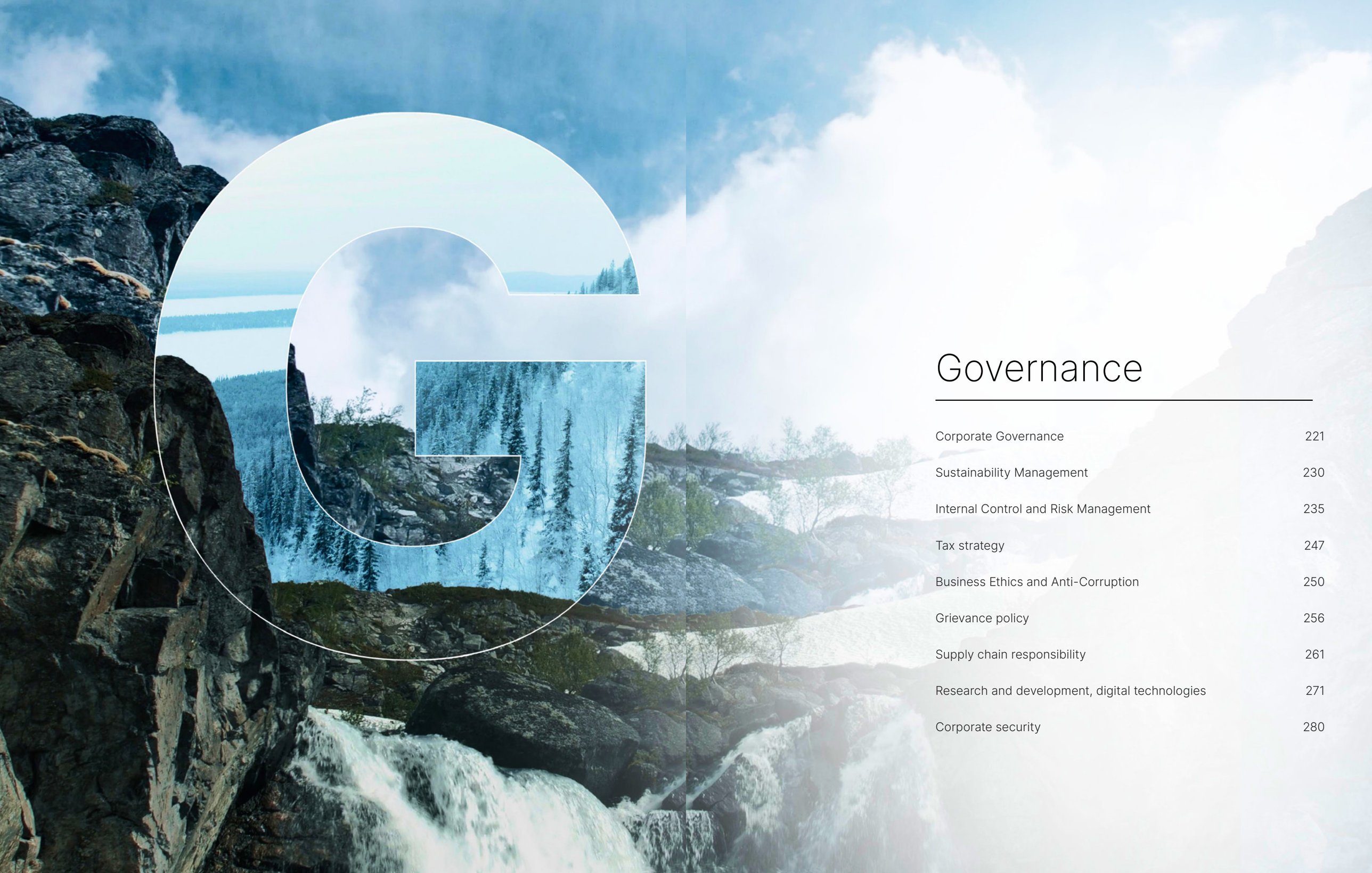
A major element of the partnership between the Company and the Association is the Futsal to Polar Schools national project, which brings together 129 schools and more than 11,000 participants from the Krasnoyarsk and Trans-Baikal territories, as well as the Murmansk Region. The project promotes a comprehensive approach to holding futsal tournaments among schoolchildren by making futsal part of extracurricular physical education and recreational sport programmes of educational institutions. In addition to holding tournaments, the project seeks to provide participants with material and technical support while also offering training courses for physical education teachers to improve their qualifications.

Support for the development of curling in the Arctic

In 2022, Nornickel and the Russian Curling Federation joined forces to hold another annual stage of the Nornickel Curling Cup world tour, which welcomed winners and runners-up of the World Curling Championships and Olympic Games.

The programme of the competitions weekend included master classes for the curling school students, various activities at the Taimyr Ice Arena showcasing elements of the North's indigenous culture, and spectacular opening and closing ceremonies directed by some the world's most talented producers.

The local curling team's successful performance in the regional tournaments and the growing number of local residents who have taken up curling are among the key social benefits resulting from the Company's partnership with the Russian Curling Federation. Curling is an inclusive sport accessible to players from various social groups, including young people, seniors, and indigenous populations.



Governance

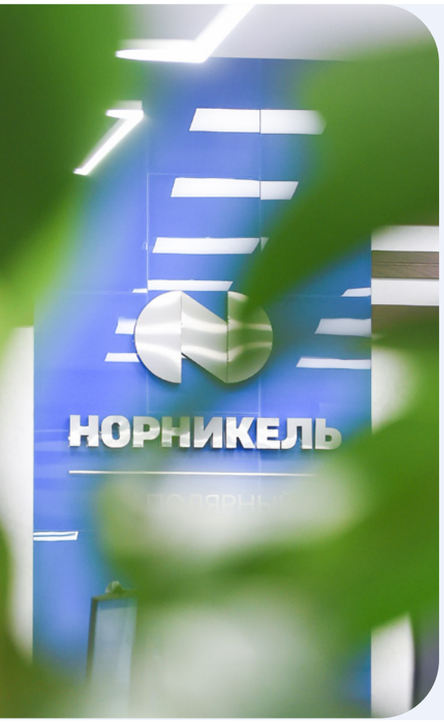
Corporate Governance	221
Sustainability Management	230
Internal Control and Risk Management	235
Tax strategy	247
Business Ethics and Anti-Corruption	250
Grievance policy	256
Supply chain responsibility	261
Research and development, digital technologies	271
Corporate security	280

Corporate Governance

Corporate governance principles

Nornickel's unwavering priority in corporate governance is balancing the interests of shareholders, the Board of Directors, management, employees, and other stakeholders.

The existing corporate governance framework is integrated into all of the Company's processes. It is underpinned by the applicable Russian laws and the Bank of Russia's Corporate Governance Code, which we are guided by in building our corporate governance practices at Nornickel. The key principles of corporate governance are reflected in Nornickel's Articles of Association, Regulations on the Board of Directors, Anti-Corruption Policy and other by-laws[1].



Our key corporate governance principles:

1. Equitable and fair treatment of every shareholder;
2. Support for the shareholders to let them exercise their rights and lawful interests in the most reasonable and convenient manner;
3. Professionalism and leadership of the Board of Directors, and involvement of independent directors in governance;
4. Strategic management by the Board of Directors, its efficient control over executive bodies, and oversight of the risk management and internal control framework;
5. Sound, bona fide and efficient management of the Company's day-to-day operations by executive bodies accountable to the Board of Directors and the General Meeting of Shareholders;
6. Strong business ethics;
7. Zero tolerance to corruption;
8. Full, transparent, reliable and timely disclosure;
9. Robust risk management and internal controls;
10. Commitment to sustainability principles.

[1] The full versions of the documents are available on the Company's website.

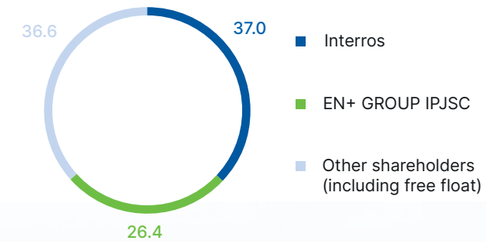
Share capital structure

In the reporting year, following respective resolution by the General Meeting of Shareholders, the Company's authorised capital was reduced to RUB 152,863,397 through the cancellation of 791,227 treasury shares repurchased in June 2021. The stakes held by the key shareholders reflect changes in the authorised capital.

As at the end of 2022, the authorised capital of Nornickel was made up of 152,863,397 ordinary shares with an aggregate market value of RUB 2,339 bn.

The Company's ordinary shares have been trading on the Russian market since 2001. Since 2014, the shares have been on the First Level quotation list of the Moscow Exchange (ticker: GMKN). American depositary receipts (10 ADRs represent one share) were also issued in 2001 and were traded on the LSE OTC market (ticker: MNOD) and over the counter in the US (ticker: NILSY). Trading in depositary receipts of Russian issuers on international stock exchanges has been suspended since March 2022.

Shareholding structure as at 31 December 2022 (%)



152,863,397 ordinary shares

the authorised capital of Nornickel as at the end of 2022 with an aggregate market value of

RUB **2,339** bn

Governance bodies

GRI 2–9, 2–10, 2–11, 2–12, 2–13

Nornickel has four key governance bodies.

Non-executive bodies		Executive bodies	
General Meeting of Shareholders, the Company's supreme governance body	Board of Directors, a collegial governance body in charge of strategic management of the Company and oversight of its executive bodies	Management Board, a collegial body that manages the Company's day-to-day operations	President, the sole executive body that manages the Company's day-to-day operations

Board of Directors

The key documents governing the Board of Directors are the Articles of Association and the Regulations on the Board of Directors, which set out the procedure for convening and holding Board meetings and outline the Board's authority and formation process.

The Board of Directors has 13 members, who are elected at the Annual General Meeting of Shareholders for a period extending until the next Annual General Meeting of Shareholders. The current size of the Board of Directors is aligned with Nornickel's goals and objectives.

The Policy on Development and Approval of Vote Recommendations on Candidates Nominated to the Board of Directors contains qualifications that nominees are to meet to be nominated and selected[1].

Key qualifications for nominees to the Board of Directors

- Impeccable professional and personal reputation, excellent professional qualifications and understanding of the key principles underpinning the Company's business
- Professional qualification, experience and skills aligned with the Company's current and expected needs
- Interest in serving on the Company's Board of Directors, including availability of sufficient time to dedicate to their role as directors
- Knowledge and understanding of all legal responsibilities related to Board service
- No conflict of interest in any form
- Service on the board of directors of no more than five other public companies at the same time

As at 31 December 2022, the Board had six independent directors. They ensure efficient decision-making in line with the interests of all stakeholders and improve the quality of adopted managerial decisions. Independent directors provide professional unbiased opinion on all agenda items.

6 independent directors
the Board had As at 31 December 2022

Composition of the Board of Directors as at 31 December 2022[2]

Independent directors

- Denis Alexandrov
- Alexey Germanovich
- Sergey Volk
- Alexey Ivanov
- Stanislav Luchitsky
- Evgeny Shvarts

Non-executive directors

- Alexey Bashkirov
- Sergey Batekhin
- Elena Bezdenezhnykh
- Andrei Bougrov
- Alexandra Zakharova
- Egor Sheibak

Executive directors

- Marianna Zakharova

[1] The full version of the document is available on the Company's website.
[2] Marianna Zakharova holds the position of First Vice President, Corporate Governance, Asset Management and Legal Affairs. The other Board members hold no major positions within the Company. As at the end of 2022, the Board of Directors was chaired by Andrei Bougrov. For more details on members of the Board of Directors, please see MMC Norilsk Nickel's Annual Report for 2022.

The Board of Directors meets as and when required, but at least once every six weeks. In 2022, the Board of Directors held 38 meetings (nine meetings in person and 29 meetings in absentia).

GRI 2–12, 2–16

As part of these meetings, the Board of Directors considered 105 matters, including 51 corporate governance matters, 27 deal approvals, and 27 strategic, operational, social, environmental and other matters.

The Company's management keeps the Board of Directors updated on the most essential matters and issues. As part of its regular reporting to the Board of Directors, the management submits problems and concerns for preliminary discussion in order to ensure the most impartial and informed decision-making possible.

105 matters
were considered by the Board of Directors in 2022

38 meetings
the Board of Directors held in 2022

In 2022, the key ESG-related matters submitted for discussion to the Board of Directors and its Committees included:

- investigations of fatalities and performance in occupational health and safety;
- assessment of performance of corporate risk management and internal controls;
- performance of the Environmental Department, the Centre for Monitoring Technical, Production and Environmental Risks, and the Environmental Monitoring Centre;
- Nornickel's KPI system, including environmental and OHS indicators;
- discussion of scenarios for global economy and for climate change.

Also, the Board of Directors meets on a quarterly basis to review the Company's financial results, operational performance, and OHS reports.

In overseeing the Company's management, financial and business affairs, the Board of Directors may instruct the managers on individual matters and monitor implementation of resolutions and tasks. Authorised executives are vested with powers and responsibilities to address economic, environmental and social matters and may delegate their powers to other employees based on their competences and functions.

Committees of the Board of Directors

Nornickel's Board of Directors has five Committees. The Committee operations, structure, functions and membership are defined by the respective Committee Regulations.

Key functions of the Board's Committees

GRI 2–9, 2–12, 2–13

Committee	Key functions
Audit Committee	• Reviewing matters related to financial statements • Overseeing risk management and internal controls • Overseeing external and internal audits • Preventing employee and third party wrongdoing • Reviewing HSE matters
Strategy Committee	• Preliminary review of matters pertaining to strategy development, investment planning, restructuring, and interaction with capital markets
Budget Committee	• Issuing recommendations to the Board of Directors in order to facilitate decision-making on the amount of dividends and on the record date to be suggested by the Board of Directors; taking into account information on the Company's financial results; approving the Company's budget
Corporate Governance, Nomination and Remuneration Committee	• Support in assessing, overseeing and improving Nornickel's corporate governance framework; succession planning for Nornickel's Board of Directors and Management Board; providing incentives, evaluating the performance of Nornickel's Board of Directors, Management Board, President, and Corporate Secretary, and setting relevant remuneration policies; supervising the development and implementation of Nornickel's information policy
Sustainable Development and Climate Change Committee	• Integration of the sustainable development principles, including climate change, into the Company's operations • Development and implementation of a strategy on sustainable development and climate change • Overseeing risk management and internal control in sustainable development and climate change • Overseeing the Company's internal reporting and disclosures on sustainable development and climate change • Overseeing external audit of the Company's sustainable development and climate change reports and activities

Composition of the Board's Committees as at 31 December 2022

The composition of the Board's Committees is determined by resolution of the Board of Directors.

Committees of the Board of Directors	Directors	Chairman		Share of directors, %	
		Independent	Non-executive	Independent	Non-executive
Audit Committee	5	+	+	80	20
Budget Committee	5	–	+	20	80
Strategy Committee	5	+	+	40	60
Corporate Governance, Nomination and Remuneration Committee	5	+	+	60	40
Sustainable Development and Climate Change Committee	5	+	+	80	20

Evaluation of the Board of Directors performance

GRI 2–18

Nornickel has developed the Performance Evaluation Policy for the Board of Directors in line with the Bank of Russia's Corporate Governance Code and global best practices. According to the Policy, the Company runs annual internal evaluation (self-evaluation) of the Board of Directors' performance in the form of an online questionnaire filled by each director based on a schedule approved by the Board of Directors. The questionnaire contains 87 questions, divided into 18 sections. All questions are graded on a scale from 1 to 10. For each question there is a text field where directors may enter additional comments. Answering all questions is mandatory.

Following the evaluation, the Corporate Governance, Nomination and Remuneration Committee prepares the Board of Directors' performance report for the year and develops recommendations for improving the Board functions that were scored below average. With the Committee's recommendations taken into account, the Board of Directors approves the report; the recommendations are communicated to all stakeholders.

In addition to internal evaluation, the Company organises an external independent evaluation of the Board of Directors' performance at least once every three years. In 2021, external evaluation of the Board of Directors' performance was carried out by the Professional Directors Association.

Survey and interview results served as the basis for conclusions and recommendations across four areas:

- role of the Board of Directors and corporate governance;
- composition and remit of the Board of Directors;
- Committees of the Board of Directors;
- operating model of the Board of Directors.

Following the evaluation, an opinion was prepared stating that in 2021, the Board was balanced in terms of professional qualification, experience and business skills of the directors; the composition of the Board Committees was aligned with the Company's goals and objectives; the Chairman of the Board of Directors ensured efficient organisation of the Board activities and its interaction with other bodies of the Company and facilitated the optimal performance of the functions conferred on the Board.

In 2022, a number of activities were implemented to improve the Board processes, including activities recommended by the independent external consultant. Specifically:

- the report submitted to the shareholders ahead of the General Meeting of Shareholders was expanded to include more information on Board nominees, and the Board paid more attention to matters related to KPI improvement;
- the Company looks into ways to increase representation of women on the Board of Directors.

Director induction and training

GRI 2–17

Nornickel has in place the Professional Development Policy for Members of Board of Directors. In line with the Policy, newly elected Board members undergo onboarding by attending a series of meetings with executives and key officers of the Company. During the summer of 2022, a number of working meetings were held between the newly elected Board members and the management team to discuss key aspects of the Company's operations. The Corporate Secretary makes sure the new directors familiarise themselves with the existing by-laws of the Company and provides materials required under the Professional Development Policy. In 2022, an online session on leadership development in the area of safety culture was organised for the Board of Directors involving Andrew Sherman, a recognised expert in this field.

The Company also organises field sessions for its directors, which involve visits to the Company's production sites and meetings with heads of production units to address key issues locally. In the autumn of 2022, the Board of Directors travelled to Norilsk to visit the key production sites of the Company's Polar Division and social infrastructure facilities included in the Company's charity programme.

Executive bodies

GRI 2–13

The President and the Management Board are the Company's executive bodies. In the reporting period, the position of the Company's President was held by Vladimir Potanin, who concurrently chaired the Company's Management Board. As at the end of 2022, Vladimir Potanin had held the position of the President (CEO before 2015) for 10 years and 13 days.

The remit of the Management Board members, who also hold the positions of Vice Presidents, includes the Company's impact on the economy, environment, and local communities. Members of the Management Board can delegate respective matters to other employees in line with their scope of responsibilities and job duties.

Prevention of conflict of interest

GRI 2–15

As part of its commitment to the principles of legality, impartiality, objectivity and confidentiality, Nornickel puts a special emphasis on managing conflicts of interest among its shareholders, members of the Board of Directors and top management. The Company has in place measures to prevent situations that may involve a conflict of interest.

Transactions involving a conflict of interest that meet the criteria for related-party transactions are executed in line with the procedure prescribed by laws on joint-stock companies. Also, under the Company's Articles of Association, transactions involving a conflict of interest for a shareholder owning more than 5% of voting shares are subject to a special approval procedure. Such transactions can only be executed upon an approval by a qualified majority voting of the Board members (at least 10 out of 13).

In addition, the Company has adopted the Code of Conduct and Ethics for Members of the Board of Directors, which serves to uphold high standards of ethics and business conduct of the Board members and is a guidance to be relied on in case of ethical risks and conflicts of interest. The Code states that members of the Board of Directors shall refrain from engaging in any activities that may cause a conflict of interest, and, if there is reason to believe such conflict may occur, notify the Corporate Secretary in writing.

If a director has a direct or indirect personal interest in a matter submitted for consideration by the Board of Directors, they shall inform the Board of Directors accordingly before the matter is considered or resolved and withdraw from any further discussions and voting on such matter.

Ensuring transparency and dialogue with stakeholders on corporate governance

GRI 2–29

Maintaining a focus on transparency and openness, Nornickel prioritises interaction between the Company's management and stakeholders. Stakeholder engagement in corporate governance helps Nornickel improve its governance system by adopting important resolutions that reflect the needs of the Company's stakeholders.

Nornickel has an active dialogue with a wide range of Russian and international investors. Public reporting is among the key communication channels for Nornickel. We strive to leverage global best practices to make all the necessary disclosures, which take the form of annual and sustainability reports, press releases, presentations, statements of material facts, and interactive tools.

We disclose quarterly production results and accounting statements prepared under the Russian Accounting Standards (RAS) on the Company's website. Every six month, we publish IFRS financial statements, issuer reports, and affiliate lists.

We also maintain regular contact with investors and external stakeholders.

To improve internal communications, Nornickel organised traditional online dialogues between employees and the top management as a way to identify key strengths and weaknesses and improve corporate governance. In March 2022, we held yet another Nornickel Live – a Q&A session for employees to ask questions and for the Company's Vice Presidents to respond and give their insights into the latest corporate developments and plans going forward. This time, the session focused on social support for employees in a turbulent economic environment. During the year, we also held a number of online one-on-one meetings, some of which were attended by the Company's top management.

Remuneration

GRI 2–19, 2–20

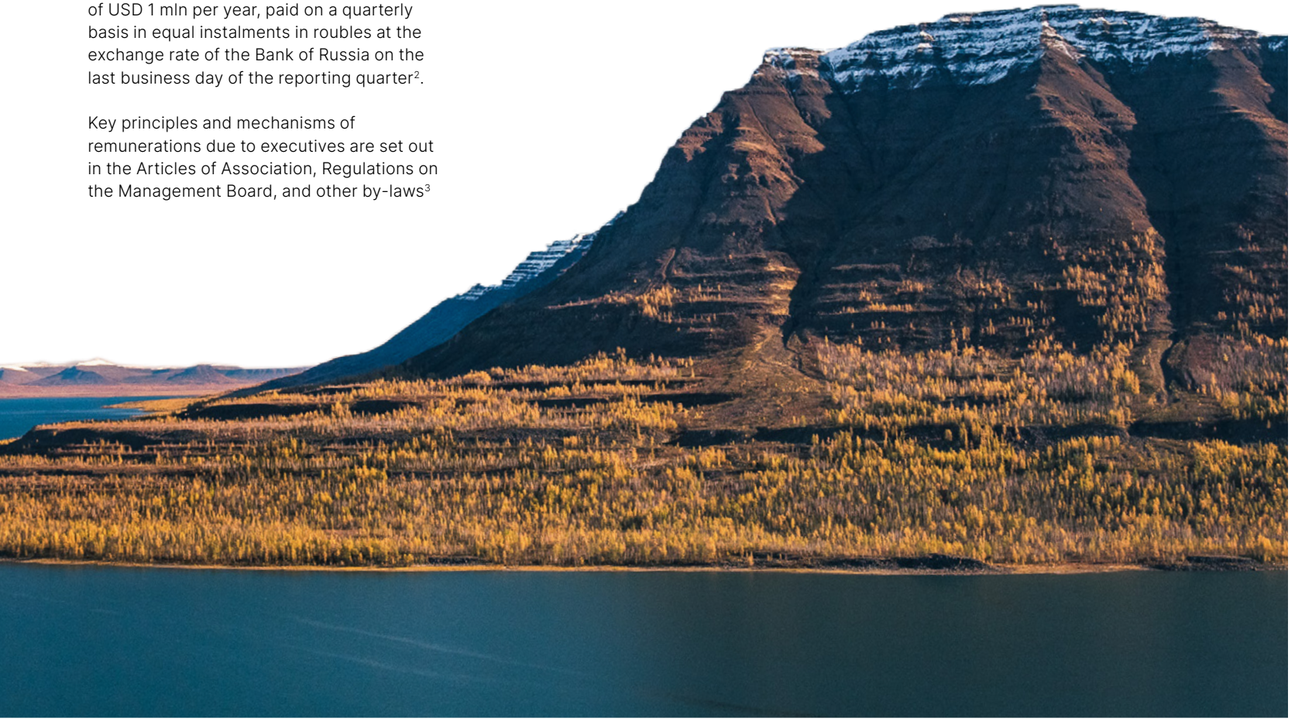
The Board of Directors' remuneration is set out in the Remuneration Policy for Members of the Board of Directors[1] approved by the General Meeting of Shareholders. The annual remuneration for non-executive directors includes:

- base remuneration of USD 120,000 for the Board membership;
- additional remuneration of USD 50,000 for membership in a Committee of the Board of Directors;
- additional remuneration of USD 150,000 for chairing a Committee of the Board of Directors;
- reimbursement of expenses incurred by directors in discharge of their duties.

In 2022, the Annual General Meeting of Shareholders established remuneration for the Chairman of the Board of Directors, an independent director, in the amount of USD 1 mln per year, paid on a quarterly basis in equal instalments in roubles at the exchange rate of the Bank of Russia on the last business day of the reporting quarter[2].

Key principles and mechanisms of remunerations due to executives are set out in the Articles of Association, Regulations on the Management Board, and other by-laws[3] of the Company. Nornickel's remuneration framework is continuously and closely monitored by the Board of Directors.

According to the Company's Articles of Association, decisions on remuneration and reimbursement payable to the Company's President and members of the Management Board are reserved to the Board of Directors. Total remuneration payable to senior executives comprises the base salary and bonuses. Bonuses are linked to the Company's performance, including both financial (EBITDA, free cash flow) and non-financial (workplace injury rates, labour productivity, environmental performance) indicators.



[1] The full version of the document is available on the Company's website.
[2] This amount is after taxes withheld in accordance with the applicable Russian laws.
[3] The texts of the documents are available on the Company's website.

Sustainability Management

GRI 2–24

Sustainability management and ESG integration are a major part of Nornickel's corporate governance system.

By promoting sustainable development practices, the Company adapts to the strategic landscape and changing market environment and contributes to effective risk management, while at the same time fostering a motivating and innovation-driven corporate culture and helping to secure stakeholder engagement positive for the Company.

To make sure sustainability principles are integrated at Nornickel across the board, the Company has adopted over 20 by-laws[1]. At the strategic level, the Company has approved the Environmental and Climate Change Strategy, and the Social Development Strategy is currently being developed.

The Company relies on a matrix structure to manage its ESG aspects, with responsibility for specific ESG aspects split among all functional units of the Head Office, branches and entities. At the same time, most of the matters are subject to oversight by the Management Board, Board of Directors, and respective Committees.

With this approach in place, ESG aspects can be successfully integrated into by-laws and day-to-day activities of all structural units and ensure development of new competencies that employees need to help Nornickel set corporate best practices in sustainable development.

To coordinate all sustainability-related processes, the Company established a dedicated Sustainable Development Department. It sets out Nornickel's ambitions and vision in the area of sustainability and monitors the alignment of the Company's operations with international standards and expectations of external stakeholders. At the senior executive level, this process falls within the remit of Vice President for Investor Relations and Sustainable Development. At the Board of Directors level, it is the Sustainable Development and Climate Change Committee that is responsible for the development of the Company's ESG practices.

To engage its top executives in sustainability management, the Company increased the share of HSE targets in the annual 2022 team KPIs, bringing their aggregate weight to 50%. The Environmental Project Implementation indicator was selected as a KPI for the Long-Term Incentive Programme for the Group's Key Employees (total weight of 30%).

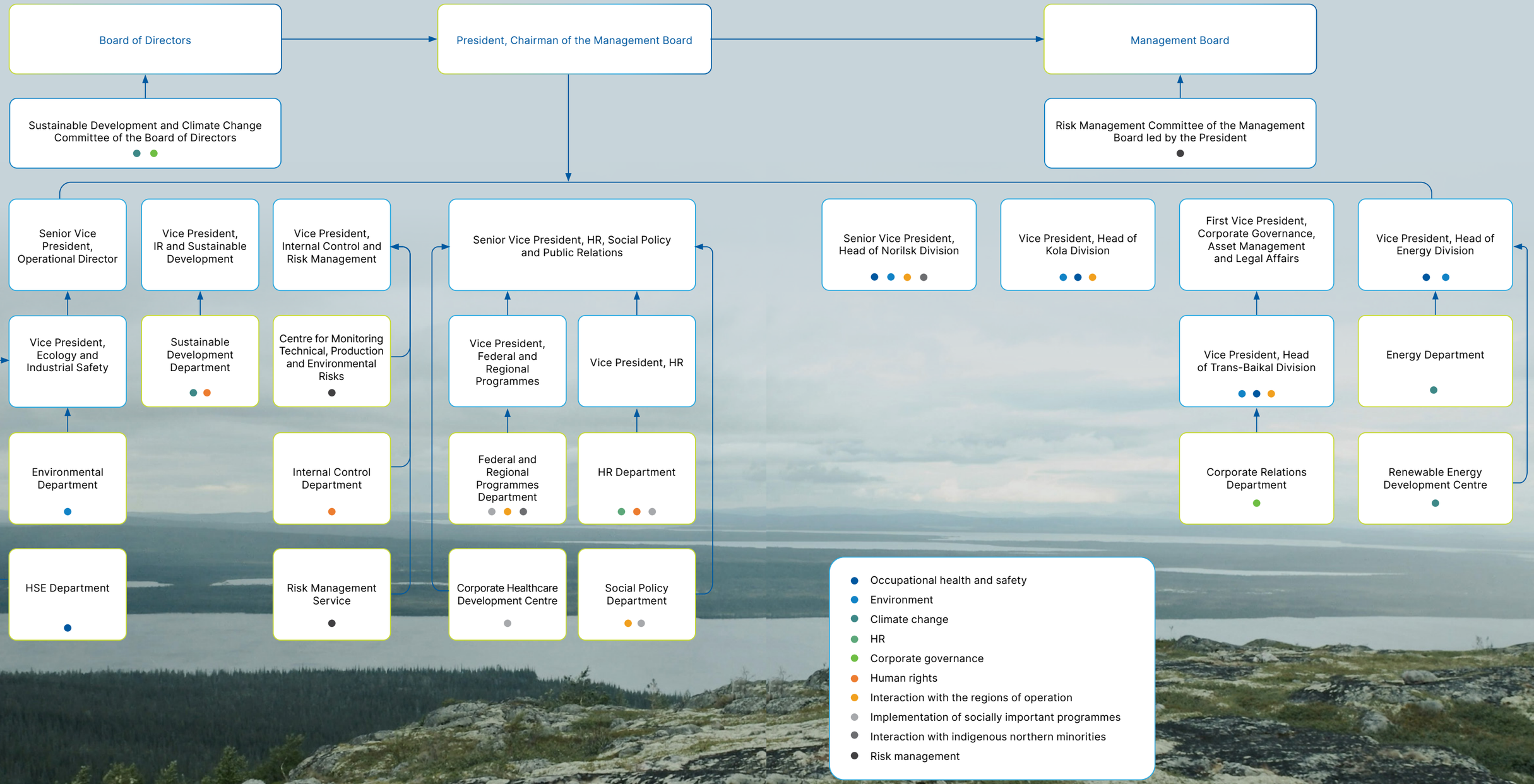
ESG-related KPIs of the top management

Period	Annual team KPIs		Long-term KPIs
Focus area	Occupational health and safety	Environment	Ecology and environment
KPI weight	30%	20%	30%
KPI target	Achievement of the OHS plan depending on FIFR	Reduction in GHG emissions	Delivery of environmental projects

[1] The texts of the documents are available on the Company's website.

Split of responsibilities for key areas of sustainable development

GRI 2–9, 2–12, 2–13



Compliance with international standards and best practices in ESG and quality management

To ensure and maintain strong governance practices in ESG, Nornickel regularly analyses experiences that peers rely on to comply with major international and national standards.

The Company's production assets are subject to regular certification and surveillance audits for compliance with international standards related to quality management, environmental management, labour protection, and information security.

For more details, please see the Certification of Corporate Integrated Management System appendix.

Support of Russian and international sustainability standards and initiatives

We support leading global and national initiatives in sustainable development often pioneering integration of their requirements into our corporate practices.

Initiative	Status
UN Global Compact	Member since 2016
International Platinum Group Metals Association	Member since 1999
Nickel Institute	Member since 2005
Global Battery Alliance (GBA)	Member since 2021
Responsible Minerals Initiative (RMI)	In 2022, RMI suspended cooperation with the Company's Russian assets. Norilsk Nickel Harjavalta was included in the Conformant/Active Smelter & Refiner Lists following a RMAP assessment by RMI
Together for Sustainability (TfS) initiative	The Company meets the initiative's requirements based on results of a 2021 audit
Responsible Sourcing Blockchain Network (RSBN)	Member in December 2020 to July 2022; membership suspended by RSBN
ICMM initiative	The Company implements initiatives to ensure compliance with requirements to members
IRMA initiative	In 2022, IRMA suspended cooperation with Russian companies. In the same year, the Company conducted an independent assessment of its mining assets compliance and readiness for certification
National ESG Alliance	One of the founders since December 2022
Extractive Industries Transparency Initiative (EITI)	The Company has been disclosing data under the EITI since 2021
Global Reporting Initiative (GRI)	Annual reporting in line with the GRI Standards
TCFD (Task Force on Climate-Related Financial Disclosures) recommendations	The Company implements a roadmap to fulfil the TCFD recommendations; for more details please see the Climate Change and Energy Efficiency section

Assessment of mining assets readiness for IRMA certification

In 2022, Nornickel held an independent assessment to understand the degree to which its mining assets are ready for IRMA certification. The independent assessment was conducted by ENSOR Management Consultants LLC (formerly a branch of Environmental Resources Management, an international consultancy firm), which has many years of track record in assessing and managing environmental and social risks. The assessment perimeter included eight key mines of Norilsk and Kola divisions. Their activities were assessed based on four principles: business integrity, planning for positive legacies, social responsibility, and environmental responsibility.

The assessment showed that in the event of an official certification exercise, the Company would have likely met the requirements of the IRMA Transparency level. In 2023, a roadmap will be developed to put in place corrective actions so as to ensure compliance with the IRMA requirements.

Nornickel in ESG ratings

Description	Rating as at 31 December 2022
SUSTAINALYTICS	ESG Risk Score: 43.9 out of 100 on a scale from 1 (low risk) to 100 (high risk)
MSCI	ESG rating – "B", score of 3.0 (out of 10)
ecovadis	ESG Score: 62.0 out of 100 on a scale from 1 (low) to 100 (high)
RAEX	ESG rating – A

Internal Control and Risk Management

GRI 2–9, 2–12, 2–13, 2–16

Risk management framework

Integrated in all of Nornickel's business processes, its corporate risk management framework enables risk-oriented decision-making at various levels to achieve strategic and operational goals.

Nornickel has the following key objectives of risk management:

- increase the likelihood of achieving the Company's goals;
- make resource allocation more efficient; and
- boost the Company's investment case and shareholder value.

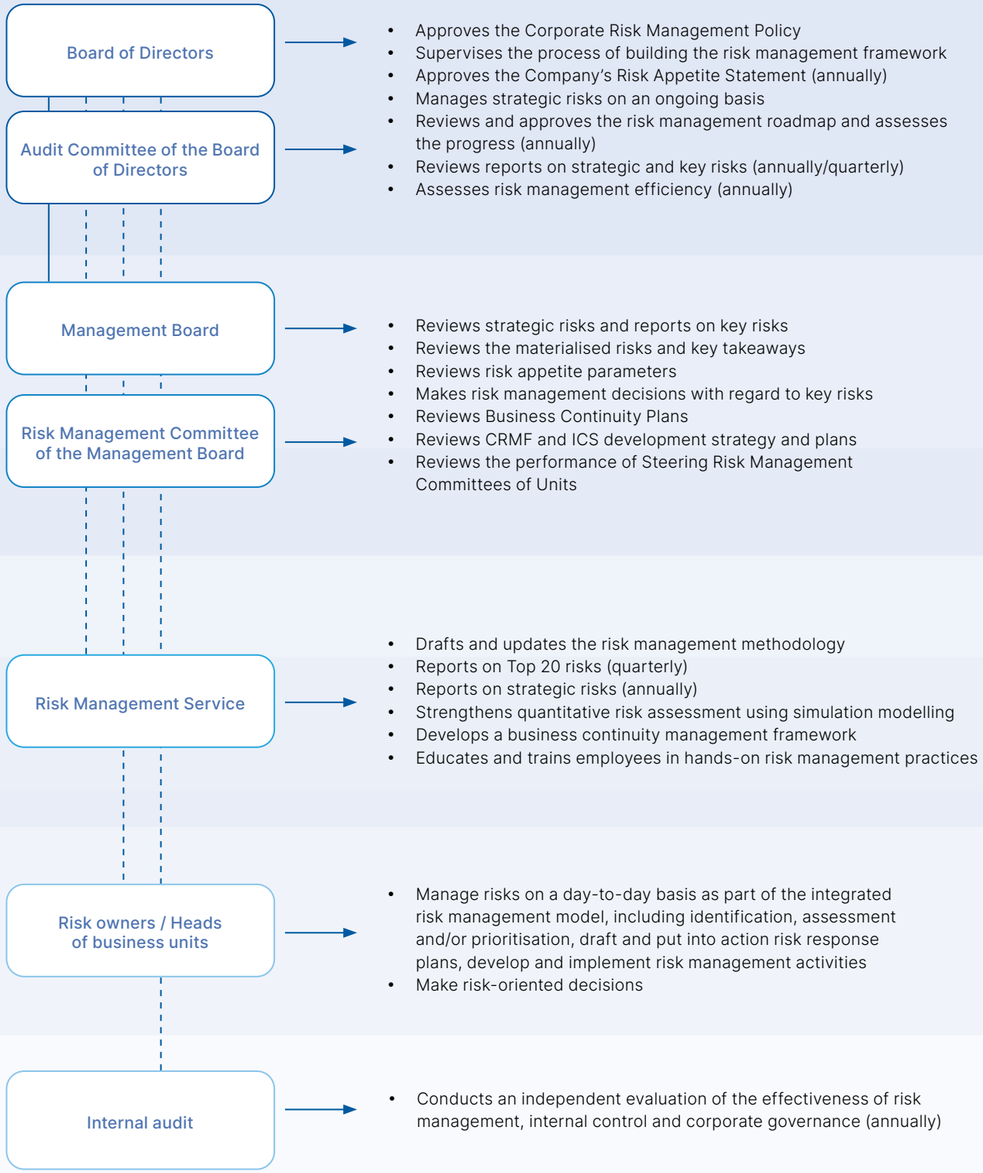
The Company's risk management practices are based on the principles and requirements of the Russian and international laws and regulations and are also guided by professional standards, including:

- Corporate Governance Code recommended by the Bank of Russia;
- GOST R ISO 31000–2019 (Risk Management. Principles and Guidelines);
- COSO ERM (Enterprise Risk Management — Integrating with Strategy and Performance);
- Recommendations on risk management, internal controls, internal audit and the work of the Board of Directors' (Supervisory Board's) audit committee in public joint-stock companies (appendix to the Bank of Russia's Information Letter No. IN-06-28/143 dated 1 October 2020).

To manage production and infrastructure risks, the Company develops, approves, updates and tests business continuity plans designed to maintain and restore current operations.

Structure of the risk management framework

Nornickel's key documents that set out the core principles and approaches in risk management, along with functional responsibilities of the key participants involved in the risk management process, are the Risk Management Policy and Risk Management Regulations.



Improving the risk management framework

In 2022, the Company completed the following projects to enhance and maintain the maturity of its risk management framework:

- put into operation a GRC-type system to automate risk management processes, contributing to better integration of risk management and budgeting processes;
- conducted an additional external expert review, update and verification of risks associated with key assets;
- performed a quantitative assessment of the aggregate impact that key risks had on the Company's 2023 budget and evaluated its sensitivity to key risks;
- decomposed the Company's risk appetite to lower levels of the corporate structure and put in place monitoring of specific metrics, including in the ESG area;
- improved tools for quantitative assessment of operational risks;
- provided comprehensive employee training in divisions' companies/units to develop risk and continuity management skills;
- developed a professional competency model for the key roles in risk management;
- conducted a self-evaluation of the risk management framework's maturity level;
- kicked off a review of long-term climate change risks in line with the TCFD requirements.

To further improve the performance of its corporate risk management framework in the short term, the Company plans to:

- go ahead with automating processes and functionality of the risk management framework;
- use quantitative risk assessment in strategic and operational planning;
- enhance methodology to analyse, assess and manage various categories and types of risks;
- continue running projects to assess long-term climate change risks in line with the TCFD methodology.

Insurance

Insurance is Nornickel's key tool for managing risks and protecting the assets of the Company and its shareholders against any unforeseen losses related to its operations, including due to external hazards.

To ensure consistent application of the Group's uniform policies and standards, the insurance function is centralised. Every year, Nornickel approves a comprehensive programme that defines key parameters by insurance type, key business line and project.

The Group has a corporate insurance programme in place that covers assets, equipment failures and business interruptions, with the same terms and conditions applied to all facilities of the core production chain. The principles of centralisation and continuity also underlie our programmes for third-party liability insurance for directors and officers, other types of liability insurance, freight, construction and installation, and vehicle insurance.

Our insurance policies are issued by Russia's largest insurance companies.

To secure the best insurance and risk management terms, we monitor the mining industry's best practices and the latest trends in the insurance market.

Key sustainability risks

Nornickel is engaged in ongoing efforts to identify, assess and manage key ESG risks. The risks to the Company's sustainability goals are mainly related to occupational health and safety, power blackouts at production and social facilities in the Norilsk Industrial District, environmental and conservation legislation, social and labour relationships, information security, and climate change. The most significant risks in terms of their impact on the Company's goals are shown on the map of key sustainability risks.

Map of key risks, including changes in assessment introduced in 2022

- Risk level higher vs the previous year
- Risk level lower vs the previous year
- Risk level unchanged vs the previous year
- New risk

Risk

1. Price risk
2. Market risk
3. Financial risks
4. Technical and production risk
5. Risks of investment project
6. Occupational health and safety risks
7. Soil thawing
8. Compliance risk
9. Information security risks
10. Environmental risks
11. Risk of insufficient water resources
12. Social risk
13. Supply chain risks

Risk: The effect of uncertainty on objectives (ISO / GOST R 31000).
Risk source: An element which alone or in combination has the potential to give rise to risk (ISO / GOST R 31000). The assessment takes into account whether external or internal factors prevail.
The Risk Effect on Objectives scale describes the risks' relative impact.

In 2022, risk trends reflected changes in the Company's external environment. During the year, the Company faced a variety of external challenges, which caused a review of the impact coming from external risk factors.

In 2022, Kola MMC saw the materialisation of a risk that had been identified before, i.e. equipment risk loss, following fire at the electrowinning shop of the cobalt section of the nickel tankhouse. To remedy the consequences, Kola MMC took a number of steps to restore the process of producing metallic cobalt. The Company also implements activities to prevent accidents like that, including projects to upgrade and restore fire safety systems across the facilities.

Climate change risks

Nornickel is aware of the importance of climate change risks and the threat they represent for sustainable development. The Company engages in consistent ongoing efforts to identify climate risk factors in its corporate risk management framework. Among other things, Nornickel implements activities as part of a Roadmap to comply with the TCFD Recommendations in order to integrate best practices in climate risk management into the Company's business processes. The Company reviews all information related to climate change risks on a quarterly basis.

For more details on the methodology to identify and assess climate change risks and on climate change scenarios, please see the Climate change and energy efficiency section.

Key sustainability risks

1. Market risk

Reduced ability of the Company's products to compete in the market may reduce their liquidity and result in sales at discounts to the market price and a decrease in the Company's income.

Risk effect: high
Risk source: combined
Risk level change: increase

Key risk factors	Key mitigants
• Higher market standards for ESG compliance and product quality • Competition from producers of cheaper nickel • Growing role of transport electrification programmes • Replacement of metals made by the Company with alternative materials • Introduction of external trade restrictions by foreign regulators with negative implications for Nornickel's operations	To mitigate this risk, the Company: • monitors and reviews market requirements to product quality and ESG compliance; • takes steps to support and boost demand for its key metals; • monitors transportation development trends by type of engine; • searches for new palladium applications; • diversifies its metal sales by industry and geography; • improves and diversifies its product range; • promotes cooperation with sectoral institutions to maintain access to relevant metal sales markets; • collaborates with Russian ministries and agencies to prevent/minimise negative impact from country-specific and international regulatory measures; • implements an ESG roadmap; • considers partnerships with key producers of cathodes for Li-ion batteries; • enters into strategic partnerships with automakers built on guarantees of long-term palladium supplies.

2. Technical and production risk

Technical and production risk relates to events that can be caused by technical, production-related, or natural factors that can have a negative impact on the progress of the production programme and result in equipment breakdowns or damage to third parties that will require compensation.

Risk effect: high
Risk source: combined
Risk level change: increase

Key risk factors	Key mitigants
• Harsh weather and climatic conditions, including low temperatures, storm winds, snow load • Unscheduled stoppages of key equipment due to excessive wear and tear • Release of explosive gases and flooding of mines • Collapse of buildings and structures • Infrastructure breakdowns	To mitigate this risk, the Company: • properly and safely operates its assets in line with the requirements of the technical documentation, technical rules and regulations as prescribed by the local laws across its footprint; • develops ranking criteria and criticality assessment for the Group's key industrial assets; • rolls out an automated system for managing reliability, efficiency and risks associated with production assets; • timely replaces its fixed assets to ensure that production safety is at the required level; • rolls out a geotechnical monitoring system across operations to perform ongoing monitoring of its buildings and structures; • uses satellite monitoring of its facilities with subsequent analysis of the monitoring data; • introduces automated systems to control equipment process parameters, uses modern engineering control systems; • improves the maintenance and repair system; • trains and educates its employees both locally, on site, and centrally, through its corporate training centres; • systematically identifies and assesses technical and production risks, implements a programme of organisational and technical actions to mitigate such risks; • continuously monitors the current status of the industrial asset management system; • has risks reviewed by collegial bodies at all governance levels; • develops the technical and production risk management system, including by engaging independent experts to assess the system efficiency and completeness of data; • develops and tests business continuity plans outlining the steps that need to be taken by the Company's personnel and internal service providers where technical and production risks cause the largest possible damage. The plans aim to ensure that the Company resumes its production as early as possible; • annually engages independent surveyors to analyse the Company's exposure to disruptions in the production and logistics chain and assess related risks.

3. Occupational health and safety risks

Failure to comply with the Group's health and safety rules may result in threats to employee health and life, temporary suspension of operations and property damage.

Risk effect: high
Risk source: internal
Risk level change: none

Key risk factors	Key mitigants
• Unsatisfactory organisation of operations • Process disruption • Exposure to hazardous factors	Pursuant to the Occupational Health and Safety Policy approved by the Board of Directors, the Company: • continuously monitors compliance with occupational health and safety (OHS) requirements; • improves working conditions for its own and contractors' employees deployed at the Company's production facilities, including by implementing new technologies and labour saving solutions and enhancing industrial safety at production facilities; • provides staff with certified modern personal protective equipment; • improves the system of fixed gas analysers and furnishes staff with portable gas analysers; • implements preventive healthcare measures and sanitary and hygienic practices to reduce the potential impact of hazardous and dangerous production factors; • provides its employees with regular training and instructions and assesses their performance in OHS, conducts corporate workshops, where, among other things, special simulation equipment is used; • strengthens the methodological framework in OHS, including by developing and introducing corporate standards; • improves the risk assessment and management framework at the Group companies and production facilities as part of the Risk Control project; • reviews the competencies of line managers at the Company's production facilities, develops OHS training programmes and arranges relevant training sessions; • holds OHS competitions; • provides all employees with updates on the circumstances and causes of accidents, conducts ad hoc themed instruction sessions; • introduces frameworks to manage technical, technological, organisational and HR changes.

4. Soil thawing

Loss of pile foundation bearing capacity may cause deformation of buildings and structures leading to their destruction.

Risk effect: medium
Risk source: external
Risk level change: none

Key risk factors	Key mitigants
• Climate change, average annual temperature increase (over the last 15–20 years) • Increased depth of seasonal thawing	To mitigate this risk, the Company: • regularly monitors the condition of foundation beds and structural parts of buildings and structures; • runs geodetic control of changes in buildings' positions; • uses satellite monitoring of the Company's facilities with subsequent analysis of the monitoring data to identify potential risks of deformations in the earth's crust, if any; • implements ongoing monitoring of the Company's buildings and structures by scaling up a corporate information and diagnostics system (including deployment of automated monitoring points to control parameters essential for the safe operation of buildings and structures); • monitors soil temperature at foundations of buildings and structures; • monitors the facilities' compliance with operational requirements for buildings and structures erected in the Northern climate zone; • puts in place corrective actions and adaptation measures to bring buildings and structures into safe operating conditions.

5. Compliance risks

GRI 205–1

This risk relates to legal liability and/or legal sanctions, significant financial losses, suspension of production, revocation or suspension of licences, loss of reputation, or other adverse effects arising from the Company's non-compliance with the applicable regulations, instructions, rules, standards or codes of conduct.

Risk effect: medium
Risk source: combined
Risk level change: none

Key risk factors	Key mitigants
• Discrepancies in rules and regulations • Considerable powers and a high degree of discretion exercised by regulatory authorities	To mitigate this risk, the Company: • develops and updates regulatory and procedural guidelines on anti-corruption and combating unlawful use of insider information and market manipulation; • implements initiatives to ensure compliance with the applicable laws; • ensures that its interests are protected during surveillance inspections or in administrative offence cases; • defends its interests in courts and when court rulings are executed; • includes in contracts provisions protecting its interests; • implements initiatives to combat corruption, money laundering, and financing of terrorism and proliferation of weapon of mass destruction, and to manage conflicts of interests; • takes actions to prevent unlawful use of insider information and market manipulation; • ensures timely and reliable information disclosures as required by the applicable Russian and international laws; • gives its employees training in dealing with insider information and combating corruption; • conducts induction briefings on anti-corruption; • supports the operation of the Corporate Trust Line set up to handle reports of future or past cases of corruption, fraud, theft or other wrongdoings; • assesses the effectiveness of anti-corruption controls in the Group.

6. Information security risks

This group of risks includes, among other things, potential cyber crimes, potential unauthorised transfer, modification or destruction of information assets, disruption or lower efficiency of IT services, business, technological and production processes of the Company.

Risk effect: medium
Risk source: combined
Risk level change: increase

Key risk factors	Key mitigants
• Growing external threats • Unfair competition • Rapid development of IT infrastructure and automation of production and business processes • Employee and/or third-party wrongdoings • Switch to remote working and engagement of remote workforce outside the regions of the Company's operation	To mitigate this risk, the Company: • complies with applicable Russian laws and regulations with respect to personal data and trade secret protection, insider information, and critical information infrastructure; • implements MMC Norilsk Nickel's Information Security Policy; • categorises information assets and assesses information security risks; • plans and controls the compliance of information systems with the corporate information security standards; • raises employee awareness in information security; • replaces imported tools of information protection that have limited functionality due to sanctions; • protects assets using technical means and manages information access; • monitors threats to information security and the use of technical protection means, including vulnerability analysis, intervention testing, cryptographic protection of communication channels, controlled access to removable media, protection from confidential data leakages, mobile device management; • develops information security regulations; • procures that the corporate information security management system is set up and duly certified; • takes measures to provide secure remote access.

7. Environmental risks

This group of risks includes events that cause hazardous substances to be present in the environment, as well as events that are not part of the approved production processes and outside of the Russian laws and regulations and affect the Company's achievement of its environmental protection goals.

Risk effect: medium
Risk source: combined
Risk level change: none

Key risk factors	Key mitigants
• Non-compliance with environmental protection laws and regulations when running the Company's facilities • Poor internal management and controls • Failure to implement environmental protection programmes and activities on time • Natural phenomena and climate-related events	To mitigate this risk, the Company: • develops, implements and improves business processes to protect the environment and introduces best practices and approaches; • creates an incentive framework and develops employee expertise in environmental protection; • implements the Environmental and Climate Change Strategy; • goes ahead with the Company's environmental action plan; • oversees compliance with environmental laws and regulations and implementation of programmes and activities on environmental protection.

8. Risk of insufficient water resources

Water shortages in storage reservoirs of the Company's hydropower facilities may result in failure to achieve necessary water pressure at HPP turbines leading to limited power production and drinking water shortages in Norilsk.

Risk effect: medium
Risk source: external
Risk level change: none

Key risk factors	Key mitigants
Abnormal natural phenomena (drought) caused by climate change	To mitigate this risk, the Company: • builds a closed water circuit to reduce water withdrawal from external sources; • performs ongoing hydrological monitoring to forecast water level in rivers and water bodies; • in cooperation with the Federal Service for Hydrometeorology and Environmental Monitoring sets up permanent hydrological and meteorological monitoring stations to ensure more accurate water level forecasting in its regions of operation; • dredges the Norilskaya River and reduces energy consumption at the production facilities, should the risk materialise; • replaces equipment at one of its two hydropower plants to increase power output through improving the performance of hydroelectric units.

9. Social risk

The risk relates to increased tension among the workforce due to the deterioration of social and economic conditions in the Company's regions of operation.

Risk effect: medium
Risk source: combined
Risk level change: none

Key risk factors	Key mitigants
• Projects that have an impact on headcount/staffing • Failure of some employees and/or third parties to share the Company's values • Limited opportunities for annual wage indexation • Dissemination of false and inaccurate information about the Company's plans and operations among the Group's employees • Reallocation of spending on social programmes and charity	To mitigate this risk, the Company: • strictly abides by the collective bargaining agreements made between the Group's companies and employees; • actively interacts with civil society institutions, and employee representative bodies; • runs programmes in accordance with its corporate social policy and the World of New Opportunities charitable programme to support and promote regional public initiatives, including those geared towards the indigenous peoples of the Taimyr Peninsula, and the Plant of Goodness corporate volunteering programme; • puts in place infrastructure to enable accelerated development and improved quality of life across the Company's regions of operation in cooperation with the Norilsk Development Agency, the Second School Centre for community initiatives in the Pechengsky District, and the Monchegorsk Development Agency; • implements regular social monitoring across the Group's operations; • conducts opinion polls among Norilsk's communities to learn more about their living standards, employment, migration trends and general social sentiment, and identify major challenges; • implements social projects and programmes aimed at supporting employees and their families, as well as the Company's former employees; • engages in dialogues with stakeholders and conduct opinion polls while preparing public sustainability reports of the Group; • implements a set of social support initiatives for the personnel facing redundancies as part of Kola MMC's social programmes and develops roadmaps for the social and economic development of the Pechengsky District.

10. Supply chain risks

Supply chain disruption in existing transportation and logistics schemes.

Risk effect: medium
Risk source: combined
Risk level change: none

Key risk factors	Key mitigants
• Harsh physical and climatic conditions of the regions of operation • Transportation and logistics limitations • Higher inflation and exchange rates, pricing pressure from suppliers, improper planning and other factors • Improper performance of contractors	To mitigate this risk, the Company: • proactively partners with domestic manufacturers to strengthen competition; • enters into long-term contracts/agreements and sets optimal fixed prices for the long term for equipment, materials and spare parts at the most favourable terms possible; • makes lists of critical equipment and materials suppliers and takes steps to prevent supply disruptions and monitor the business of said partners; • runs logistics expansion programmes.

Tax strategy

GRI 207–1

Nornickel is one of the largest taxpayers in the Russian metals and mining industry. The Company ensures strict compliance with tax laws and pays all taxes on time.

The Group's Tax Strategy Policy sets general operating principles for the tax functions of MMC Norilsk Nickel and its subsidiaries and improves the efficiency of their financial and economic operations by managing the tax burden and tax risks. The Policy is the key document that governs all taxation aspects at the Company.

Tax management at Nornickel Group

GRI 2–9, 2–12, 2–13, 207–2

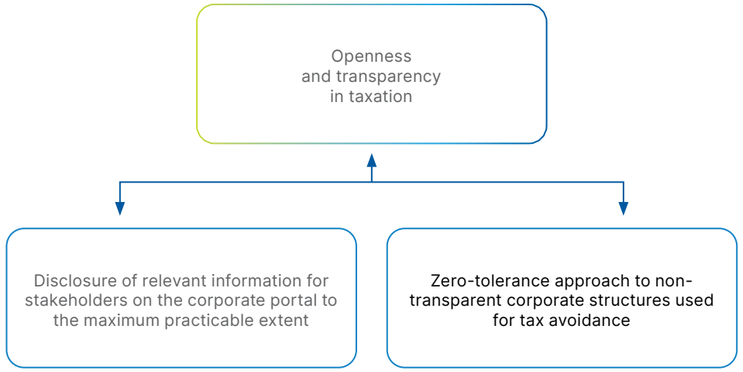
Board of Directors	Reviews the report on the efficiency assessment of Nornickel Group's corporate risk management framework
Management Board	• Approves the Tax Strategy Policy • Reviews the reports on tax risk management
Senior Vice President and CFO at PJSC MMC Norilsk Nickel	• Oversees the activities of the Tax Department • Organises and controls the implementation of the Risk Management Regulations
Tax Department	Provides tax support for Russian and foreign companies of the Group
Corporate Trust Line	Collects reports of unethical or illegal tax practices
Employees of the financial services of foreign companies	• Prepare tax accounts and reports • Interpret tax legislation and resolve controversial tax issues • Manage tax risks
Independent external auditor	Conducts statutory audits of consolidated financial statements, including tax disclosures[1]
Tax experts of the Shared Services Centre, tax experts in business units, employees of local accounting business units	Prepare tax accounts and reports

[1] For more details, please see our consolidated financial statements

The Head of the Tax Department, who reports to Nornickel's Senior Vice President and CFO, is in charge of the Tax Strategy development. The tax strategy and any substantial amendments thereto are subject to approval by Norilsk Nickel's Management Board. Updates and significant changes are introduced as needed, but at least once every three years.

The Company's Tax Department prepares internal regulations based on the current legislation, arbitration practice, regulatory clarifications and other circumstances, and communicates them to the Group's business units. If necessary, the Tax Department requests specific clarifications from competent authorities or a reasoned opinion of the tax authority required for the companies participating in tax monitoring.

Approach to taxation



As a responsible company, Nornickel is committed to openness and transparency in its taxation aspects.

Intra-group transactions between the Group's companies are made using market prices. In terms of transfer pricing, the Group complies with the basic principles set out in the Organisation for Economic Cooperation and Development (OECD) Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations and follows the laws and regulations of Russia and other countries of operation.

Nornickel takes a conservative approach to all controversial tax issues arising in all jurisdictions across the Group's footprint. The Group considers unacceptable any use of aggressive tax planning schemes.

The Group's foreign entities interpret applicable tax legislation and resolve controversial tax issues independently.

Cooperation with tax authorities

GRI 207–3

The Group's companies interact with tax authorities as part of tax control, when obtaining clarifications on the current legislation, and when signing pricing agreements.

Nornickel interacts with tax authorities on an ongoing basis using the tax monitoring framework, which provides tax authorities with real-time access to the Company's tax and accounting data. By giving tax authorities direct access to its corporate accounting system, the Group clearly demonstrates its highly professional and ethical approach to tax matters.

2022 tax payments breakdown[1] (RUB mln)

Indicator	Income tax	Mineral extraction tax	Licences and similar payments	Total
MMC Norilsk Nickel Group	68,114	66,334	23	134,471
South Cluster	4,394	5,989	0	10,383
Kola MMC Group	0	2,286	0	2,286
NN Harjavalta	137	0	0	137
GRK Bystrinskoye	112	457	0	569
Other mining businesses	546	0	0	546
Other non-metals businesses	1,172	0	0	1,172
Total	**74,475**	**75,066**	**23**	**149,564**

2022 tax payments by country (RUB mln)

Indicator	Income tax	Mineral extraction tax	Licences and similar payments	Total
Russia	73,166	75,066	23	148,255
Finland	137	0	0	137
Switzerland	1,035	0	0	1,035
Other countries	137	0	0	137
Total	**74,475**	**75,066**	**23**	**149,564**

Information on the Company's tax payments is disclosed in line with the Extractive Industries Transparency Initiative (EITI) requirements.

[1] Income tax payments are reflected in accordance with the taxpayer's belonging to the reporting segment. Income tax payments for the consolidated taxpayers group are, therefore, reflected in MMC Norilsk Nickel Group reporting segment due to the affiliation of the responsible member of the consolidated taxpayers' group to this segment. Here, MMC Norilsk Nickel Group means the operating segment which includes mining, processing and metallurgy operations, as well as transportation, energy, repair and maintenance services on the territory of the Taimyr Peninsula. Kola MMC Group means the operating segment which includes mining and processing operations, metallurgy, energy and mineral exploration operations on the territory of the Kola Peninsula. The data include Norilsk Nickel Harjavalta.

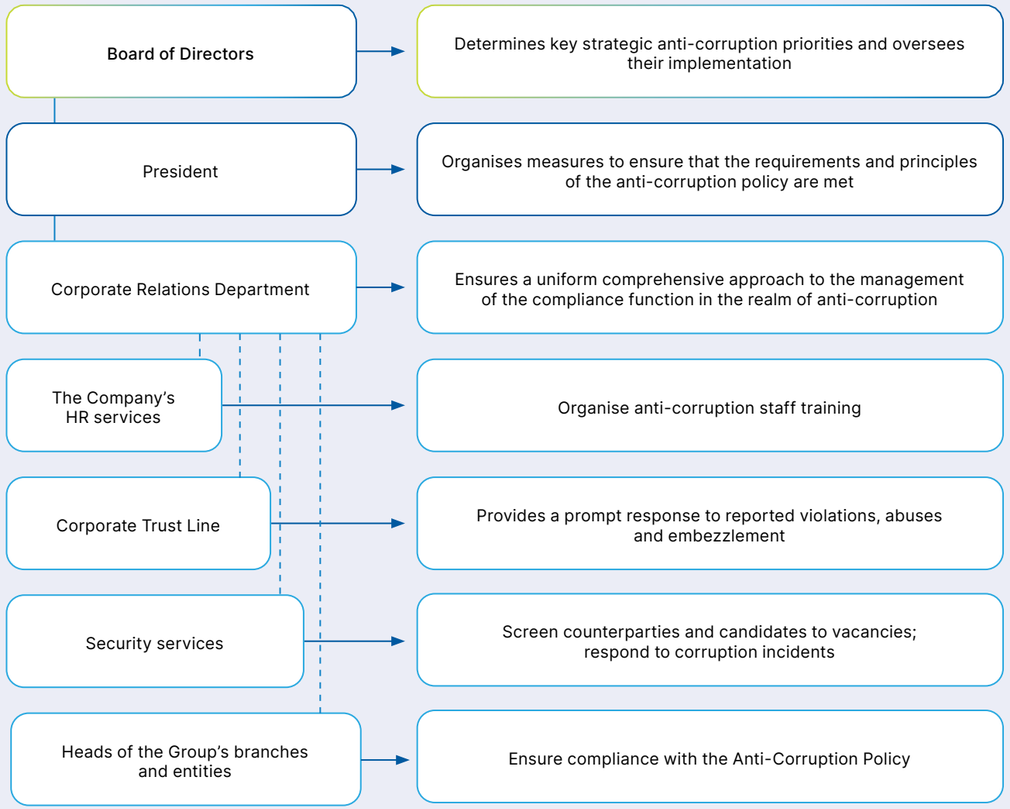
Business Ethics and Anti-Corruption

Nornickel is committed to conducting business in a transparent, honest and ethical manner. This approach is not only beneficial in building trust-based relationships with investors, partners, employees, and other stakeholders, but is also instrumental in improving social and economic conditions for the Company.

Nornickel sets the bar high for its employees and partners with respect to integrity and responsible business conduct, and has zero tolerance to any form of corruption at all levels. With an anti-corruption and compliance framework in place, the Company works to eliminate any and all unethical and corrupt practices.

Anti-corruption practices: allocation of responsibility

GRI 2–9, 2–12, 2–13



Guided by the United Nations Convention against Corruption, Nornickel also ensures compliance with Federal Law No. 273-FZ On Combating Corruption dated 25 December 2008.

Nornickel's Anti-Corruption Policy is the key internal document that governs the anti-corruption and corruption risk management efforts in the Company. The policy seeks to ensure compliance with anti-corruption laws, as well as to prevent, identify and eliminate causes of corruption. The document applies to both Company employees and third parties, including foreign public officials and officials of public international organisations. The respective anti-corruption responsibilities are stipulated in agreements made with contractors or are expressly provided for by the applicable laws.

Nornickel Group's Russian business units adopt and implement their own anti-corruption regulations in line with the Company's anti-corruption policy. We also do our best to ensure our foreign operations comply with the key anti-corruption principles and requirements.

Key anti-corruption regulations

- Anti-Corruption Policy
- Business Ethics Code
- Code of Conduct and Ethics for Members of the Board of Directors
- Supplier Code of Conduct
- Regulations on the Prevention and Management of Conflicts of Interest
- Regulations on the Conflict of Interest Commission
- Regulations on Business Gifts
- Procedure for Anti-Corruption Due Diligence of By-Laws Adopted by the Head Office
- Standard anti-corruption agreement (appendix to the employment contract)
- Standard anti-corruption clause included in counterparty agreements

Our principles of business and ethical conduct are articulated in the Business Ethics Code that applies to the employees of all levels performing their job duties.

In 2014, Nornickel joined the Anti-Corruption Charter of the Russian Business. Once every two years, we submit a declaration to prove our compliance with anti-corruption requirements as prescribed by the Anti-Corruption Charter of the Russian Business. Our anti-corruption initiatives are regularly covered in corporate press releases.

Every year, we take part in the Russian Business Anti-Corruption Rating compiled by the Russian Union of Industrialists and Entrepreneurs. Following a comprehensive independent assessment in 2022, the Company received the highest A1 rating class. This is a proof of how much effort the Company's management invests in improving the anti-corruption system.

Preventing and fighting corruption

GRI 205–3, SASB EM-MM-510a.1

The key initiatives designed to develop and improve the anti-corruption compliance system in 2022 included:

- approving a uniform approach to the adoption of anti-corruption regulations and control mechanisms across the Group;
- conducting a training campaign on the basics of anti-corruption compliance for the Group's employees responsible for relevant practices;
- revising and updating the Company's anti-corruption regulatory and procedural guidelines.

In addition, the Company runs a wide range of internal initiatives on an annual basis.

In 2022, no corruption practices were revealed.

Focus areas

- Prevention and management of conflicts of interest
- Adopting standards and codes of conduct
- Internal control of business operations and accounting
- Cooperation with the government and law enforcement agencies
- Anti-corruption due diligence of by-laws
- Monitoring of anti-corruption procedures at Nornickel Group
- Bonuses and social support
- Sponsorship and charity
- Identification, assessment and mitigation of corruption risks
- Raising stakeholder awareness about the Company's anti-corruption policy
- Staff training in preventing and fighting corruption
- Procurement procedures
- Business gifts and hospitality expenses
- Counterparty due diligence to confirm their reliability, solvency and financial stability

As regards the previously identified cases that involved Nornickel Group employees, court judgements were passed in 2022. Nornickel took disciplinary action in the form of dismissal against these employees in strict compliance with the law. Following convictions under these accusations, the Company conducted mandatory preventive talks with the staff on the unacceptability of law violations and zero tolerance for any unlawful acts, including corruption. The topics also cover the Business Ethics Code and the inevitability of penalty for any crimes[1].

Prevention efforts enable Nornickel to take adequate and timely action not just in identifying the wrongdoings, but also in avoiding them, which is one of the main goals of the Company's responsible units.

In addition, to further boost efficiency and improve anti-corruption performance, the employees of the Anti-Corruption Compliance Department at the Head Office are annually assigned individual performance indicators.

Corruption risk management

GRI 205–1

The Company performs an annual analysis of existing anti-corruption risks and ensures that business processes are monitored on a quarterly basis. The key risk areas are reviewed and the existing corruption risk map is updated as necessary. The Company identifies a number of key risks associated with the occurrence or possible occurrence of anti-corruption violations in its interactions with contractors, employees and government officials. Other sensitive areas include procurement, business gifts and hospitality expenses, charity projects, as well as the recruitment and hiring processes.

In 2022, the assessment of corruption-related risks[2] covered 81 business units, which is

98% of the total number of the Group's business units.

Nornickel aims to exclude any compliance risks, including contractor-related ones. To this end, Nornickel's Security Service performs a contractor due diligence review to identify corruption incidents or involvement in any corruption incidents, inclusion in the register of fraudulent suppliers and pending administrative proceedings. In case of negative findings, the Corporate Relations Department assesses the risk of relations with the contractor in question and recommends mitigants if applicable.

Regardless of the outcomes, the Company signs a standard master agreement containing an anti-corruption clause with all selected suppliers and contractors.

Anti-corruption monitoring

In 2022, we implemented an anti-corruption monitoring initiative to see how anti-corruption procedures are actually being put into practice across the Group. At the beginning of 2023, 91% of Russian business units of Nornickel Group adopted the key anti-corruption regulations and procedures. The Company continues to integrate anti-corruption procedures across the Group, including the newly created companies.

In 2022, to check compliance with Federal Law On Combating Corruption, we organised a random check across the Group's branches and Russian business units to look into procedures of entering into employment and contractor agreements with former government officials.

Following a previous internal audit into the efficiency of anti-corruption controls, the Group updated its anti-corruption regulatory and procedural guidelines while also eliminating the flaws in, and tightening control over preventive procedures.

Anti-corruption training

GRI 205–2

Nornickel provides regular training to its employees to raise awareness on anti-corruption practices. All new hires receive an induction briefing in this area. When recruited, they also need to familiarise themselves with the corporate Anti-Corruption Policy and sign an addendum to their employment contract that sets out anti-corruption responsibilities.

There is an online anti-corruption course taken by all employees and a dedicated course on compliance with anti-corruption laws for our HR function. The new approach to raising personnel awareness of anti-corruption procedures resulted in stronger employee training indicators in 2022. In addition, there was a major three-day training session for employees responsible for implementing anti-corruption procedures.

Educating and training employees on Nornickel's anti-corruption policies and practices in 2022, by region

Indicator	Norilsk Industrial District	Krasnoyarsk Territory (excluding the Norilsk Industrial District)	Murmansk Region	Moscow and other regions of Russia	Trans-Baikal Territory	Total
Number of employees made aware of the Group's anti-corruption policies and practices	54,837	3,429	12,375	7,999	2,852	81,492
Share of employees made aware of the Group's anti-corruption policies and practices, %	100	100	100	100	100	100
Number of employees trained on the Group's anti-corruption policies and practices	22,975	821	3,995	3,133	101	31,025
Share of employees trained on the Group's anti-corruption policies and practices, %	42	24	32	39	4	38

Educating and training employees on Nornickel's anti-corruption policies and practices in 2022, by category

KPI	Managers	White-collar employees	Blue-collar employees	Total
Number of employees made aware of the Group's anti-corruption policies and practices	12,868	18,170	50,454	81,492
Share of employees made aware of the Group's anti-corruption policies and practices, %	100	100	100	100
Number of employees trained on the Group's anti-corruption policies and practices	4,246	6,399	20,380	31,025
Share of employees trained on the Group's anti-corruption policies and practices, %	33	35	40	38

[1] For more details, please see Nornickel's 2021 Sustainability Report.
[2] Corruption-related risks were assessed for the aspects of anti-corruption activities significant for the Group.

Managing conflicts of interest

The Company pays special attention to timely identification and prevention of conflicts of interest. With the Regulations on the Prevention and Management of Conflicts of Interest at MMC Norilsk Nickel in place, the Company seeks to prevent and minimise the risk of employees' personal interests influencing the business decision-making process. In addition, the Company approved the standard declaration form for reporting conflicts of interest, to be filled in by candidates applying for vacant positions and by individuals acting as independent contractors. There are also permanent Conflict of Interest Commissions working to ensure compliance with the principles of legality and improve corporate culture.

In 2022, we established a conflict of interest reporting process for the employees of Russian business units hired before the Regulations on the Prevention and Management of Conflicts of Interest came into effect.

Anti-money laundering and counter-terrorist financing initiatives

For the purposes of anti-money laundering / counter-terrorism financing / prevention of proliferation of weapons of mass destruction (AML/CFT/CPF), the Company has put in place internal controls in strict compliance with Russian laws and its own by-laws:

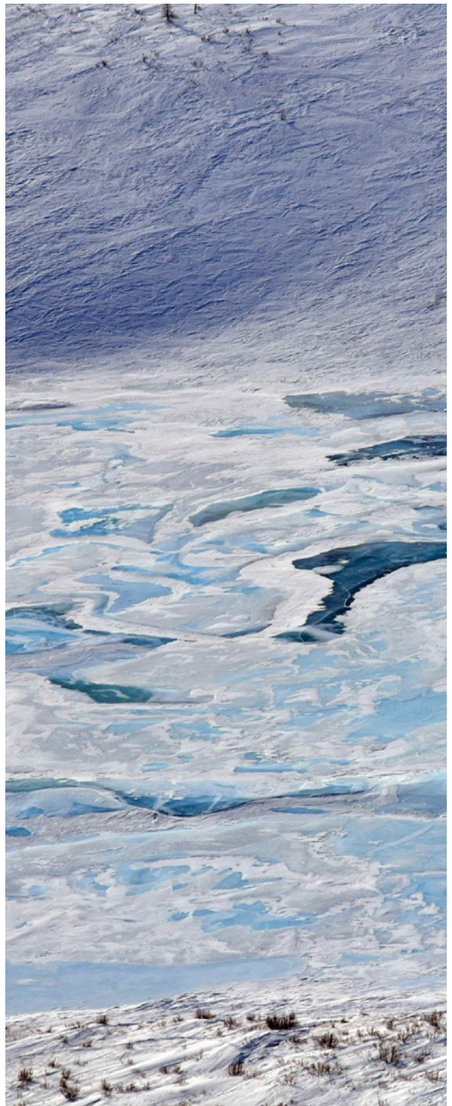
- Federal Law No. 115-FZ On Anti Money Laundering and Combating the Financing of Terrorism dated 7 August 2001;
- MMC Norilsk Nickel Internal Control Rules on Combating Money Laundering, Financing of Terrorism and Proliferation of Weapons of Mass Destruction.

In 2022, the Internal Control Rules were updated to reflect Federal Law amendments.

The key principle of internal control for AML/CFT/CPF purposes is the risk-based approach that covers:

- customer identification and due diligence;
- assessing the risk of suspicious transactions made by customers; assigning a risk group;
- taking measures to mitigate the AML/CFT/CPF risks and their potential effects, among other things, by engaging all employees, within their competences, in identifying risk criteria for suspicious transactions;
- systematic employee training.

Other AML/CFT/CPF efforts include due diligence of customers prior to entering into contracts, identification of beneficial owners, analysis of customers' business reputation and other reasonable and available measures depending on the risk exposure.



Grievance policy

GRI 2–16, 2–25, 2–26, 207–2

Corporate Trust Line

In 2010, Nornickel launched its Corporate Trust Line (CTL) as a primary tool to manage complains and queries. Available to a wide range of stakeholders, the line helps to quickly respond to their concerns relating to the protection of assets and corporate interests, prevention of abuse, theft and other violations.

The CTL is accountable to the Internal Control Department and operates in line with the Company's by-laws. Responsible for the service are its operator and head along with the Director of the Internal Control Department.

Report statistics (broken down by Group company) are submitted to units in charge on a quarterly basis. CTL performance is reviewed by the Board's Audit Committee. CTL is subject to assessment by the Vice President for Internal Control and Risk Management, the Board's Audit Committee and employees taking part in an engagement survey named "Let Everyone Be Heard. What Do You Think?".

Persons in charge of the CTL have individual KPIs such as a timely and proper processing of incoming communications and reporting on CTL performance to interested users.

Key principles

CTL is guided by the following principles designed to prevent retaliation against or pressure on whistle-blowers:

- guaranteed confidentiality for whistle-blowers;
- independent consideration of reports;
- timely and unbiased consideration of all incoming reports irrespective of the position and employment period of the person mentioned therein.

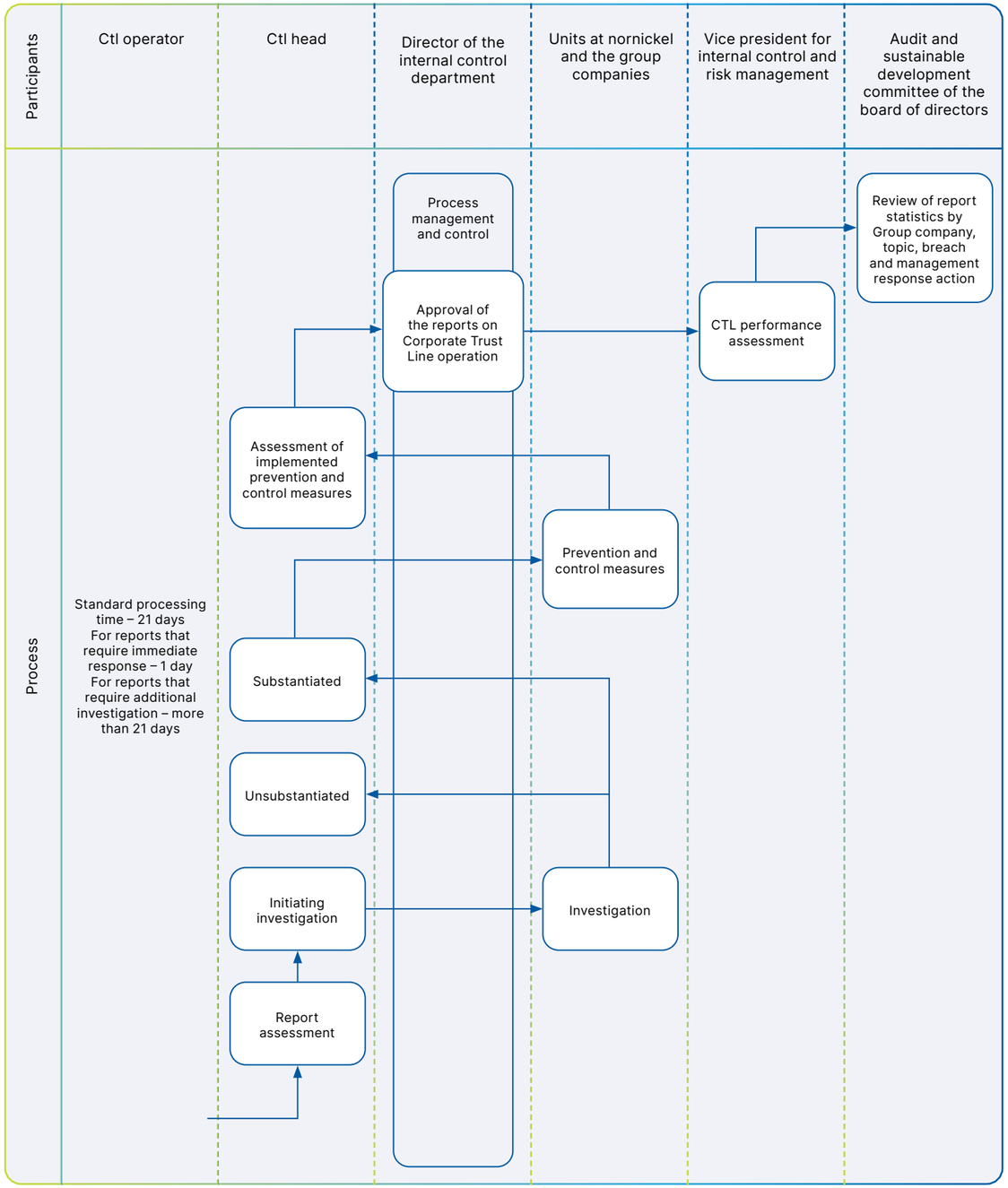
Any stakeholder may contact the CTL reporting both potential corruption and a wider range of matters related to violations of procedures and by-laws, including with respect to human rights, environment, labour relations, etc.

For everyone wishing to make a report, toll-free channels are available 24/7:

- +7 800 700 1941 and +7 800 700 1945;
- e-mail: skd@nornik.ru;
- online form at https://www.nornickel.com/sustainability/corporate-hotline/

The procedure provides for the operator to fully handle the report (from registration in the information system to review by a dedicated function and assessment of the response by the Head of the Corporate Trust Line) within 21 business days.
The exceptions are reports that require immediate action or additional investigation. If found substantiated, the report triggers a set of control measures, and if a violation is confirmed, steps are taken to correct the situation, eliminate any negative consequences, and inform stakeholders.

Framework for registering and reviewing reports by the Corporate Trust Line



CTL procedures provide for sending a response explaining the results of the review to the applicant only upon their request. In late 2022, the Company prepared a draft update of the Corporate Trust Line Procedure. Among other things, the update provides for informing applicants about the registration of their complaints or queries and the review outcomes upon their request and availability of contact details.

All employees are kept thoroughly informed of this service through information displays and stands, payslips, corporate calendars, brochures, etc.

In 2022, the Corporate Trust Line received 1,463 reports, with 589 accepted for review, 556 resolved and released from control (out of which 159 were confirmed and 397 not confirmed). Most reports had to do with labour relations and commercial and contractual activities. As at 1 January 2022 and 31 December 2022, 70 and 103 reports were at the processing stage, respectively.

In 2022, the Corporate Trust Line received

1,463 reports

Reports received in 2022 by type of reported abuse (589 in total)

Reports confirmed in 2022 by type of reported abuse (159 in total)

Grievance Mechanism

In 2022, the Company introduced additional corporate procedures to improve the Grievance Mechanism and its accessibility to external stakeholders (local and indigenous minority communities, suppliers or contractors, etc.). Company employees and other stakeholders can continue using the Corporate Trust Line and other channels for grievance purposes (telephone numbers, an online form on the Company's website or an e-mail). The Mechanism does not replace any existing statutory or corporate rights protection mechanisms.

The new Mechanism provides for pre-trial dispute resolution based on dialogue and mediation. It is not mandatory and does not limit the right to statutory remedies, such as legal action.

The Grievance Mechanism serves the following purposes:

- receiving, reviewing and resolving complaints about adverse impacts either caused or contributed by, or directly linked to, our own activities and business relationships;
- early prevention, identification and elimination of social and human rights risks, in addition to supporting continuous improvements in the Company's operations, to strengthen the relationships between the Company and its stakeholders in the long run.

The Mechanism is not intended to address any pre-existing social, economic, or cultural issues affecting local communities across the Company's operations. The Company continues to resolve them using other mechanisms and social programmes.

Complaints are filed through CTL channels, community liaison offices, and Company executives. A complaint may be submitted by the initiator or with the help of company representatives and independent experts in case of any difficulties.

The standard review period is 21 business days when filed through the Corporate Trust Line and 30 calendar days for other channels. If more time is needed for review and resolution, the initiator is notified to this effect within 30 days.

Initial assessment of the information received from the applicant involves determining which division head should receive the complaint, whether additional information and investigation are required, and whether the complaint should be considered by an independent expert group or redirected to government authorities. This means that the grievance mechanism has three levels such as internal, independent (expert) and government:

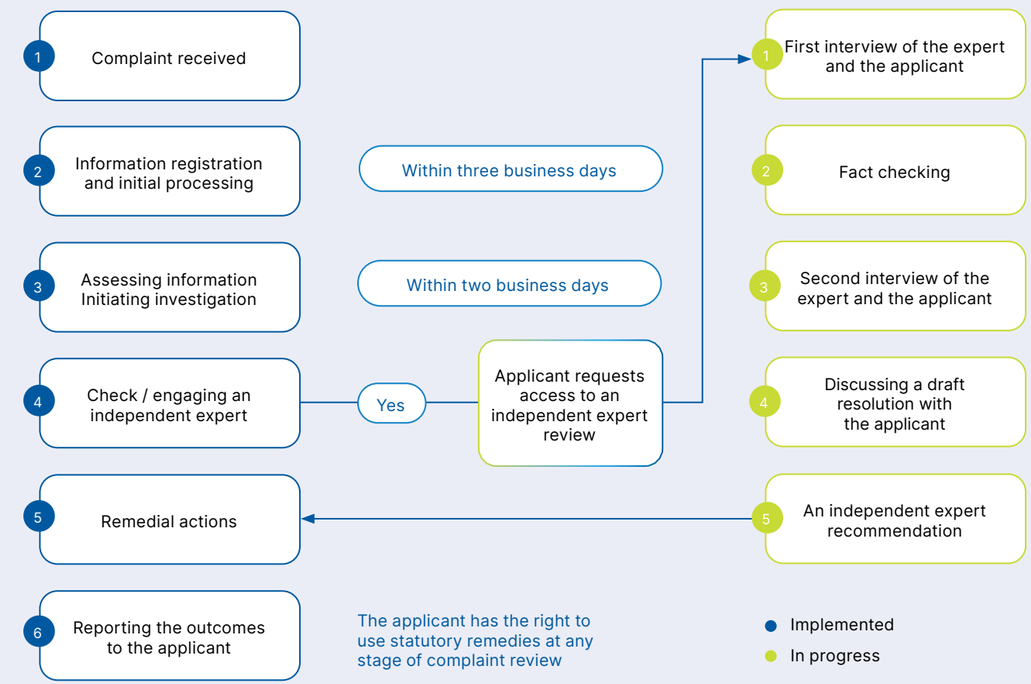
- if the review identifies signs of non-compliance which require the complaint to be referred to government authorities, or violations of applicant rights requiring referral to an independent expert group for further consideration, the complaint is redirected as appropriate;
- internally, complaints are reviewed in accordance with the Company's by-laws. Remediation and restoration of stakeholder rights are handled by the Company's Head Office and Russian business units.

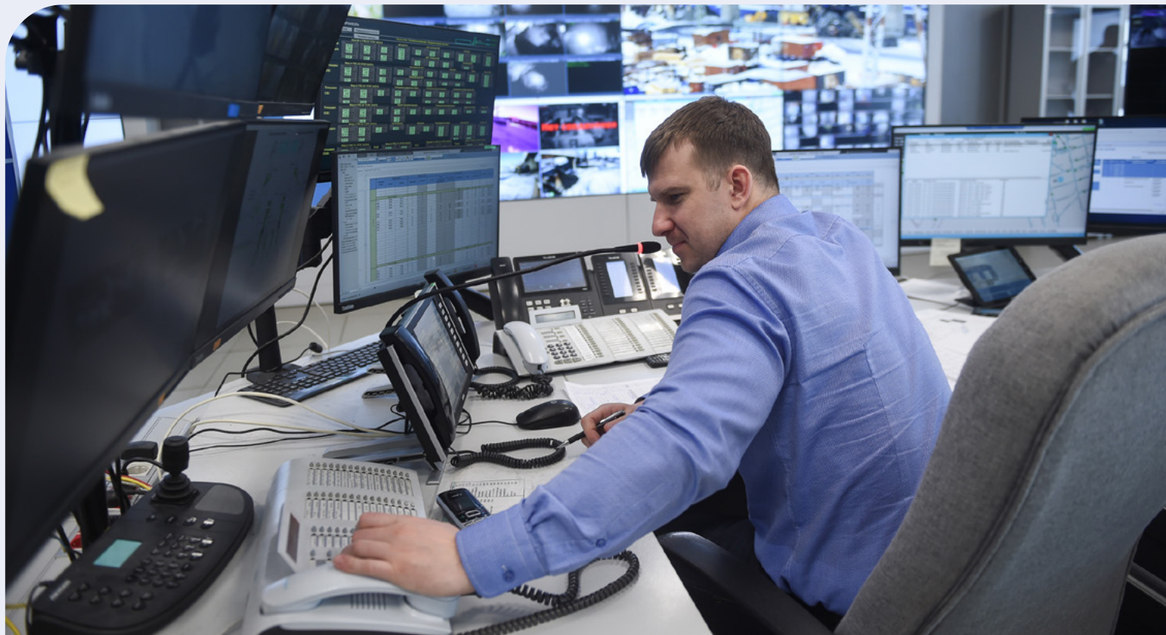
To monitor the performance of the Mechanism, we collect feedback from complaint initiators and assess the level of satisfaction on an ongoing basis and annually by analysing the feedback received during consultations with stakeholders across the Company's footprint and at the Head Office.

In 2022, we held discussions with stakeholders on options for improving the corporate Grievance Mechanism. Having assessed the human rights impact, external experts recommended that the Mechanism be updated and stakeholders provided with an effective access to an independent expert review to obtain a full, credible, and objective third-party (independent) decision. By developing this grievance mechanism, the Company becomes one step closer to improving the human rights due diligence system in 2023

For more details, please see the Respect for human rights section.

Grievance process flow





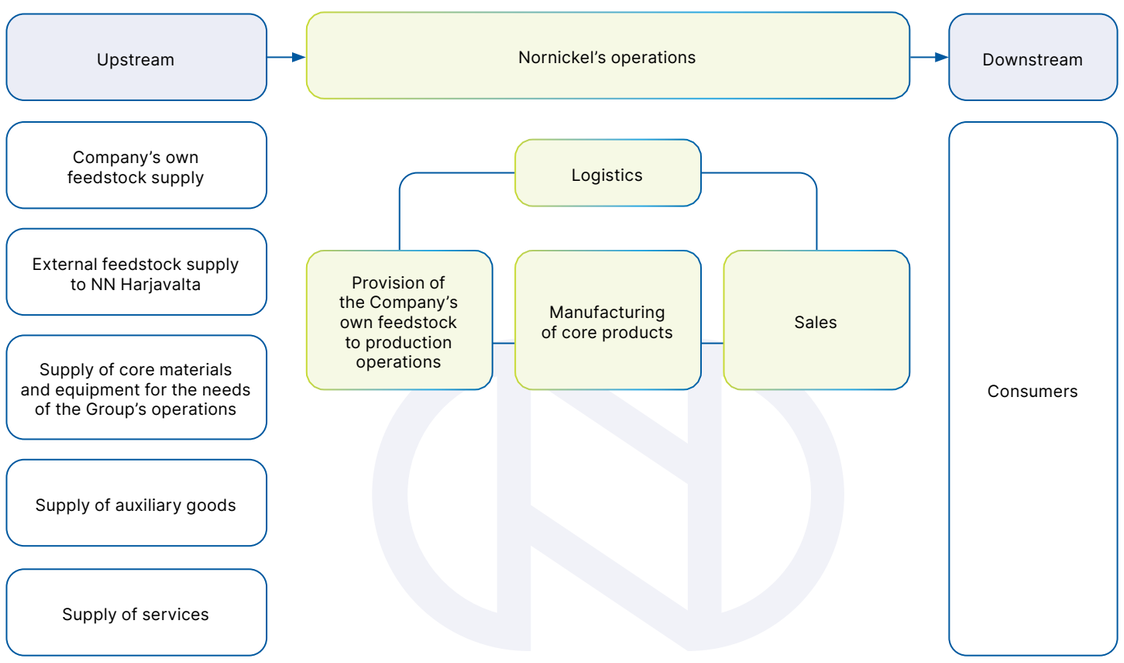
Supply chain responsibility

Managing the ESG aspects along the entire value chain is an essential element of Nornickel's management culture which helps manage relevant risks and respond to growing consumer needs. The continuity of the operations and operating results of the entire Group hinges on a sustainable supply chain.

Nornickel's supply chain management includes both interaction with mineral feedstock suppliers in the upstream sector and control over sustainability of their practices and procedures and ensuring high product quality in the downstream sector. Going forward, the Company plans to expand its supply chain management processes to cover suppliers of goods and services as well. Stakeholder engagement is an essential component in building a responsible supply chain.

Key elements of Nornickel's supply chain

GRI 2–6



Responsible procurement

Nornickel has set three main goals in responsible procurement management:

01

Making sure the key suppliers and contractors comply with the core ESG requirements.

02

No business relations with contractors in serious violation of sustainability principles.

03

Building long-term business relationships with the most responsible contractors.

Our cooperation with suppliers on the ESG front coupled with modern production practices ensure a sustainable and careful treatment of natural resources, in addition to reducing adverse impact on the environment. Taken together, these efforts directly contribute to making our processes more environmentally-friendly.

In 2021, MMC Norilsk Nickel approved its Responsible Sourcing Policy[1] and its Supplier Code of Conduct[2], which reflect the Company's responsible sourcing principles.

The Policy defines Nornickel's approach to responsible supply chain, stating the principles to be followed by the Company and its suppliers. The Code introduces procedures for the responsible selection of suppliers based on the principles outlined in the Policy, and motivates Nornickel's suppliers to implement processes that ensure a responsible and transparent supply chain.

In case of supplier non-compliance with the Policy or the Code, the Company takes measures to manage the risks of cooperating with that contractor, and can potentially reconsider its relationship with such suppliers.

With an extensive range of by-laws, Nornickel is able to effectively mitigate the operational and financial risks and costs, reduce the working capital, make supplies more reliable, and improve the delivery cycle.

[1] The Policy is available on the Company's official website.
[2] The Code is available on the Company's official website.

Nornickel's by-laws on responsible procurement

Key procurement by-laws	• Regulations on the Product Procurement Procedure for Nornickel Group Companies • Procurement policies by category (group of similar products) • A standard master agreement signed with every supplier • Policy Regarding Support for Small and Medium Enterprises • Efficiency improvement programme
Policies setting out ESG requirements for the Company's suppliers and contractors[1]	• Responsible Sourcing Policy • Supplier Code of Conduct • Business Ethics Code • Community Engagement Policy • Occupational Health and Safety Policy • Working Conditions Policy[2]; • Indigenous Peoples' Rights Policy • Human Rights Policy • Anti-Corruption Policy • Climate Change Policy

Checking suppliers for compliance with ESG requirements

Nornickel expects suppliers to meet the mandatory and target requirements and expectations set out in the Code.

The Company also provides responsible supply chain training for employees of the Company's Head Office and the Group companies, as well as for mineral feedstock suppliers.

For information and preparation purposes, in 2022, 1,313 contracts and general agreements with suppliers were updated to include an ESG compliance clause, which also notifies suppliers that they can reach out to Nornickel's Corporate Trust Line. The clause requires compliance with the UN Global Compact principles, the Code and the Policy.

In late 2022, this clause was added to the general terms and conditions and standard contract forms.

Contracts with suppliers were also updated to include an anti-corruption clause:

- designed to ensure that contracting parties are on the same page as regards zero tolerance to corruption;
- obliging contracting parties to inform the other party in a timely manner about the identification of possible corruption risks and relevant checks;
- providing grounds for termination or other liability if the contractor violates the anti-corruption clause and/or is involved in unlawful activities.

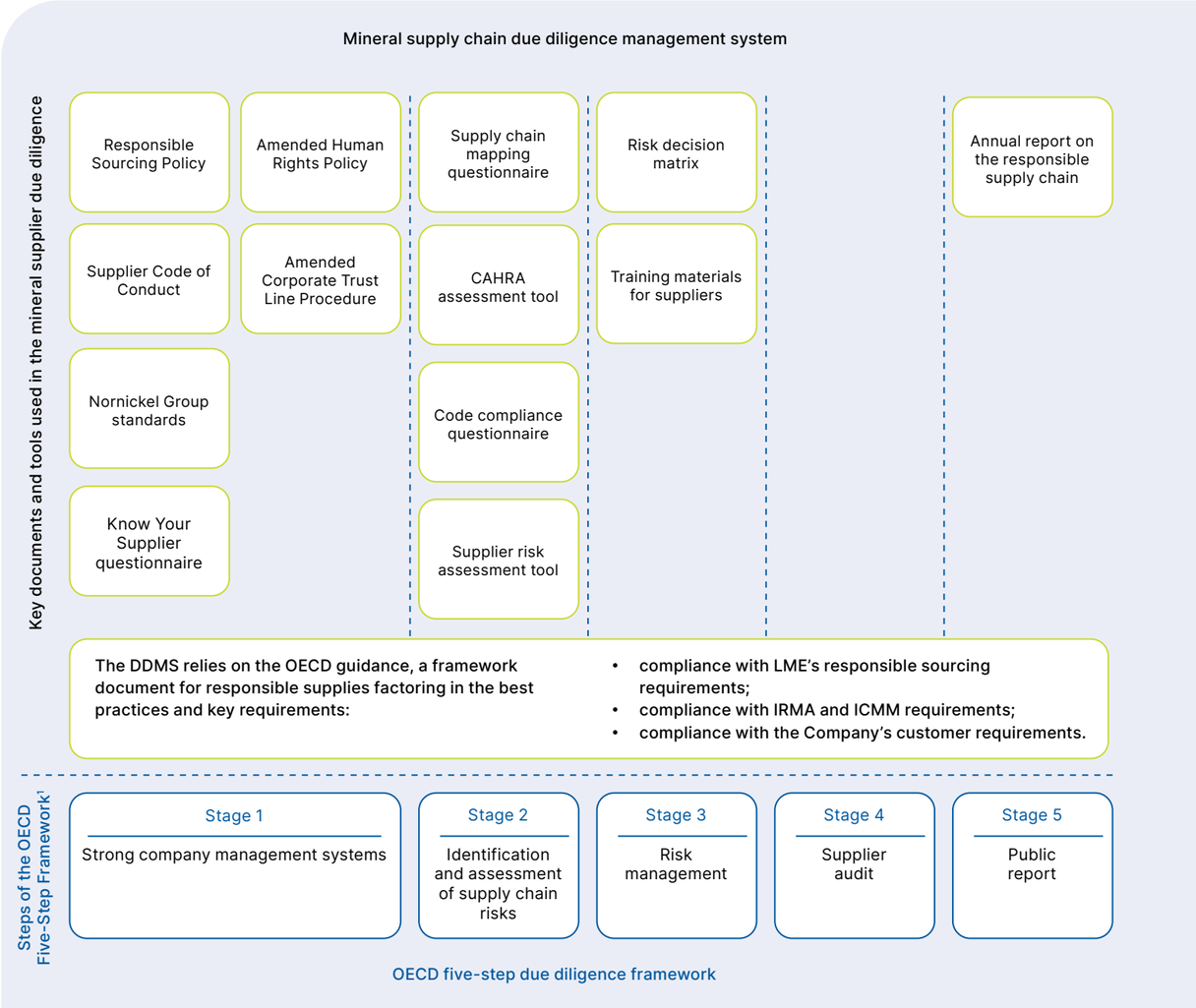
To monitor suppliers' compliance with the Code, Nornickel started developing a due diligence management system (DDMS) in 2021. The system focuses on compliance with the requirements and guidelines of:

- the London Metal Exchange for responsible sourcing;
- the standards and principles of industry-leading sustainability initiatives: ICMM, IRMA, RMI (including JDDS), as well as guidance from the China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters (CCCMC) regarding the due diligence process for responsible mineral supply chains;
- the Company's major customers.

> If suppliers refuse to comply with the Code or do not clearly demonstrate their continuous improvement in terms of compliance with its requirements, Nornickel may reconsider its relationship with such suppliers.

The Policy and the Code are the underlying documents of the supply chain due diligence system. The methodological basis for developing the system is the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas as well as OECD Five-Step Framework for Risk-Based Due Diligence in the Mineral Supply Chain.

[1] All of the above policies have been reviewed and approved by the Company's Board of Directors and are publicly available on the official website.
[2] Among other things, this policy specifies working hours and rest periods, adopts zero tolerance to child and forced labour, and sets out the approach to remuneration.



The system focuses primarily on identifying potential risks that could impact the stability and transparency of mineral supply chain processes, and on minimising the following risks:

- violations of human rights and freedoms;
- support for non-state armed groups;
- illegal mine control and feedstock trafficking;
- corruption and bribery;
- misinformation across the supply chain from ore mining to product delivery to consumers.

DDMS tools make it possible to collect more data on participants along the mineral supply chain, including their environmental, social and corporate governance (ESG) practices. An accurate mapping and identification of suppliers, provided they comply with the Code, in turn, contributes to a more effective decision-making, ensures a responsible mineral supply chain and high-quality products, and strengthens our position on global markets.

[1] OECD Five-Step Framework is the Five-Step Framework giving OECD guidance on risk-based due diligence for responsible supply chains of minerals from conflict-affected and high-risk areas

As part of the first step from the OECD Five-Step Framework for Due Diligence in the Mineral Supply Chain, Nornickel developed and released the Code and the Policy, which are public documents available on the Company's official website, and revised the Human Rights Policy[1] and Corporate Trust Line Procedure.

The Company developed DDMS tools focusing on mineral supplier due diligence (Know Your Supplier questionnaire) and on assessing how well a supplier complies with the Code, which help collect key information about the suppliers and their ESG practices. Other tools include the CAHRA[2] assessment tool, a supply chain mapping questionnaire, risk assessment tools (including supplier risk assessment tool and risk decision matrix), as well as template reporting documents, including a template internal monitoring report for DDMS purposes serving to analyse its efficiency and the need to amend it. To implement DDMS in the divisions, the Company also developed standards that are part of the supply chain due diligence system and conducted due diligence on both internal (being part of Group) and external suppliers.

Since 2021, the Company has been conducting due diligence on mineral suppliers in accordance with steps 2 and 3 of the Five-Step OECD Due Diligence Guidance. In 2021, Kola MMC developed the Mineral Supplier Due Diligence standard, and conducted a supply chain due diligence procedure in 2021–2022. The Polar Division also adopted a similar standard and performed due diligence on mineral suppliers in 2022. At Bystrinsky GOK, a due diligence standard was adopted during the reporting period, but no due diligence took place as the subsidiary does not have any mineral suppliers.

In 2022, Nornickel completed the DDMS development, rolled it out across all divisions and implemented all the steps covered by the OECD Framework. The due diligence involved existing suppliers only, as there were no new suppliers of mineral feedstock during the reporting period. Following the due diligence of 100% suppliers of metal-containing mineral feedstock for the Group's Russian assets, no risks were confirmed. Step 5 involved the release of a public responsible supply chain report[3] for 2021–2022 for greater transparency of Nornickel's efforts to build a responsible supply chain.

In addition to the due diligence, annual RSBN (Responsible Sourcing Blockchain Network) audit was conducted at the Kola and Norilsk divisions, as well as the Head Office during the reporting period. This audit focused on the development of the supply chain due diligence system and the Company's compliance with the key responsible sourcing requirements. These audits were first conducted at the Company's sites in 2021, when Nornickel joined the international Responsible Sourcing Blockchain Network. This initiative brings together sellers and buyers of across the minerals supply chain. Based on the 2022 audit results, the Company delivered a 35% improvement in performance on a year-on-year basis.

In 2022, Nornickel's 2021 RFA[4] reports relating to five metal brands were sent to the London Metal Exchange. Their acceptance by LME proves the high compliance level of the Company's practices with the LME responsible sourcing policy.

During the first stage, Nornickel's DDMS covered suppliers of metal-containing mineral feedstock. In 2023, the Company plans to expand the system to suppliers of goods and services by launching a new tool — a supplier self-assessment questionnaire (the "supplier questionnaire"). Focused on the environmental, social, and governance (ESG) matters, the supplier questionnaire will be used to determine to what extent the suppliers of all categories meet the Code requirements. Going forward, after analysing supplier feedback, the Company plans to make this document part of the supplier selection process used to evaluate ESG maturity.

In addition to the DDMS measures, Nornickel traditionally performs detailed sustainability compliance control as part of its major procurement procedures. Nornickel's actual and potential contractors undergo mandatory checks for reliability, solvency and financial resilience. This check comprises a set of measures allowing us to sufficiently ensure that working with these contractors is not very risky in terms of compliance with contractual obligations and applicable laws, and will not damage our business reputation.

Contractor due diligence relies on a comprehensive approach in accordance with the Organization for Economic Cooperation and Development (OECD) Guidelines, international standards, as well as Russian laws and regulations.

According to the results of the 2022 audits, the Company improved its performance

by **35%**

Monitoring ESG factors in interaction with suppliers and contractors as part of procurement procedures

Procurement procedure stage	Key control tools	Control of ESG factors
Procurement initiation	**Scope of supply/work:** legal and regulatory requirements of the Company, mandatory and recommended specifications of products and services, covering health, safety and environment, etc.	● ● ● ●
	Procurement documents: provisions for no signs of bankruptcy, overdue taxes and charges, and no criminal records in the biographies of top managers	● ● ● ●
	Procurement policies for certain product categories: quality assurance procedures for supplies	●
Procurement procedure	**Qualification of suppliers:** default risk assessment and compliance with the Company's initial requirements (scope of supply/work, specifications, etc.)	● ● ● ●
	Corporate Security's checks into business reputation, reliability and solvency of potential counterparties	●
	Analysis and evaluation of bids submitted, including track record of similar projects and qualifications of key employees	●
Contracting procedure	Inclusion of an anti-corruption clause in the contract	●
	Inclusion of product and service specifications in **the scope of supply/work**	● ● ● ●
Contract performance by suppliers	**Corporate Procedure for Organising and Conducting High-Hazard Operations:** control over contractors' compliance with health and safety requirements	●
	Control over compliance with the Company's initial requirements (scope of supply/work, specifications, etc.) and environmental regulations during work and upon acceptance	● ● ●

ESG factors:
- ● Quality of products, works and services
- ● Environmental protection
- ● Occupational health and safety
- ● Legal compliance

[1] The Policy is available on the Company's official website.
[2] CAHRA means conflict-affected and high-risk areas.
[3] The report is available on the Company's official website.
[4] RFA means Red Flag Assessment.

Ensuring procurement efficiency and transparency

The Company and the Group as a whole handle both centralised and decentralised procurement using SAP SRM, an automated system for supplier relationship management. In 2022, 26 Group companies and MMC Norilsk Nickel divisions had joined the SAP SRM system and over 10,000 potential suppliers had registered in it, of which over 9,500 had been certified to work in it. Nornickel's current and potential suppliers can communicate online with procurement specialists for all categories of products purchased through Nornickel's SRM Procurement Management System and receive up-to-date information regarding ongoing procurement. Sign-up for the Supplier Relationship Management (SRM) system is free of charge and does not impose any obligations on users.

In addition, our website has a dedicated Suppliers section, which provides key information on the Group's procurement principles and procedures and planned needs. The page also features announcements and invitations to participate in the Company's tenders. For more details on SAP SRM-based procurement, please see the Procurement Procedures tab in the Suppliers section on Nornickel's official website.

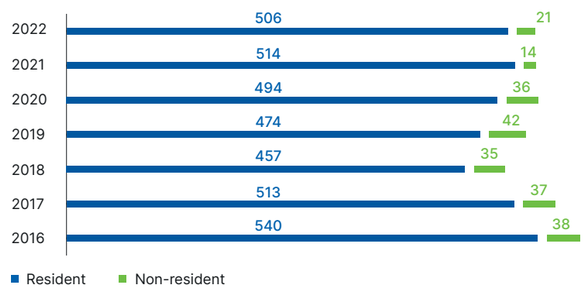
In 2022, the Company signed over

4.4 thsd contracts

for centralised procurement of materials and equipment worth around

180.6 bn RUB

Breakdown of Nornickel Group's suppliers for centralised procurement, number of companies



Product quality and supply reliability

Product quality assurance

As a producer, Nornickel is responsible for compliance with HSE laws and requirements during its production process.

The Company makes sure that its products comply with applicable regulations, takes into account the relevant requirements of consumers, and works to improve the chemical composition, appearance and packaging of its products, while also looking to create new forms of products and expand the product line.

Nornickel's efforts in managing product quality are underpinned by the principles highlighted in international standard ISO 9001:2015.

The Company's senior executives manage the risks and opportunities that can affect how much Nornickel's products and services meet consumer expectations, and ensure that the business focuses on improving customer satisfaction. Product quality related goals and objectives are in line with the Company's strategic goals and are formulated in the management's resolutions based on annual performance reviews of the Corporate Integrated Management System.

Corporate Integrated Management System (CIMS)

Nornickel maintains a Corporate Integrated Quality and Environmental Management System (CIMS), which is subject to continuous update and improvement in accordance with international standards ISO 9001 and ISO 14001.

CIMS objectives	Key regulations	Key Russian and international standards
• Competitive edge and liquidity of products and services • Guaranteed occupational safety, quality and reliability of supplies • Alignment with consumer needs and expectations • Environmental performance management	• Quality Policy[1] • Environmental Policy[2] • Occupational Health and Safety Policy[3] • CIMS Guidelines[4] • Company's internal standards	• GOST, GOST R • ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 • Rules and regulations of the European Union, World Trade Organisation, London Metal Exchange and Shanghai Futures Exchange

[1] Updated in 2017
[2] Updated in 2021
[3] Updated in 2020
[4] Updated in 2022

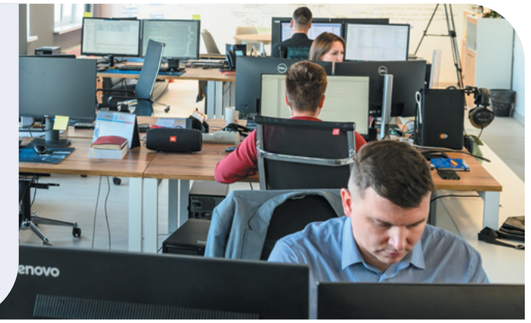
The CIMS is viewed as a set of interrelated and interacting processes, activities, procedures, rules, organisational structure and resources required for achieving the Company's goals and fulfilling the Company's ambitions and commitments articulated by the senior management in the quality, environmental, occupational health and safety policies.

In 2022, a number of recertification and surveillance audits were conducted at Nornickel's divisions. The audit confirmed CIMS compliance with ISO 9001, 14001, 45001.

For more details, please see the Certification of the Corporate Integrated Quality Management System appendix.

Corporate quality management training

In 2022, close to 200 employees of various levels received training in the integrated management system. Some of the key training topics included GOST and ISO compliance, development and deployment of an integrated management system, nonconformity management, and management of opportunities in the context of risk-based thinking.



The research centres and laboratories, which, as part of Nornickel's divisions and Group companies, analyse the ore feedstock, semi-products and saleable products, have quality management systems certified for compliance with GOST ISO/IEC 17025-2019 General Requirements for the Competence of Testing and Calibration Laboratories.

Nornickel products are not subject to mandatory certification. Consumer properties of each product are defined in the relevant specifications and contractual documentation in full compliance with Russian and international laws.

The Company's goods are labelled to keep the customers and carriers informed about key properties of the products (including those meant for exports). The labelling rules are set out in product-specific regulations and take into account the GOST 14192-96 (Cargo Labelling) requirements and contractual obligations.

NORILSK brand copper cathodes produced by Nornickel's Polar Division are registered on the London Metal Exchange and meet the requirements of GOST 546-2001, "Copper Cathodes. Technical Specifications", GOST 859-2014 "Copper. Grades", for the M00k grade. In 2022, the Company rebranded and registered its copper cathodes under the new NORNICKEL brand instead of the NORILSK brand previously used at the London Metal Exchange.

Electrolytic nickel of the H-1u, H-1, and NORNICKEL grades, produced by Kola MMC is listed at the London Metal Exchange, with the H-1u and H-1 nickel grades also listed at the Shanghai Futures Exchange. Electrolytic cobalt was listed on the London Metal Exchange in 2019.

Nickel brands of NORILSK NICKEL HARJAVALTA CATHODES and NORILSK NICKEL HARJAVALTA BRIQUETTES are also registered on the London Metal Exchange.

Throughout the history of Nornickel Group, it had never failed to meet its obligation to deliver products to consumers.

Ensuring reliable and uninterrupted supplies

Nornickel's sales strategy is focused on strengthening its positions in the market, with the Company seeking to achieve a balanced ratio of nickel supplies to stainless steel producers and other industries. As the largest palladium producer, Nornickel is implementing a strategy of direct long-term contracts with its end users (with a focus on the automotive industry) in order to maintain a long-term and sustainable demand for palladium.

Factors ensuring reliability and continuity of Nornickel Group's product shipments

- Efficient in-house system for product delivery planning and monitoring
- Close coordination between marketing, production and delivery units
- Corporate cargo fleet
- ISO-certified management systems across Nornickel Group
- Feedback loop with customers that enables prompt response to their proposals, inquiries, and complaints
- Highly qualified staff

Customer satisfaction

Nornickel is committed to building a reliable supplier reputation. To improve mutual understanding with customers, determine the degree of their satisfaction and identify areas for possible improvements in customer satisfaction with the quality of products/services, the Company conducts annual customer surveys and continuously monitors the performance of contractual obligations. These data are used to analyse customer requirements and expectations and their satisfaction with the Company's products.

Customer satisfaction is assessed using a scale from 1 to 3. The key to positive survey results is maintaining or exceeding target customer satisfaction level at 2.50 points (out of 3 points). According to the 2022 survey, the customer satisfaction level stood at 2.85 points, which fully meets the target.

Regardless of the score achieved, survey results serve to improve the quality of products, processes and the management system. To reduce the risks affecting product quality and customer satisfaction, the Company annually develops a comprehensive action plan to improve customer satisfaction.

In 2022, the Company received 16 complaints and grievances about its product or service quality and achieved out of court settlement for all of them by meeting the demands of consumers (13 complaints were deemed unfounded). In addition, three complaints received in 2021 were settled in 2022, with two of them deemed unfounded. After all the claims received had been reviewed, remedial action plans were developed to address eight complaints (including two rejected ones).

According to the 2022 survey, the customer satisfaction level stood at

2.85 points

Research and development, digital technologies

Nornickel's contribution to the Science and Universities national project

Relevant UN SDGs

Related federal projects

- Development of science and scientific-and-production cooperation;
- Development of advanced research and development infrastructure.

Key initiatives and focus areas

- Activities of Gipronickel Institute and Nornickel Digital Lab;
- Cooperation with universities to develop and test advanced technologies and train highly skilled staff;
- Support for graduates of vocational education institutions;
- Development of cooperation with the Russian Academy of Sciences.

Research and development

R&D activities — research, development, feasibility studies and innovative projects — are a must for achieving the Company's strategic priorities.

Nornickel has adopted an R&D Management Policy defining the setup and implementation of relevant initiatives.

The key principles underpinning our R&D management:
- developing and fostering the Company's R&D potential;
- identifying priority areas as regards research, technology and engineering, and resource allocation to such areas;
- putting into action a production and technical development strategy by upgrading capacities to improve production and management quality and implementing cutting-edge, cost-effective and eco-friendly technologies developed in-house.

Nornickel's key research and development projects and feasibility studies (R&D and FS) continue to focus on fundamental environmental improvements, the development and implementation of projects set to upgrade existing operations, build new facilities, and maintain the Company's financial strength.

Since 2013, Nornickel has had an R&D Panel working to improve the quality of the scientific and technical solutions.

Gipronickel Institute is Nornickel's core R&D platform, one of Russia's largest research and design centres for mining, concentration, and metallurgy. The institute studies samples of ore deposits and rocks, as well as valuable non-ferrous feedstock, such as nickel, cobalt, copper, aluminium, tin, tungsten, molybdenum, mercury, sulphur, etc. The Company also engages domestic and foreign R&D and engineering companies, and collaborates with numerous Russian universities.

Gipronickel performs a substantial amount of work both for the Company, including the Head Office and Polar Division, and for Russian business units, such as Kola MMC, Medvezhy Ruchey, Arctic Palladium, and GRK Bystrinskoye. A significant part of the work is focused in some way or other on addressing environmental issues.

In 2022, the Group's R&D projects and feasibility studies received a total of

RUB **84.3** mln

in financing

In addition to research within the Group, Gipronickel also provides R&D services to third parties, mainly in the metals and chemical industries.

In 2022, Gipronickel Institute completed a wide scope of work on the mining, concentration, and smelting operations of MMC Norilsk Nickel.

For example, for Polar Division's Skalisty Gluboky mine, using advanced technical solutions for autonomy and comprehensive automation to minimise headcount in mine workings, research was carried out to select the most efficient configuration of mine workings, optimal mining plan based on mining capabilities and ventilation, as well as the possibility for sequential mining of disseminated ores as rich ores are retired, to ensure that the mine's annual output is maintained at the same level without major drops.

In order to solve the environmental problems of the Norilsk Industrial District by shutting down the existing converter operations, Copper Plant is proceeding with the construction of a continuous converting facility consisting of two units connected in series: the Vanyukov converter furnace which continuously smelts granulated copper matte to produce blister copper, liquid converter slag and process gases, and the Vanyukov slag cleaning furnace, which continuously cleans converter slag by its deep reduction to produce metallic copper-nickel alloy containing iron and cobalt, as well as waste slag and process gases. The continuous converting technology will solve the main environmental problems of copper production by transferring the sulphur content of the feedstock into a continuous stream of highly concentrated gases ready for disposal as contemplated by the new converting process.

Kola MMC continued to implement its copper production project using the roast-leach-electrowin technology. This technology is designed to process sulphide copper concentrates from flotation-based matte separation by using a modern and environmentally friendly technology, with the output to total 150 kt of marketable-quality copper cathodes. The roast-leach-electrowin technology will:
- reduce the cost of finished products by cutting operating costs, losses, and turnover;
- ensure that regulatory environmental standards are met through obtaining a flow (constant by composition) of gases containing SO_2 and their capturing;
- increase direct copper extraction for marketable products.

In 2022, Nornickel launched a number of projects to improve environmental performance:
- pilot tests to treat Komsomolsky Mine's drained water kicked off. The project envisages simultaneous operation of several reverse osmosis and electrodialysis units;
- we tested an innovative technology of obtaining modified sulphur, which has good prospects of becoming the feedstock for the construction industry and reducing atmospheric sulphur emissions. We got test samples of asphalt, with prototypes already used to check if asphalt concrete blends can withstand climate of the Far North;
- as part of our effort to combat climate change and reduce GHG emissions, we studied the ability of tailings to absorb CO_2 from the air. We will keep developing the engineered mineralisation technology and testing accelerated mineralisation of tailings.

Major R&D and feasibility studies in 2022

Initiative	Achievements of 2022	Expected effects
Development of a technology for the preparation of aerated filling compounds at Polar Division	• A technological process for the production of aerated filling compounds and their delivery to mine workings was developed; • The current status of hydraulic transport at the mines of Polar Division was reviewed; • A general overview of hydrotransport systems was prepared and types of hydraulic fluids are described; • The hydraulic flow modes were described; • Sedimentation properties of the filling compound were analysed.	• Increased intensity of mining operations; • Increased rate of strength gain of the artificial backfill mass formed; • Minimisation of cement costs while maintaining the standard strength of the backfill mass; • Lower water consumption for pipeline flushing.
Pilot tests of the first Allflot flotation machine at Norilsk Concentrator	Data were obtained to provide rationale for the re-equipment of scavenging operations at Norilsk Concentrator with impellerless pneumatic flotation machines	Due to the energy efficiency of flotation machines, the expected economic effect will amount to RUB 5.5 mln per year
Research to assess the impact of more frequent extreme weather events and degradation of permafrost rocks due to climate change on the Company's hydraulic engineering facilities (tailing dumps)	• The forecast until the middle of the 21st century was prepared based on calculations using 40 CMIP5 generation climate models for two GHG emission scenarios, RCP8.5 and RCP4.5; • Stability of dams at hydrotechnical structures was reassessed due to expected climate change; • Quantitative assessment of factors that may trigger accidents at hydraulic structures caused by climate change was carried out	Implementation of the Company's environmental policy to comply with ICMM and TCFD requirements; assessment of risks related to the operation of the Company's tailing dumps.
Research to obtain synthetic binders from sulphuric acid and carbonate rock in the Norilsk region and test them in filling compounds	The Company started working on a technology to produce a synthetic binder from sulphuric acid and carbonate rock in the Norilsk Industrial District to be used in filling compound as a substitute for natural anhydrite	The potential effect is up to RUB 2 bn per year in OPEX on natural anhydrite mining
Adjustment of operating procedures to design a technology for the production of rich selective precious metal concentrates at Kola MMC	Fine-tuning of high-scale operations for processing semi-products concentrating precious metals in the process cycle to adjust Operating Procedures for designing new precious metals production facilities.	Reduction of SO_2 emissions by 1,200 tpa

Digital technology

Nornickel's contribution to the Digital Economy national project

Relevant UN SDGs

Related federal projects

- Information infrastructure;
- Information security;
- Digital technology.

Key initiatives and focus areas

- Norilsk Nickel's Robotisation Service;
- Implementation of the Technological Breakthrough project pipeline;
- Automation of management and operating processes;
- Creation of the Data Lake digital platform;
- Development of communication systems and electronic communications for employees and local communities.

Technological progress and promotion of innovative tools are essential elements for streamlining business processes and enhancing industrial safety at Nornickel.

In 2022, amid geopolitical risks and external challenges, the Company continued to run digital projects, while taking measures to maintain business continuity. Thanks to proactive management decisions in the reporting year, the Company managed to achieve high IT stability despite great uncertainty and external pressure.

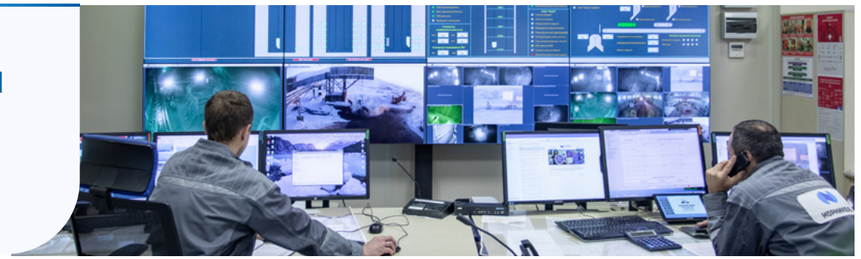
Data Lake and artificial intelligence

Technology-wise, non-ferrous metal mining is one of the most complex industries. From the mine to the marketing of the finished product, terabytes of data are collected and processed to bolster productivity and improve working conditions. To collect, process Big Data at production sites and foster cutting-edge developments, the Company has implemented the Data Lake digital platform project. Data Lake is essentially a technology platform to address business challenges using Big Data and artificial intelligence / machine learning.

In 2022, the infrastructure for launching several AI use cases was designed on the basis of Data Lake. For example, we launched a prototype of a predictive algorithm for managing dissolution and filtration processes in the nickel tank-house at Kola MMC.

A dedicated environment is also being created to develop machine learning solutions. The environment helps handle tasks such as data mining, development of machine learning applications.

Ensuring technological independence



Initiatives to ensure technological independence became a new and high-priority focus of Nornickel's digital development strategy.

In 2022, the Company assessed its IT landscape, and systems based on foreign software accounted for 18%, of which one third need to be replaced. The remaining systems can be used without significant risks for several years.

In 2022, Nornickel's IT systems were isolated well in advance of mass failures; equipment and spare parts available in stock in Russia were additionally procured. Project ranking criteria were developed for Nornickel's IT portfolio based on the impact of restrictions with a focus on the availability of Russian counterparts, in-house development capabilities, and already purchased licences.

Extensive measures were taken to ensure the technological independence of industrial automation systems. In 2022, a special laboratory was established at Polar Division to test domestic solutions for the automated process control system.

In the reporting year, Nornickel adopted a Strategy for Ensuring Consistency of Measurements, which includes an initiative to improve technological independence. In the process of sourcing local counterparts, more than 360 manufacturers were reviewed across 119 major groups of gauges. In particular, a counterpart of PR-1K, a domestic radioisotope density meter, was found and tested in the real production environment on the Medvezhy Ruchey site.

With the assistance from Russian infrastructure solutions market players, Nornickel tested the replacement critical systems and IT equipment for compliance with the corporate standards and information security requirements, as well as for compatibility with the existing IT landscape. The replacement solutions enabled the Company to continue performing critical tasks.

Communication network development

In 2022, the Company continued its programme to build and upgrade its networks.

In conjunction with a number of Russian manufacturers, the development of a network switch with enhanced performance and data transfer speed to be deployed in the mines is underway. The combination of performance and rugged body requires effort from the development teams, but this solution will not only meet today's needs, but will also support the future growth of traffic from unmanned mine technologies and remotely controlled equipment.

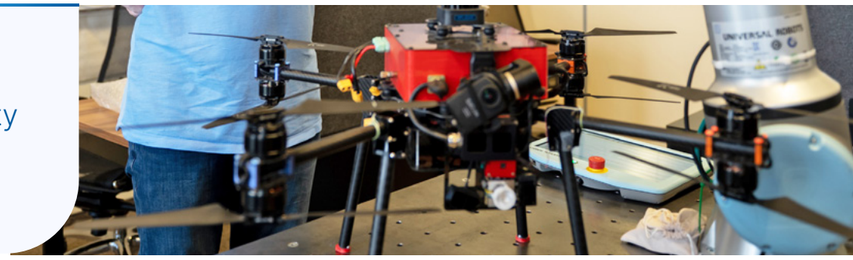
Digital technology training

Improving employees' digital literacy remains one of the Company's strategic priorities. Various training formats are used to develop digital competencies: workshops, online courses, webinars, and business games. At the same time, we foster creative potential of and involve our employees' children in the training process, immerse teenagers and youth in the IT profession in the cities where the Company operates.

To develop young professionals, the Company has launched a master's programme, AI Transformation in Industry, jointly with the MIPT centre for educational programmes.

This is unique programme, as it was created directly for the needs of the mining company. Students receive multidisciplinary training in mathematics, programming and IT, and gain practical experience by continuously applying knowledge in addressing the Company's current business needs. In 2022, the first group of MIPT students completed more than 70% of their field internship at Nornickel.

IT infrastructure: continuity and reliability



The Company has launched a major initiative to pilot and gradually integrate a multifunctional Linux-based infrastructure solution into the corporate environment. Migration to the target environment is planned with an increased focus on business processes and will be phased in via a heterogeneous environment combining hardware running Microsoft and Linux operating systems.

Projects previously initiated to develop enterprise data centres continued this year with revisited goals and approaches to implementation. Jointly with IXcellerate, site preparation for a new data centre and IT equipment support systems in Moscow was completed. Concepts for data centres in Monchegorsk and Norilsk were designed.

Digital solutions in occupational health and safety

In 2022, Nornickel together with Rostechnadzor participated in the Russian Government's experiment to launch a system for remote control over industrial safety.

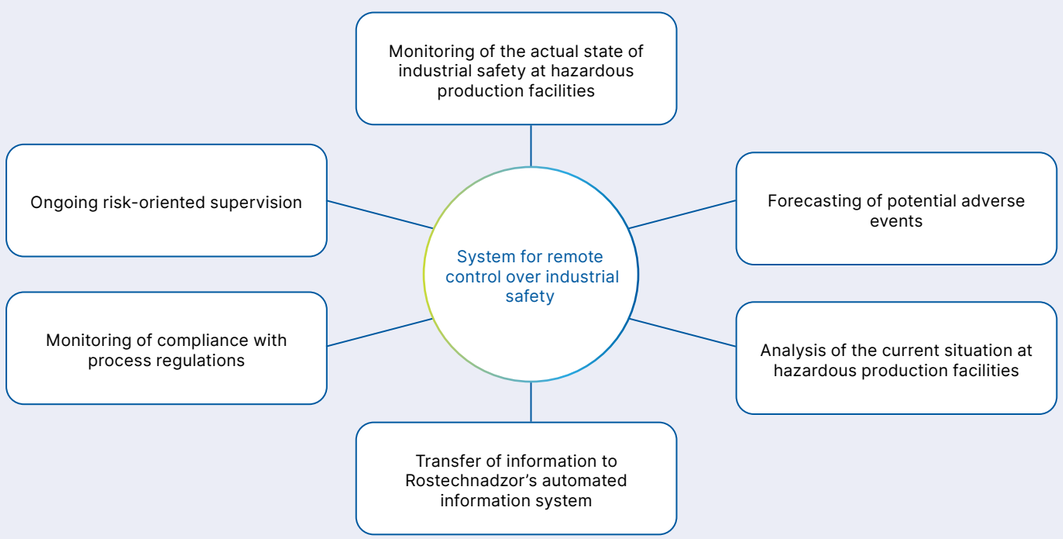
Nornickel actively deploys systems to improve occupational health and safety using AI-based video analytics. In 2022, the system for monitoring personal protective equipment of production personnel was further developed:

- new detection types and parameters were added;
- the solution was integrated with personnel positioning and face recognition modules from third-party Russian software vendors.

Development of this system boosts the effectiveness and quality of safety compliance monitoring and the level of safety culture in production. In 2023, we plan to continue pilot tests of the technology from several advanced vendors at the production facilities and construction sites of Norilsk Division.

In 2022, design of a digital engineering and operating model (3D model) was completed at Kola MMC. This model helps improve tracking and positioning of employees and vehicles, monitor conditions in special areas using video cameras and video stream projection onto the model, and track changes on a timeline using laser scanning. The Company plans to make a transition from the 3D model to a full-fledged digital twin of Kola MMC.

Functions of the system for remote control over industrial safety



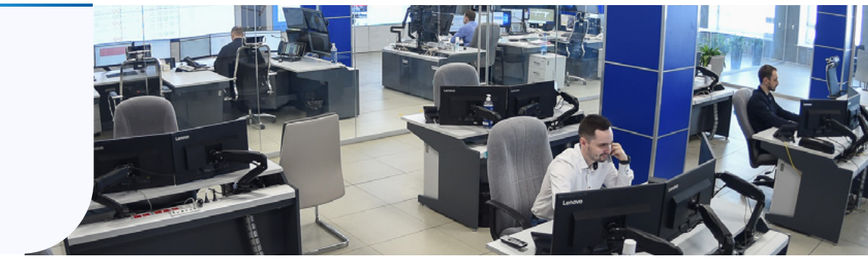
Digital environmental solutions

Nornickel is developing a prototype environmental monitoring system based on the digital twin of Nadezhda Plant. The pilot will be our first step towards designing an integrated information and analytical system using a unified methodology for calculating environmental impact indicators. The system will be able to interpret and verify the data obtained, produce forecasts and reports, and create mathematical and simulation models of environmental processes.

Copper Plant had a test launch of the system for automated control of pollutant emissions that have an adverse impact on the environment. The pilot solution will help assess whether domestic equipment can be used, taking into account the nature of the Company's production chains and conditions.

Also, Nornickel will start developing a mathematical model of industrial emissions in 2023. The software package will replace expensive and complex tools of instrumental emission control.

Digital solutions to improve business processes

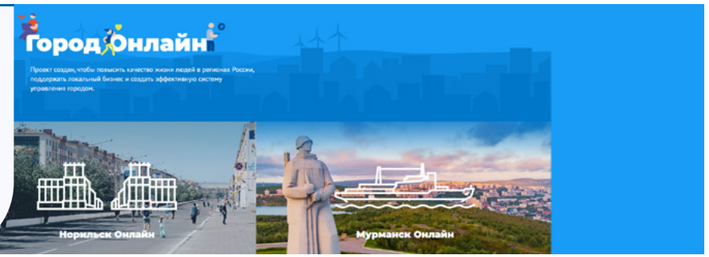


The Company continues its Integrated Document Management programme set to fully automate and digitally transform business processes for handling electronic legal documents and data. In 2022, key work aimed at digitalising contract-related business processes was completed.

Nornickel operates a Tax Monitoring System. Following the transition to this platform, over 90% of the Group's turnover has been monitored by the tax authorities in real time since 2021, and the platform continues to evolve.

Interaction with the Company's suppliers and contractors is also integrated into the digital system. Competitive procurement procedures, contract execution processes and feedback are managed through a dedicated section for suppliers on the Company's website, while conferences are held via an automated SRM system. In 2021–2022, new functions were introduced in the supplier online account in the processes of contract negotiation and execution enabling special payment terms for goods or services between the buyer and the supplier to accelerate payment in exchange for a reduced price or discount. The solution is integrated with electronic document management to speed up verification and generation of accounting documents for works/services and inventory and with the Oracle Transportation Management solution to simplify the transport ordering process and the data exchange system to store archived documents. To date, more than 650 different companies across the country have been invited to use the new service.

Digitalisation in regions of operation



GRI 203–1, 203–2

The City Online project is set to improve the quality of life of people living in small and medium-sized towns in the Far North and the Far East by providing infrastructure and digital services in various areas of life and making habitual services more accessible to remote areas.

The platform is available as a website and a mobile app in five cities: Norilsk, Dudinka, Monchegorsk, Murmansk, and Krasnoyarsk. Currently, the web and mobile versions of the platform offer 28 and 16 services, respectively. The most popular are GO.Media, Playbill, Broadcasts (web version only), Map, and Transport. In the near future, we plan to develop services that will help municipal employees promptly interact with each other and with residents of the city in the shared information space.

Major City Online infrastructure services include:

- a city air monitoring programme with a predictive environmental assessment model in Norilsk, Monchegorsk, Nickel, and Zapolyarny seeking to improve the urban environment quality and the comfort of people's lives;
- a mobile school education system in the Murmansk Region. The system was deployed in 2022 and has already made a better and more equal level of education available to different social groups and minimised the impact of downtime days during school period.

To meet the Company's production needs with high-speed communication and to improve the quality of life in the Norilsk Industrial District by creating conditions for broadband Internet access, enhancing the quality of services and expanding the range of communication services provided, Nornickel implements the Fibre Optic Communication Line (FOCL) Construction Project in Norilsk. The project involves the construction of a 956 km fibre optic communication line from Novy Urengoy to Norilsk.

In 2022, in response to growing demand from the population in the Norilsk District, the bandwidth of the transport network was increased from 40 Gbps to 200 Gbps, which now enables customer traffic to grow to 85 Gbps, with less than 1% of traffic used for the Company's needs.

As mobile and fixed-line Internet access remains one of the key conditions for high quality of life in the modern world and is the driver behind digital services, in order to improve the availability of high-quality communications, we held a promotion campaign in 2022 for telecom operators providing services to end users, involving an average discount of 15%. The new tariff policy helped develop high-speed tariff plans of operators in the city and resulted in a twofold more affordable pricing on average in 2022. In addition, 15 schools in the Norilsk Industrial District were connected to the Internet on preferential terms.

More than
180 thsd users
registered on the platform

Almost
1.5 million
unique visitors

About
55 thsd
mobile app installs

Corporate security

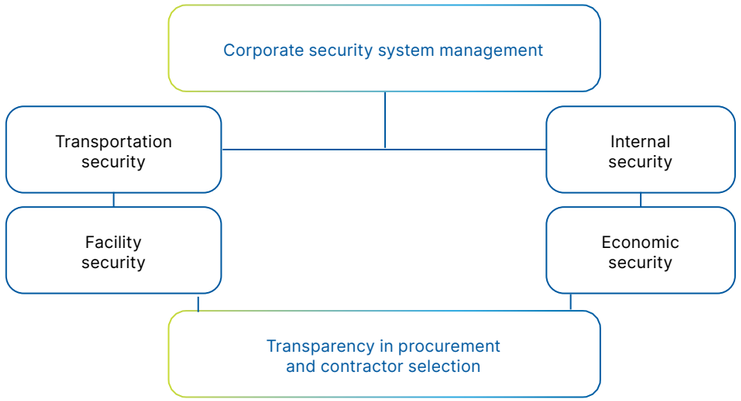
The corporate security system underpins the sustainability of Nornickel's business processes. The Company has developed a comprehensive corporate security management system comprising five main blocks.

The Company has a dedicated Corporate Security Unit to manage corporate security issues. In addition, the Company has established and is expanding a network of analytical situation centres. The regulatory framework in this area is defined by the Russian laws, applicable international norms and internal standards, and Nornickel's by-laws.

All senior managers of the Company, including the Board of Directors and the Management Board, are involved in the processes of drafting and improving regulatory documents aimed at ensuring corporate security. In March 2022, the Board of Directors approved PJSC MMC Norilsk Nickel's Policy on Countering Corporate Fraud. The requirements of the Policy are in line with the principles of honest and responsible business conduct, emphasising the Company's commitment to improving its corporate culture and adherence to best corporate governance practices and high ethical standards.

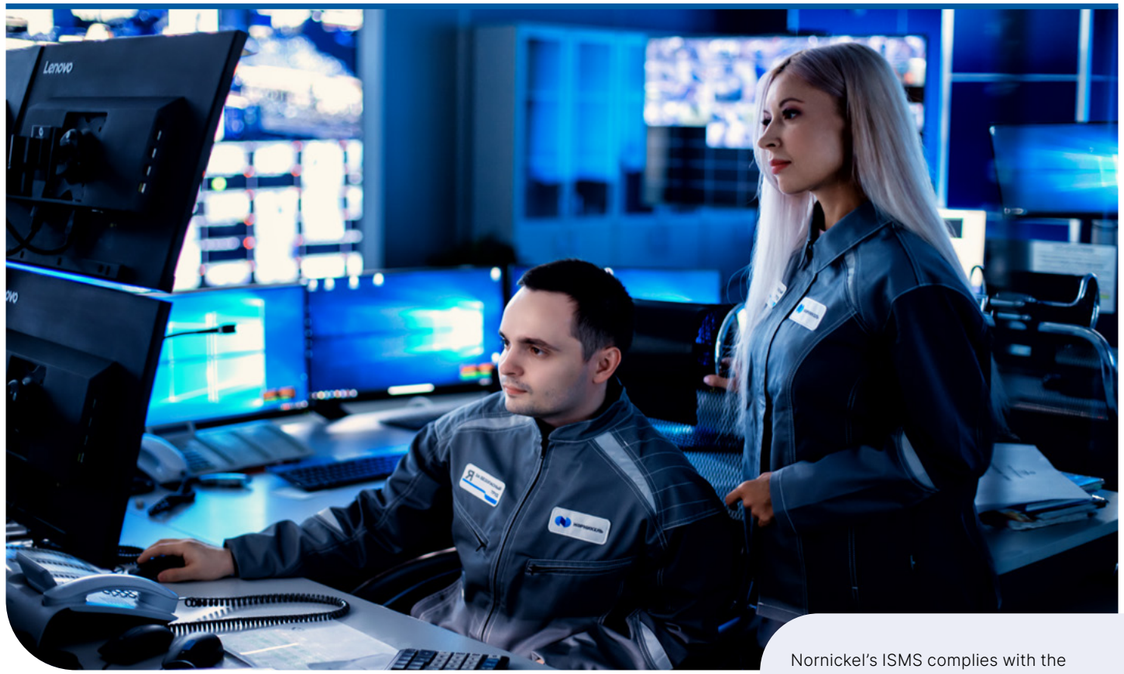
The Policy unifies a set of systemic measures for the prevention, detection and counteraction to corporate fraud.

Corporate security management system



Objectives of the Policy on Countering Corporate Fraud

1. Preventing, detecting and mitigating the risk of corporate fraud. Protecting legitimate interests of the Company, its subsidiaries, their shareholders/participants, and safeguarding assets.
2. Reaffirming zero tolerance to any form or manifestation of corporate fraud.
3. Creating a consistent, Company-wide understanding of the essence of fraud, as well as a uniform standard of conduct for the prevention and suppression of fraud.
4. Preventing violations of laws on combating corporate fraud by the Company or its subsidiaries or employees.



Ensuring information security

Nornickel has a highly integrated information system for all of its businesses. Information is a valuable resource for the Company, while information security guarantees business continuity. Nornickel has its own Information Security Management System (ISMS) in place. The ISMS covers day-to-day production management, supplies of feedstock and process materials, as well as control over production and finished product shipment targets.

To support robust information security, the Company is subject to regular ISMS audits for compliance with personal data and critical infrastructure protection requirements and international standards on cyber security management, testing and assessment of data protection, vetting inspections to check information security in river and marine navigation, and other control procedures.

Nornickel's ISMS complies with the norms and requirements of ISO/IEC 27001:2013. In 2022, four of Nornickel's sites confirmed the high efficiency of their information security management processes:

1. Murmansk Transport Division;
2. Nadezhda Metallurgical Plant;
3. Copper Plant;
4. Talnakh Concentrator.

The external auditor noted the facilities' high preparedness to new threats and challenges. The Company demonstrated risk control effectiveness and readiness for unexpected changes, confirming its ability to achieve goals related to securing production processes.

In addition to analytical situation centres, the Company has in place an Information Security Incident Response Centre. If any suspicious content or activity is detected by users, the relevant notice is given to the Response Centre. The Centre assesses the possible negative impact on the Company's information systems and takes measures to prevent and eliminate the consequences of incidents. In its work, the Centre relies on the best domestic and global practices of cyber security process management and advanced technological solutions.

In 2022, there was a significant increase in cyber attacks on Russian companies. To minimise the risks, Nornickel took additional comprehensive measures, including proactive ones, to ensure the security of its information infrastructure. In the reporting year, over 20,000 information security events and more than 1,000 incidents were handled by the Response Centre staff.

The Company's confidential information is protected by special technical protection tools that allow detecting unauthorised access attempts through the main channels, including email and file exchange. If unauthorised attempts to withdraw confidential information are identified, an internal review and investigation procedure is initiated in accordance with the Company's regulations.

The Company recognises the risk of incidents and emergencies affecting the stability of Nornickel's information systems. To ensure the continuity of the Company's operations, Nornickel developed and documented information security processes and procedures. These procedures are tested at least quarterly to ensure that they are up-to-date.

To protect the personal data of various types of subjects, including the personal data of third parties, the Company applies a set of organisational and technical measures. Technical protection is ensured by means of anti-virus protection, prevention of information leaks, control of removable media, analysis of security events. The Company also has a Personal Data Processing Policy and a number of by-laws regulating the processing and protection of personal data.

Information security training

In accordance with the Rules of Raising Awareness in Information Security, all employees of the Company are regularly trained in information security.

All new employees of Nornickel are familiarised with by-laws governing information security requirements and undergo additional induction training. In 2022, some 7,400 newly hired employees were familiarised with by-laws on information security, and approximately 4,300 new employees received additional information security induction training.

Nornickel develops annual staff training plans based on current trends and newly identified risks and cyber threats. Employees of Nornickel's Head Office and facilities across the Company's footprint take regular knowledge tests. In 2022, there were about 70 scheduled and 5 unscheduled e-learning training sessions for almost 18,500 Group employees.

In 2022, almost were trained
18.5 thsd employees

The knowledge gained is further applied to combat information security threats. To this end, the Company arranges recurrent training and workshop sessions dealing, among other things, with simulated fishing attacks and other threats to IT infrastructure. It helps test the quality of cyber security systems, practice employee actions in case of an information security threat, and improve the overall level of the corporate information security system. Analysis of training session results helps us revise existing and develop new instructions for employees. Information updated after training sessions is included in a quarterly newsletter circulated among the heads of the Company's units. Employees are informed of what to do via by-laws pertaining to information security if suspicious activity is detected.

In addition, there are regular newsletters to inform employees about current information security threats and digital hygiene rules. In 2022, we circulated 27 themed newsletters among all employees of the Group.

Appendices

About the Report 285

GRI content index 286

Report boundaries 304

Definition of material topics 307

SASB METALS&MINING content index 313

UNCTAD Guidance on core indicators for entity reporting on contribution towards implementation of the UN SDGs 319

TCFD disclosures 324

GRI quantitative indicators disclosure 325

Nornickel's support for initiatives, standards, and participation in associations focused on sustainable development and corporate social responsibility 353

Certification of Corporate Integrated Management System (CIMS) 355

Awards and accolades 357

List of abbreviations 359

Glossary 363

Stakeholder dialogue minutes 366

Stakeholder recommendations 369

Opinion of the RSPP Council on Non-Financial Reporting 370

Independent assurance report 375

Disclaimer 379

Contacts 380

About the Report

GRI 2-1, 2-3, 2-4, 2-5

The 2022 Sustainability Report of Nornickel Group (the "Report") is the nineteenth public non-financial report prepared by MMC Norilsk Nickel and addressed to a wide range of stakeholders.

This Report has been prepared in accordance with the GRI Standards (2021) and discloses the Company's contribution to the UN Sustainable Development Goals up to 2030.

Among others, the Report relies on the following documents: SASB Metals & Mining Sustainability Accounting Standard (2021), UNCTAD Guidance on core indicators for entity reporting on contribution towards implementation of the UN Sustainable Development Goals, recommendations of the Task Force on Climate-Related Financial Disclosures(TCFD), Reference Performance Indicators of the Russian Union of Industrialists and Entrepreneurs (RSPP), AccountAbility Standards AA1000SES (2015) and AA1000AP (2018).

The Report covers operations of the Nornickel Group companies. For the purposes of this Report, Nornickel Group shall refer to MMC Norilsk Nickel and the entirety of operations of the Norilsk Nickel Group companies. Unless otherwise specified or required by the context, the terms "Company", "Group", "Nornickel" or "the Group companies" shall refer to Nornickel Group.

The content of the Report has been determined in accordance with the requirements of the applicable standards and guidelines, with the Company's stakeholders engaged in the process. For details about material topics and the procedure for defining them, please see the Definition of Material Topics appendix. Quantitative indicators for material topics of sustainable development are disclosed for the Group's specific operations in accordance with the Reporting Boundaries Appendix.

Each year, the Company's Report undergoes external assurance procedures, including independent professional assessment of the Report's compliance with the GRI Standards and the RSPP public verification procedure.

The Sustainable Development Department of MMC Norilsk Nickel and a dedicated working group comprising representatives of the Group's key companies supervised the preparation of the Report. The Report has been approved by MMC Norilsk Nickel's Management Board and Board of Directors.

Other sources of information about Nornickel Group

- Corporate website: https://www.nornickel.com/
- Nornickel's approach to sustainable development: https://www.nornickel.com/sustainability/
- Nornickel's annual reports: https://www.nornickel.com/investors/reports-and-results/annual-reports/

GRI content index

Nornickel prepared the Report in accordance with the GRI Standards for the period from 1 January 2022 to 31 December 2022.

GRI standard	Disclosure number	Disclosure	Page/link	Assured by the auditor	Omission	Comments
GRI 1: Foundation 2021						
GRI 2: General Disclosures 2021	**1. The organisation and its reporting practices**					
	2–1	Organisational details	11, 285	Assured		Nature of ownership – private.
	2–2	Entities included in the organisation's sustainability reporting	304	Assured		For a list of entities included in the financial statements of Nornickel Group, please see the Group's IFRS financial statements.
	2–3	Reporting period, frequency and contact point	285, 377	Assured		Financial and sustainability reporting is prepared annually for the calendar year. The date of this report is 23.05.23.
	2–4	Restatements of information	285	Assured		Information on changes in previous periods' data is provided in the report in the footnotes below the respective figures.
	2–5	External assurance	285, 375	Assured		
	2. Activities and workers					
	2–6	Activities, value chain and other business relationships	11, 22, 27, 261	Assured		There were no significant changes in the supply chain of the core production process in the reporting year. Due to sanctions imposed on the Russian Federation, the Company is in the process of revising its list of equipment and software suppliers.
	2–7	Employees	131, 344	Assured		
	2–8	Workers who are not employees	344	Assured		The relations with such employees are mainly formalised through civil law contracts. Such contracts are usually made for temporary work, without any prevailing type of activity. There are no significant hiring fluctuations within the reporting periods, and the changes from one reporting period to another may be associated with an increasing number of FTEs (a part of the functions handed over to FTEs).
	3. Governance					
	2–9	Governance structure and composition	53, 113, 130, 189, 223, 226, 231, 236, 247, 250	Assured		Disclosure 2-9-c is provided in the Annual Report of MMC Norilsk Nickel for 2022: https://www.nornickel.com/investors/reports-and-results/annual-reports/#2022.

GRI standard	Disclosure number	Disclosure	Page/link	Assured by the auditor	Omission	Comments
	2–10	Nomination and selection of the highest governance body	223	Assured		
	2–11	Chair of the highest governance body	223	Assured		The Chairman of the Board of Directors is not an executive director.
	2–12	Role of the highest governance body in overseeing the management of impacts	41, 53, 114, 130, 189, 223, 225, 226, 231, 236, 247, 250	Assured		
	2–13	Delegation of responsibility for managing impacts	41, 53, 114, 130, 189, 223, 226, 227, 231, 236, 247, 250	Assured		
	2–14	Role of the highest governance body in sustainability reporting	41	Assured		The Sustainability Report, including the list of material topics, was approved by the Board of Directors, GMK/24-pr-sd dated 23.05.2023.
	2–15	Conflicts of interest	228	Assured		The Company publicly discloses information on related-party transactions in its annual reports.
	2–16	Communication of critical concerns	225, 236, 256	Assured		
	2–17	Collective knowledge of the highest governance body	227	Assured		
	2–18	Evaluation of the performance of the highest governance body	227	Assured		
	2–19	Remuneration policies	229	Assured		The Board of Directors' remuneration is set out in Remuneration Policy for Members of Board of Directors are no termination or retirement benefits for members of the Board of Directors, as they are not employees of the Company. The Company's management are subject to the same termination and retirement benefit rules as other employees of the Company.
	2–20	Process to determine remuneration	229	Assured	Information on 2-20 b is not disclosed as not applicable.	The Board of Directors' remuneration is set out in Remuneration Policy for Members of Board of Directors.
	2–21	Annual total compensation ratio	–	Not assured	Information has not been disclosed due to the protection of the personal data of the highest paid executive.	
	4. Strategy, policies and practices					
	2–22	Statement on sustainable development strategy	3, 5	Assured		
	2–23	Policy commitments	21, 46, 104	Assured		For sustainable development policies and statements, please see the Company's corporate website at https://www.nornickel.com/investors/disclosure/corporate-documents/. The Company's employees are familiarised with by-laws upon hiring and in internal training sessions conducted by Nornickel. Suppliers and contractors of the Company are familiarised with by-laws when entering into contracts if it is stipulated by provisions of the contracts.
	2–24	Embedding policy commitments	21, 230	Assured		
	2–25	Processes to remediate negative impacts	256	Assured		For information on the commitment to assess negative impacts, please see MMC Norilsk Nickel's Human Rights Policy.
	2–26	Mechanisms for seeking advice and raising concerns	101, 122, 137, 192, 256	Assured		

GRI standard	Disclosure number	Disclosure	Page/link	Assured by the auditor	Omission	Comments
	2–27	Compliance with laws and regulations	251	Assured		Significant cases of non-compliance with laws/regulations resulting in fines or non-financial penalties are understood as events disclosed in section 26 of the Notes to the IFRS annual consolidated financial statements and/or receiving adverse publicity. There have been no such cases in 2022.
	2–28	Membership associations	353	Assured		
	5. Stakeholder engagement					
	2–29	Approach to stakeholder engagement	99, 228	Assured		
	2–30	Collective bargaining agreements	138	Assured		
GRI 3: Material Topics 2021	**Disclosures on material topics**					
	3–1	Process to determine material topics	307	Assured		
	3–2	List of material topics	307	Assured		
	Employment and decent working conditions in the regions of operation					
	3–3	Management of material topics	129, 135, 177, 311	Assured		The Equal Opportunities Programme defines the Company's approaches and commitments in providing jobs. The Working Conditions Policy sets forth the principles and commitments in ensuring decent working conditions: https://www.nornickel.com/upload/iblock/7d3/Working_Conditions_Policy_en_new.pdf.
	201–3	Defined benefit plan obligations and other retirement plans	157	Assured		Payments under the pension plan are made by NPF GAZFOND Pension Savings. For the fund's public reports, please see the website at: https://gazfond-pn.ru/about/disclosure/.
	202–1	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	141	Assured		The calculation covers the Group's companies with an average headcount of at least 500 employees in 2022.
	202–2	Proportion of senior management at significant locations of operation hired from the local community	131	Assured		
	401–1	New employee hires and employee turnover	133, 134, 346	Assured		
	401–2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	342	Assured	The indicator is partially disclosed. No information is provided for the following types of benefits: life insurance, healthcare, disability/temporary disability coverage, childcare leave and share ownership.	
	403–6	Promotion of worker health	124, 154, 156	Assured		
	404–3	Percentage of employees receiving regular performance and career development reviews	347	Assured		
	Emissions					
	3–3	Management of material topics	71, 311	Assured		
	305–7	Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions	72, 333	Assured	Persistent organic pollutants are not emitted. Hazardous air pollutant emissions are not disclosed as there is no such a category according to the Russian laws.	Emissions of volatile organic compounds (VOCs) in 2022 amounted to 1,366 t.

GRI standard	Disclosure number	Disclosure	Page/link	Assured by the auditor	Omission	Comments
	Training and education					
	3–3	Management of material topics	147, 312	Assured		Collecting feedback from trainees and assessing their satisfaction serve to assess the effectiveness of training.
	404–1	Average hours of training per year per employee	146	Assured		
	404–2	Programmes for upgrading employee skills and transition assistance programmes	147, 160	Assured		
	Innovation projects pursuing sustainable development goals					
	3–3	Management of material topics	271, 274, 312	Assured		In 2015, Nornickel launched the Technological Breakthrough programme focused on automating process control and enhancing productivity and safety, among other things, by introducing cutting-edge information support and automated systems. For more details, please see MMC Norilsk Nickel's Annual Report for 2022.
	Contribution to the development of local communities					
	3–3	Management of material topics	167, 180, 312	Assured		
	201–1	Direct economic value generated and distributed	325	Assured		
	203–1	Infrastructure investments and services supported	180, 186, 200, 279	Assured		
	203–2	Significant indirect economic impacts	177, 178, 200, 279	Assured		
	204–1	Proportion of spending on local suppliers	–	Assured	The indicator is not disclosed in accordance with the GRI requirements due to no accounting system. The Company will consider disclosure within the next three years.	The Development of Local Communities section discloses information on the Company's expenses associated with procurement from suppliers in the key regions of operation.
	207–1	Approach to tax	247	Assured		
	207–2	Tax governance, control and risk management	247, 256	Assured		
	207–3	Stakeholder engagement and management concerns related to tax	248	Assured		Stakeholders' tax-related concerns among their other queries can be addressed as part of the mechanisms of the Corporate Trust Line.
	207–4	Country-by-country reporting	–	Assured	The indicator is not disclosed due to the confidential nature of information (this information is a trade secret of the Company).	
	413–1	Operations with local community engagement, impact assessments, and development programmes	–	Assured		The share of operations with local community engagement is 45% of all business units of the Company.
	Climate change					
	3–3	Management of material topics	48, 310	Assured		
	201–2	Financial implications and other risks and opportunities due to climate change	57	Not assured	Financial implications of the risk are not disclosed as there is no such estimate. Estimating financial implications is planned to be conducted within 3–5 years.	In 2022, the expenses on the Climate Change and Energy Efficiency initiatives as well as the permafrost-focused activity as part of the Environmental and Climate Change Strategy totalled RUB 8.5 bn.

GRI standard	Disclosure number	Disclosure	Page/link	Assured by the auditor	Omission	Comments
	302–1	Energy consumption within the organisation	68, 69	Assured		The Company uses statistical reporting forms applicable in Russia to record energy consumption data. TJ recalculation ratios are derived from the GRI 3.0 Guidelines and Engineering Magazine, a Russian R&D reference book. The calculation does not include cooling energy as inapplicable.
	302–3	Energy intensity	68	Assured		To calculate internal energy intensity, the Group's total energy consumption and the consolidated IFRS revenue are taken as the numerator and the denominator.
	302–4	Reduction of energy consumption	70	Assured		Reduction of energy consumption is calculated based on the technical specifications of equipment and other energy-consuming devices that are replaced as part of energy efficiency initiatives (as the difference between the consumption of more energy-efficient new equipment and less energy-efficient old equipment).
	305–1	Direct (Scope 1) GHG emissions	61	Assured		The calculation of GHG emissions relied on GWP values from the IPCC Fifth Assessment Report, which are 1 for CO_2, 28 for CH_4 and 265 for N_2O. The organisational boundaries for the quantitative assessment of GHG emissions in 2022 include MMC Norilsk Nickel companies over which the Company has operational control. At present the Company does not report indirect GHG emissions calculated using a market-based method. The information is not provided due to the need to request it from electric power companies.
	305–2	Energy indirect (Scope 2) GHG emissions	61	Assured		
	305–3	Other indirect (Scope 3) GHG emissions	61	Assured		The calculation of GHG emissions relied on GWP values from the IPCC Fifth Assessment Report, which are 1 for CO_2, 28 for CH_4 and 265 for N_2O. It takes into account the following greenhouse gases: carbon oxide (CO_2), nitrous oxide (N_2O), methane (CH_4), with no or insignificant emissions of other greenhouse gases. Biogenic CO_2 emissions are inapplicable.
	305–4	GHG emissions intensity	61	Assured		
	305–5	Reduction of GHG emissions	–	Assured		In 2022, we prevented GHG emissions of 146.6 kt of CO_2 equivalent, of which 26.6 kt of CO_2 equivalent are Scope 1 emissions eliminated as a result of direct energy saving initiatives, and 120 kt of CO_2 equivalent are Scope 2 emissions eliminated through deregulated bilateral purchase agreements for low-carbon electricity signed by the Trans-Baikal Division companies. Calculation of the emissions prevented as a result of direct energy saving initiatives is based on the calculation of the 302-4 indicator (the prevented emissions estimated result from reduced energy consumption).
Contribution to the national industry by promoting Russian technology						
	3–3	Management of material topics	274, 312	Assured		As at 31 December 2022, the Company did not adopt policies or set targets as regards contribution to the national industry.
Waste management						
	3–3	Management of material topics	78, 311	Assured		
	306–1	Waste generation and significant waste-related impacts	78	Assured		
	306–2	Management of significant waste-related impacts	78, 79	Assured		
	306–3	Waste generated	335	Assured		
	306–4	Waste diverted from disposal	79, 335	Assured	Waste diversion is only disclosed as regards recycling. Information on the disposal of waste transferred outside the organisation is partially disclosed (without breakdown by type of disposal).	Information on waste management methods is disclosed in a breakdown stipulated by the Russian law (as part of filling the statistic form 2-TP (waste)). In the GRI terms, hzard waste is understood as waste of hazard classes 1–4 defined by the Russian law.
	306–5	Waste directed to disposal	335	Assured	Partially disclosed (without breakdown by incineration with energy recovery and incineration without energy recovery).	

GRI standard	Disclosure number	Disclosure	Page/link	Assured by the auditor	Omission	Comments
	Biodiversity					
	3–3	Management of material topics	88, 311	Assured		
	304–1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	90, 93	Assured	No data is disclosed on the size of Kola MMC operational sites located in the vicinity of protected areas due to no accounting system. The Company will consider disclosure within the next three years.	
	304–2	Significant impacts of activities, products, and services on biodiversity	90	Assured	The information on the number of affected (unprotected) species and on the reversibility of the impact is not disclosed as it is subject to the Company's further research in biodiversity. The Company will consider disclosing this information within three years.	
	304–3	Habitats protected or restored	84	Assured	The information on the condition of the restored habitats is not disclosed due to the lack of the accounting system. The Company will consider disclosing this information within three years.	The information is disclosed in accordance with the practice of land rehabilitation (restoration) as per the Russian laws. The completion of land rehabilitation is confirmed by government authorities in relevant documents.
	304–4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	96, 339	Assured	For Pasvik and Lapland nature reserves, there is no breakdown by vulnerability of protected species in accordance with GRI 304-4 (CR, EN, VU, NT, LC).	
Health and safety						
	3–3	Management of material topics	112, 312	Assured		
	403–1	Occupational health and safety management system	112, 115, 118	Assured		
	403–2	Hazard identification, risk assessment, and incident investigation	115, 118	Assured		Identification and assessment of occupational health and safety risks take place at all Group companies covered by the Report on an annual basis or ad hoc as described in the STO KISM 121-211-2017 corporate integrated management standard or similar local standards. The quality for these processes is ensured through compliance of assessment requirements with the above standards. Employees may report workplace hazards through the following channels: • orally to their head; • problem-solving boards available at all sites; • report to an OHS structural unit; • authorised persons present at OHS committee meetings; • staff meetings; • work refusal form. All injuries are investigated by a dedicated commission as stipulated by the national laws.
	403–3	Occupational health services	119, 123	Assured		Contractors work on the Company's sites based on a contract that includes mandatory requirements for occupational health and safety. Before the start of a contractor's work, the Company takes a set of preparatory measures to ensure work safety. During the execution of the contract, the contractor undertakes to provide its employees with personal protective equipment on its own. The contractor ensures that sanitary and epidemiological requirements are met and all necessary OHS measures are taken. In the course of its operations, Nornickel monitors contractor employees' compliance with OHS requirements. In addition, the Company provides contractor employees with access to first aid at first-aid posts on production sites.
	403–4	Worker participation, consultation, and communication on occupational health and safety	122	Assured		
	403–5	Worker training on occupational health and safety	115, 123	Assured		

GRI standard	Disclosure number	Disclosure	Page/link	Assured by the auditor	Omission	Comments
	403–8	Workers covered by an occupational health and safety management system	350	Assured		
	403–9	Work-related injuries	116, 348	Not assured	There are no disclosures on the following: • contractor injury rates due to the lack of accounting for the number of hours worked; • types and causes of non-fatal injuries due to the lack of consolidated accounting. The Company will consider developing an appropriate accounting system within the next three years.	Data on total registered injuries is shown using the Company's accounting system based on Russian laws. In addition, the following data for 2022 is disclosed in line with the GRI-driven methodology: • total number of registered injuries among employees (number of workplace injuries and minor injuries): 257; • occupational injury rate among employees per million hours worked: 2.21; • total number of registered workplace injuries among contractors' employees engaged at the Company's sites (number of workplace injuries and minor injuries): 68.
	403–10	Work-related ill health	116, 348	Assured	Types of occupational diseases and the number of fatalities caused by work-related ill health is not disclosed due to the confidential nature of this information and the lack of permission for its use by the government agencies responsible for maintaining and recording such information. The information on work-related ill health among contractors is also not disclosed, as it is impossible to unambiguously determine whether the contractor's ill health is directly caused by working at the Company's facilities. The information on occupational diseases is not disclosed due to the lack of consolidated records. The Company will consider developing an appropriate accounting system within the next three years.	
Water consumption and wastewater discharge						
	3–3	Management of material topics	74, 311	Assured		
	303–1	Interactions with water as a shared resource	74, 77, 328	Assured		Supplier relationship as regards impact on water resources is governed by the Company's Supplier Code of Conduct; there may be consultations with customers at customer request.

GRI standard	Disclosure number	Disclosure	Page/link	Assured by the auditor	Omission	Comments
	303–2	Management of water discharge-related impacts	74	Assured		The wastewater quality standards of the Company are based on Order of the Ministry of Agriculture of Russia No. 552 On Approval of Water Quality Standards for Water Bodies of Fisheries Significance, Including Standards for Maximum Permissible Concentrations of Harmful Substances in the Waters of Water Bodies of Fisheries Significance dated 13 December 2016 and Decree of the Chief State Sanitary Doctor No. 2 On Approval of Sanitary Rules and Norms SanPiN 1.2.3685-21 "Hygienic Standards and Requirements for Safety and/or Harmlessness of the Living Environment for People" dated 28 January 2021.
	303–3	Water withdrawal	74, 75, 326, 327	Not assured		The regions where the Company's assets are located are areas of normal and high water availability. The volume of water withdrawal is recorded using instrumental controls and readings of certified gauges, as well as by indirect methods as may be approved by the relevant territorial office of the Federal Water Resources Agency.
	303–4	Water discharge	74, 76, 331	Not assured		All water discharged by the Company is not freshwater (in GRI terminology). In 2022, individual cases of exceeding permissible discharge limits were identified.
	303–5	Water consumption	74, 75	Not assured	Information on the impact that changes in water volumes of water reservoirs (storage basins) have on water bodies is not collected.	
		Industrial environmental safety of production facilities (including tailings dumps)				
	3–3	Management of material topics	81,127, 311	Assured		
	306–3 (2016)	Significant spills	–	Assured	–	In 2022, there were no significant spills.
		Impact of transport on water bodies				
	3–3	Management of material topics	77, 311	Assured		The key principles in managing the environmental impact of the Company's transport on water bodies are set out in the Environmental Policy. No targets were set for the environmental impact of the Company's transport on water bodies in 2022. Stakeholder engagement is mainly interactions with the government agencies and port infrastructure operators as regards compliance with transport operation requirements.
		Responsible exploration and land reclamation				
	3–3	Management of material topics	83, 311	Assured		
		Supply chain responsibility				
	3–3	Management of material topics	261, 312	Assured		

GRI standard	Disclosure number	Disclosure	Page/link	Assured by the auditor	Omission	Comments
	308–1	New suppliers that were screened using environmental criteria	–	Assured		In 2022, the existing supply chain due diligence management system applied only to suppliers, processors and transporters of metal-containing mineral feedstock (“mineral suppliers”). As part of the due diligence, eight existing mineral suppliers were assessed in 2022, including against environmental and social criteria. The number of new mineral suppliers to the Company in 2022 is zero. Following the exercise, all audited mineral suppliers met the environmental and social criteria set out in Nornickel’s Supplier Code of Conduct. No significant environmental and social risks have been identified. The Company plans to include other categories of suppliers in the due diligence exercise in 2023–2024.
	308–2	Negative environmental impacts in the supply chain and actions taken	–	Assured		
	414–1	New suppliers that were screened using social criteria	–	Assured		
	414–2	Negative social impacts in the supply chain and actions taken	–	Assured		
Anti-corruption and business ethics						
	205–1	Operations assessed for risks related to corruption	243, 253	Assured		
	205–2	Communication and training about anti-corruption policies and procedures	253	Assured		No training on anti-corruption practices was conducted for Board members in 2022. Training is scheduled for 2023. No training on anti-corruption practices is provided to external stakeholders; when contracts are signed, counterparties are familiarised with the Anti-Corruption Policy.
	205–3	Confirmed incidents of corruption and actions taken	252	Assured		
Respect for human rights (including those of indigenous minorities)						
	401–3	Parental leave	346	Assured	The indicator is partially disclosed due to the lack of the accounting system; information is provided about employees on maternity leave and/or childcare leave and on those who returned to work after the leave ended. The Company will consider developing an appropriate accounting system within the next three years.	
	402–1	Minimum notice periods regarding operational changes	138	Assured		
	405–1	Diversity of governance bodies and employees	132, 133, 325	Assured		
	405–2	Ratio of basic salary and remuneration of women to men	–	Assured	The indicator is not disclosed due to the lack of the accounting system. The Company will consider developing an appropriate accounting system within the next three years.	
	406–1	Incidents of discrimination and corrective actions taken	–	Assured		No discrimination incidents have been recorded.

GRI standard	Disclosure number	Disclosure	Page/link	Assured by the auditor	Omission	Comments
	407–1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	–	Assured		There are no such operations. The 2022 due diligence of suppliers covered observance of the right to the freedom of association and collective bargaining as part of checking compliance with the Company's Supplier Code of Conduct.
	408–1	Operations and suppliers at significant risk for incidents of child labour	–	Assured		There are no such operations and suppliers[1].
	409–1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	–	Assured		
	411–1	Incidents of violations involving rights of indigenous peoples	186	Assured		
	413–2	Operations with significant actual and potential negative impacts on local communities	71	Assured		The main operation (unit) that has a significant negative impact on local communities is Polar Division, whose assets are located in Norilsk. The key source of negative impact is sulphur dioxide emissions into the atmosphere.

[1] The reporting year saw a due diligence of Polar Division and Kola MMC.

Report boundaries

GRI 2-2

Reporting boundaries

Nornickel has a long and successful track record of preparing sustainability reports. The 2022 Sustainability Report is the nineteenth report prepared by the Company in accordance with the GRI Standards (formerly the Guidelines). During this period, the Company has established an information collection system configured in such a way that entities of Nornickel Group[1] provide information on the topics and aspects of operations where they have significant sustainability impacts. As a result, the boundaries of information consolidation in a sustainability report are easily adjustable for the context of the entities' operations and differ across material topics.

The reporting boundaries include data on Russian business units. Foreign business units are insignificant in terms of sustainability impacts, except for Norilsk Nickel Harjavalta, a Finnish company of the Group. No data for Norilsk Nickel Harjavalta are included in the 2022 Sustainability Report due to the limited ability to collect information in the new geopolitical environment[2]. However, the Company reasonably believes that not including Norilsk Nickel Harjavalta in the reporting boundaries will not have a material effect on the Group's performance (Norilsk Nickel Harjavalta's headcount, occupational injury rate, and key environmental impact indicators are traditionally within 1% of the consolidated figure for Nornickel Group). To ensure transparency of Norilsk Nickel Harjavalta, sustainability data for this asset will be disclosed on the Norilsk Nickel Harjavalta website as a separate set of indicators (ESG Databook).

The Company traditionally does not include investment assets that are outside the Group's control unless they form a significant part of the Group's production chain. In 2022, the Company did not carry out any major mergers and acquisitions that would have a significant impact on the reporting boundaries.

[1] In total, Nornickel Group counts over 80 entities. A detailed list of entities in the perimeter of the Group's IFRS financial statements is available.
[2] A limited number of indicators that include Norilsk Nickel Harjavalta data is included in the reporting boundaries, in which case this is reported in a special note. For reference, the Report also discloses data on the headcount of foreign operations.

Reporting boundaries for material topics

● All assets of the Subgroup are included
● Assets of the Subgroup with the most significant impacts are included
● Entities of the Subgroup are not included

Material topics	GRI disclosures	Norilsk Division	Kola Division[1]	Trans-Baikal Division	Energy Division	Head Office	Other Group assets
Employment and decent working conditions in the regions of operation	201-3	●	●	●	●	●	●
	202-1, 202-2	●	●	●	●	●	●
	401-1, 401-2	●	●	●	●	●	●
	403-6	●	●	●	●	●	●
	404-3	●	●	●	●	●	●
Emissions	305-7	●	●	●	●	●	●
Training and education	404-1, 404-2	●	●	●	●	●	●
Innovation projects pursuing sustainable development goals	–	●	●	●	●	●	●
Contribution to the development of local communities	201-1	●	●	●	●	●	●
	203-1, 203-2	●	●	●	●	●	●
	204-1	●	●	●	●	●	●
	207-1, 207-2, 207-3	●	●	●	●	●	●
Climate change	201-2	●	●	●	●	●	●
	302-1, 302-3, 302-4	●	●	●	●	●	●
	305-1 – 305-5	●	●	●	●	●	●
Contribution to the national industry by promoting Russian technology	–	●	●	●	●	●	●
Waste management	306-1 – 306-5	●	●	●	●	●	●
Biodiversity	304-1 – 304-4	●	●	●	●	●	●
Health and safety	403-1 – 403-5, 403-8 – 403-10	●	●	●	●	●	●
Water consumption and wastewater discharge	303-1 – 303-5	●	●	●	●	●	●
Industrial environmental safety of production facilities (including tailings dumps)	–	●	●	●	●	●	●
Impact of transport on water bodies	–	●	●	●	●	●	●
Responsible exploration and land reclamation	–	●	●	●	●	●	●
Supply chain responsibility	308-1, 308-2, 414-1, 414-2	●	●	●	●	●	●
Corporate governance and risk management	2-9 – 2-21	●	●	●	●	●	●
Anti-corruption and business ethics	205-1, 205-2, 205-3	●	●	●	●	●	●
Respect for human rights (including those of indigenous minorities)	401-3	●	●	●	●	●	●
	402-1	●	●	●	●	●	●
	405-1	●	●	●	●	●	●
	406-1	●	●	●	●	●	●
	407-1	●	●	●	●	●	●
	408-1	●	●	●	●	●	●
	409-1	●	●	●	●	●	●
	411-1	●	●	●	●	●	●
	413-2	●	●	●	●	●	●

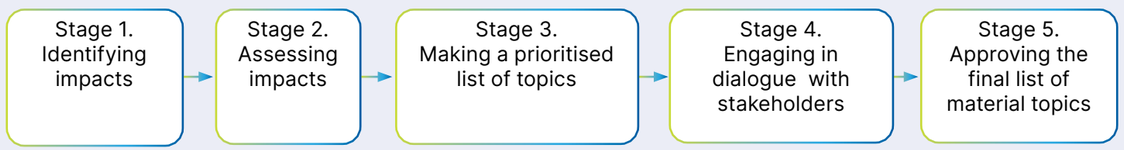
[1] Excluding Norilsk Nickel Harjavalta.

Definition of material topics

GRI 3-1, 3-2

Process to determine material topics

When preparing the 2022 Sustainability Report, we identified material topics in accordance with the GRI Standards. The process of identifying material topics included five stages.



At the first stage, the working group for the Report preparation jointly with external consultants[1] made a base list of the Company's actual and potential economic, environmental, and social impacts, including those related to human rights.

To assess the identified impacts, we polled a wide range of stakeholders, including internal and external sustainability experts, at the second stage. As a result, 221 respondents were polled in 2022 – twice as many as the average number of respondents in recent years.

The poll included questions that helped us assess the list of impacts made by the Company against the key parameters recommended by the GRI Standards:

- severity, with a breakdown by positive and negative impact;
- regularity and likelihood;
- scale and scope.

At the third stage, based on the results of the poll, average scores for two groups of respondents were calculated for all questions: sustainable development experts and other stakeholders. The average correlation between the scores of the two groups of respondents across all questions was 92%.

For each impact, the severity of the impact was determined (average score for impact severity and scope), and the likelihood/regularity of the impact was assessed.

In order to make a list of material topics, impacts were grouped into material topics (see the Prioritised List of Topics table below).

[1] The working group for the Report preparation included employees of MMC Norilsk Nickel's Sustainable Development Department and two groups of independent consultants.

A materiality matrix reflecting the relative significance of the topics was plotted on the Severity of Impact and Likelihood/Regularity of Impact axes.

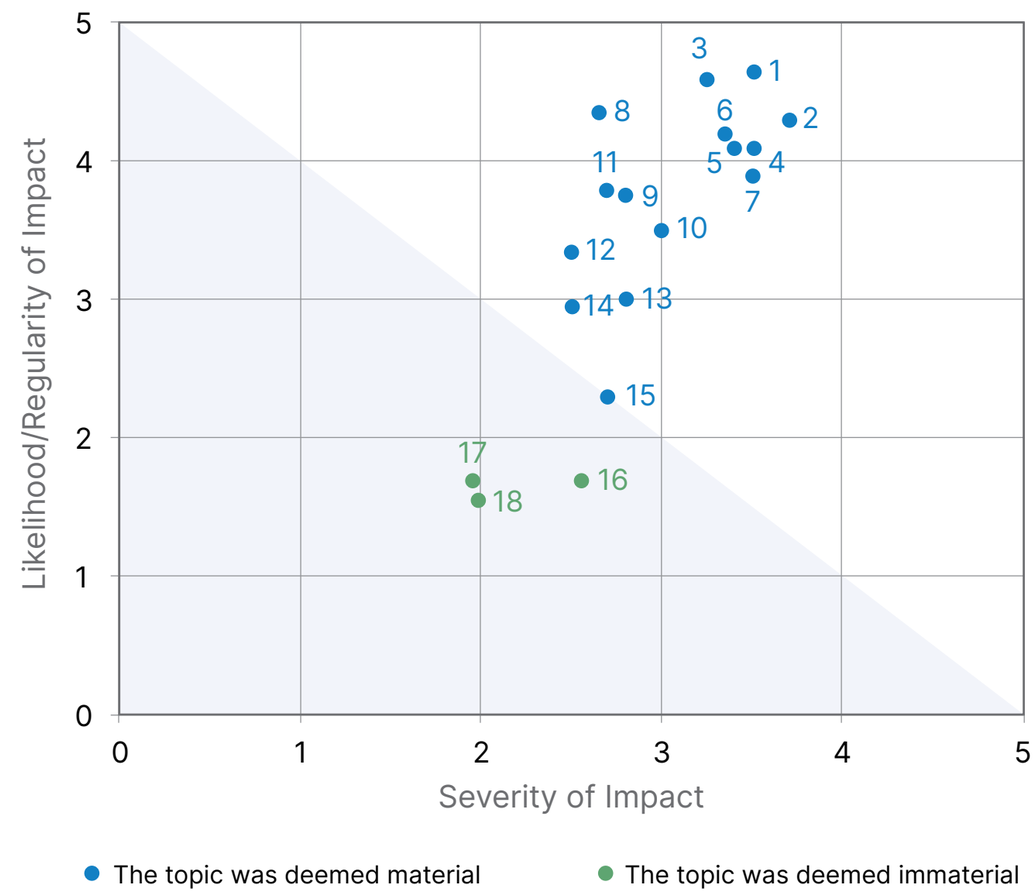
The Company has set cut-off thresholds for the materiality boundary in the matrix. A value of 5.0 on the sum of coordinate values (rounded)[1] was selected as the cut-off point – 50% of the maximum score. Topics falling below the cut-off point serve as grounds for deeming them insignificant. They are also reported in line with stakeholder needs, but GRI Standards are not mandatory for these topics. As a result of the stage, 15 material topics were identified for disclosure in the 2022 Sustainability Report.

At the fourth stage, the Company conducted stakeholder dialogue to present the materiality matrix to stakeholders.

Stakeholders reviewed the results and made recommendations on the report and the details of topics disclosure in the report.

At the last stage, the working group analysed the materiality assessment results, with due regard to the recommendations provided by the session participants, and finalised the materiality matrix.

Materiality matrix



[1] The average of the sum of the maximum values of the matrix's parameters.

Prioritised List of Topics[1]

№	Topic wording	Operations related to sustainable development
1	Employment and decent working conditions in the regions of operation	Employment and decent working conditions in the regions of operation
2	Emissions	Emissions of sulphur dioxide and other pollutants
3	Training and education	Training and education
4	Innovation projects pursuing sustainable development goals	Innovation projects pursuing sustainable development goals
5	Contribution to the development of local communities	Payment of taxes to budgets of various levels
		The Company's charitable activities targeting local communities (including indigenous minorities) and non-profit organisations to support sustainable development
		Development of housing, energy, and other infrastructure in the regions of operation
		Support for entrepreneurship in the regions of operation
6	Climate change	Greenhouse gas emissions
		Development of a climate change monitoring system
		Metals production needed to combat climate change
7	Contribution to the national industry by promoting Russian technology	Contribution to the national industry by promoting Russian technology
8	Waste management	Generation of industrial waste from operations
9	Biodiversity	Impact on biodiversity in the regions of industrial operations
10	Health and safety	OHS risks for employees and contractors Work-related injuries
		Occupational disease risks for employees and contractors
11	Water consumption and wastewater discharge	Wastewater discharge to water bodies
		Water withdrawal from water bodies
12	Industrial environmental safety of production facilities (including tailings dumps)	Tailings risks
		Industrial environmental safety risks
13	Impact of transport on water bodies	Pollution of water bodies by sea and river transport
14	Responsible exploration and land reclamation	Land disturbance
15	Supply chain responsibility	Risks related to the violation of sustainability principles in the supply chain
16	Corporate governance and risk management	Risks related to inadequate corporate governance and risk management
17	Anti-corruption and business ethics	Corruption and business ethics risks
18	Respect for human rights (including those of indigenous minorities)	Risks related to the violation of employee and contractor rights (including wrongdoings, discrimination, etc.)
		Risks related to the violation of fundamental rights of local communities in the regions of operation (including indigenous minorities)

[1] Following the prioritisation, the first 15 topics were found to be material.

The final list of material topics contains a number of changes as compared to 2021. The key triggers for the changes were:

- change in the methodology to determine material topics, a new procedure for assessing impacts;
- optimisation of contents, change of focus in disclosure at stakeholder requests, relevant change in the names of topics;
- contextual optimisation (in particular, the topic "Response to the COVID-19 Pandemic" was disclosed in detail in the context of the 2021 reporting year's events);
- the topic "Compliance" in accordance with the GRI Standards (2021) is mandatory for disclosure and is not subject to the materiality assessment procedure.

Impacts related to material topics

Material topic	Related impact	Description
Environmental		
Climate change	Greenhouse gas emissions	Metals and mining is a highly carbon-intensive industry. The majority of GHG emissions produced by Nornickel operations comes from burning various substances in metallurgy along with fuel combustion as part of power generation and transportation. A global increase in GHG concentration in the air may lead to higher average annual temperatures in Nornickel's regions of operation, making physical risks related to climate change more likely to materialise. This would ultimately drive up our operating expenses and disrupt production processes.
	Development of a climate change monitoring system	A project to develop climate change monitoring is set to raise our awareness of actual and potential changes in soils, which will enable us to proactively identify potentially hazardous defects and deviations and to prevent accidents related to industrial facilities and housing infrastructure across our geography.
	Metals production needed to combat climate change	Nornickel contributes to global transitioning to low-carbon and carbon-free energy by growing the output of PGM needed to advance renewable energy and green transport.
Emissions	Emissions of sulphur dioxide and other pollutants	Higher sulphur dioxide emissions due to the ramp-up of our production capacities have a negative impact on the air quality and natural ecosystems across our footprint. Our Sulphur Project aimed at production upgrade and sulphur dioxide capture and recovery will be instrumental in improving air quality in our regions of operation.

Waste management	Generation of industrial waste from operations	Inefficient management of industrial waste generated by the Company's operations may compromise the quality of the environment and living standards for local communities. By implementing practices to recycle in-house waste and making efforts to clean up the existing pollution, we can minimise our negative impact on the environment.
Biodiversity	Impact on biodiversity in the regions of industrial operations	Capacity ramp-up and expanding production sites may lead to the degradation of natural habitats and loss of biodiversity across our footprint. Large-scale studies of biodiversity in ecosystems and regular monitoring of the relevant impact will help restore and preserve such biodiversity.
Water consumption and wastewater discharge	Wastewater discharge to water bodies	Excessive wastewater discharge into water bodies may negatively affect the biodiversity of aquatic ecosystems and the well-being of local communities. Water shortages may disrupt Nornickel's production processes and increase operating expenses. We seek to make our management of water resources as efficient as possible to reduce costs and minimise our impact on aquatic biodiversity.
	Water withdrawal from water bodies	
Industrial environmental safety of production facilities (including tailing dumps)	Tailings risks	Tailing dump-related incidents may have a negative impact on nearby ecosystems, as well as our business reputation and financial performance due to additional costs to eliminate the consequences of such incidents. The Company regularly monitors the hydraulic structures of tailing dumps and conducts environmental monitoring on-site and within the impact area to ensure safety of nearby ecosystems.
	Industrial environmental safety risks	Incidents related to the operation of Nornickel's industrial sites may have a negative impact on ecosystems in the vicinity of the place of incident, as well as our business reputation and financial performance due to response costs. Stronger environmental management and environmental safety initiatives will help reduce the risk of industrial incidents.
Impact of transport on water bodies	Pollution of water bodies by sea and river transport	Sea and river transport that has an anthropogenic impact on water bodies may also affect endemic ecosystems primarily because such vessels run on fuel.
Responsible exploration and land reclamation	Land disturbance	Greenfield development to step up production may lead to a significant disturbance of land and higher costs of response and rehabilitation. Effective exploration planning, preparing decommissioning roadmaps and putting them into action will be instrumental in reducing these risks.
Social		
Employment and decent working conditions	Employment and decent working conditions in the regions of operation	An effective employment policy may cut unemployment rates and increase economic stability in the regions of operation. Failure to duly observe labour practices and respect employee rights may result in materialised reputational and legal risks, including discontinued production operations in the worst case scenario. High employee satisfaction with labour conditions and engagement in discussing production matters help increase motivation and productivity.
Training and education	Training and education	Training programmes for employees boost organisational efficiency and added value for the Company while also helping employees improve their competencies and gain an edge in the labour market.
Contribution to the development of local communities	Payment of taxes to budgets of various levels	By implementing the tax strategy and timely paying taxes to budgets of various levels, we secure economic stability across our geography.
	The Company's charitable activities targeting local communities (including indigenous minorities) and non-profit organisations to support sustainable development	Our charitable activities serve to maintain a favourable social climate and a comfortable environment in the regions of operation while also preserving the traditions and lifestyle of indigenous minorities.
	Development of housing, energy, and other infrastructure in the regions of operation	By developing housing, energy and social infrastructure, we help improve social and economic conditions along with living standards in our regions of operation, establish a constructive dialogue with stakeholders and enhance our reputation.
	Support for entrepreneurship in the regions of operation	Support to local small and medium-sized businesses translates into social and economic stability in the regions of operation.
Health and safety	OHS risks for employees and contractors Workplace injuries	A high level of workplace hazards and insufficient health and safety efforts may lead to fatalities and severe injuries among the Company's employees and contractors. We can reduce injury risks by developing health and safety management systems and taking steps to foster a corporate culture of safety.
	Occupational disease risks for employees and contractors	Employees and contractors working at metals and mining facilities may contract occupational diseases.
Governance		
Innovation projects pursuing sustainable development goals	Innovation projects pursuing sustainable development goals	Innovation projects may have a positive impact on various aspects of sustainable development, including HSE, boost a competitive edge in the long run and strengthen the Company's position in the domestic and international business arena.
Contribution to the national industry through import substitution	Contribution to the national industry through import substitution	By supporting local manufacturers and focusing on import substitution, Nornickel will contribute to the growth of national and regional economies, support stable cash flows for businesses and strengthen ties with its key stakeholders.
Responsible supply chain	Risks related to the violation of sustainability principles in the supply chain	Non-compliance with sustainability principles on the part of suppliers may lead to a whole range of negative impacts on the economy, environment and society within the boundaries of their operations. Nornickel seeks to prevent negative impacts its suppliers may have, as the most critical of them may entail reputational risks and the need to rethink its relations with suppliers as a result.

SASB METALS&MINING content index

Topic	SASB code	Accounting metric	Disclosure	Page/link	Comment
Greenhouse gas emissions	EM-MM-110a.1	Gross global Scope 1 emissions	Full	Climate Change and Energy Efficiency	–
		Percentage covered under emissions-limiting regulations	–	–	No emissions-limiting regulations are imposed in Russia.
	EM-MM-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Full	Climate Change and Energy Efficiency	–
Air quality	EM-MM-120a.1	Air emissions of the following pollutants:			
		CO	Not disclosed	–	–
		NOx (excluding N_2O)	Full	Air Pollutant Emissions	–
		SOx	Full	Air Pollutant Emissions	–
		Particulate matter (PM_{10})	Full	Air Pollutant Emissions	–
		Mercury (Hg)	Not disclosed	–	–
		Lead (Pb)	Not disclosed	–	–
		Volatile organic compounds (VOCs)	Full	Air Pollutant Emissions	–
Energy management	EM-MM-130a.1	Total energy consumed			
		Percentage grid electricity	Not disclosed	–	–
		Percentage renewable	Full	Utilisation of Renewable Energy Sources	–
Water management	EM-MM-140a.1	Total fresh water withdrawn	Full	Appendices	–
		Total fresh water consumed	Full	Appendices	–
		Percentage of each in regions with High or Extremely High Baseline Water Stress	Full	Appendices	–
	EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Not disclosed	–	–

Topic	SASB code	Accounting metric	Disclosure	Page/link	Comment
Waste & hazardous materials management	EM-MM-150a.4	Total weight of non-mineral waste generated	Full	Appendices	–
	EM-MM-150a.5	Total weight of tailings produced	Full	Appendices	–
	EM-MM-150a.6	Total weight of waste rock generated	Full	Appendices	–
	EM-MM-150a.7	Total weight of hazardous waste generated	Full	Appendices	–
	EM-MM-150a.8	Total weight of hazardous waste recycled	Full	Appendices	–
	EM-MM-150a.9	Number of significant incidents associated with hazardous materials and waste management	Not disclosed	–	–
	EM-MM-150a.10	Description of waste and hazardous materials management policies and procedures for active and inactive operations	Full	Sustainable Waste and Tailing Dump Management, Waste Disposal	–
Biodiversity impacts	EM-MM-160a.1	Description of environmental management policies and practices for active sites	Full	Biodiversity	–
	EM-MM-160a.2	Percentage of mine sites where acid rock drainage is:			
		Predicted to occur	Not disclosed	–	–
		Actively mitigated	Not disclosed	–	–
		Under treatment or remediation	Not disclosed	–	–
	EM-MM-160a.3	Percentage of:			
		Proved reserves in or near sites with protected conservation status or endangered species habitat	Not disclosed	–	–
		Probable reserves in or near sites with protected conservation status or endangered species habitat	Not disclosed	–	–
Security, human rights & rights of indigenous peoples	EM-MM-210a.1	Percentage of:			
		Proved reserves in or near areas of conflict	Full	–	0%
		Probable reserves in or near areas of conflict	Full	–	0%
	EM-MM-210a.2	Percentage of:			
		Proved reserves in or near indigenous land	Full	–	0%
		Probable reserves in or near indigenous land	Full	–	0%
	EM-MM-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	Full	Human Rights, Interaction with Indigenous Minorities	–
Community relations	EM-MM-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	Full	Interaction with Indigenous Minorities	–
	EM-MM-210b.2	Number and duration of non-technical delays	Full	–	No delays recorded.
Labour relations	EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements, broken down by US and foreign employees	Partial	Occupational Health and Safety	–
	EM-MM-310a.2	Number and duration of strikes and lockouts	Full	–	No such incidents.

Topic	SASB code	Accounting metric	Disclosure	Page/link	Comment
Workforce health and safety	EM-MM-320a.1	MSHA all-incidence rate	Full	Workplace Injuries	–
		Fatality rate	Full	Workplace Injuries	–
		Near miss frequency rate (NMFR)	Full	Workplace Injuries	–
		Average hours of health, safety, and emergency response training for (a) full-time employees and (b) contractors	Full	OHS Training	–
Business ethics and transparency	EM-MM-510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain	Full	Business Ethics and Anti-corruption	–
	EM-MM-510a.2	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Full	–	We do not operate in such countries.
Tailing dump management	EM-MM-540a.1	Tailing dump inventory table: facility name, location, ownership status, operational status, construction method, maximum permitted storage capacity, current amount of tailings stored, consequence classification, date of most recent independent technical review, material findings, mitigation measures, site-specific emergency preparedness and response plan (EPRP)	Partial	Waste Disposal	–
	EM-MM-540a.2	Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailing storage facilities	Full	Waste Disposal	–
	EM-MM-540a.3	Approach to development of emergency preparedness and response plans (EPRPs) for tailing dumps	Full	Waste Disposal	–
Activity metric	EM-MM-000.A	Production of:			
		Metal ores	Not disclosed	–	–
		Finished metal products	Not disclosed	–	–
Activity metric	EM-MM-000.B	Total number of employees, percentage of contractors	Partial	Staff Composition	–

UNCTAD Guidance on core indicators for entity reporting on contribution towards implementation of the UN SDGs

UNCTAD indicator		Page	Disclosure status	Information/comments
A Economic indicators				
A.1 Revenue and/or (net) added value	A.1.1: revenue	–	Disclosed	RUB 1,184.5 bn
	A.1.2: added value	–	Disclosed	RUB 902.6 bn
	A.1.3: net added value	–	Disclosed	RUB 828.9 bn
A.2 Payments to the Government	A.2.1: taxes and other payments to the Government	–	Disclosed	In 2022, tax and non-tax payments totalled RUB 262 bn VAT is not included in taxes since this tax is indirect and actually paid by end consumers of products and services rather than by the reporting entity. VAT is also excluded from the calculation of profit (loss) and is not disclosed in the Income Statement.
A.3 New investment/ expenditures	A.3.1: green investment	–	Disclosed	RUB 82.2 bn The expenditures in question make 7% of the Company's consolidated revenue for 2022.
	A.3.2: community investment	–	Disclosed	RUB 48.5 bn The expenditures in question make up 4% of the Company's consolidated revenue for 2022
	A.3.3: total expenditures on research and development	–	Disclosed	RUB 84.3 mln The expenditures in question make 0.01% of the Company's consolidated revenue for 2022.
A.4 Local supplier/ purchasing programmes	A.4.1: percentage of local procurement	–	Partially disclosed	Data is collected for materials and supplies only. As for other procurement categories, there is no centralised data collection broken down by the location of suppliers. Materials and supplies procured from Russian suppliers make 95% of total procurements in this category.

UNCTAD indicator		Page	Disclosure status	Information/comments
B Environmental indicators				
B.1 Sustainable use of water	B.1.1: water recycling and reuse	–	Disclosed	82%
	B.1.2: water use efficiency	–	Disclosed	The ratio between water withdrawal and net added value is 400 m³ / RUB mln
	B.1.3: water stress	–	Disclosed	No water is withdrawn in water-scarce areas.
B.2 Waste management	B.2.1: reduction of waste generation	–	Disclosed	In 2022, waste generation increased to 166.3 mt from 156.4 mt in 2021. The ratio between waste generation and net added value increased from 160 t to 200 t / RUB mln
	B.2.2: waste reused, re-manufactured and recycled	–	Disclosed	In 2022, the amount of waste recycled increased to 30 mt from 23.7 mt in 2021. The ratio between waste recycling and net added value increased from 19 t to 36 t / RUB mln
	B.2.3: hazardous waste	–	Disclosed	In 2022, hazard classes I–IV waste generation increased to 1,151.2 thousand t from 1,492.8 thousand t in 2021. The ratio between such waste generation and net added value went up from 1.53 t to 1.86 t / RUB mln
B.3 Greenhouse gas emissions	B.3.1: greenhouse gas emissions (scope 1)	–	Disclosed	The absolute relative amount of Scope 1 greenhouse gas emissions decreased from 6.3 t to 5.9 t of CO_2 equivalent per RUB mln of net added value
	B.3.2: greenhouse gas emissions (scope 2)	–	Disclosed	The absolute relative amount of Scope 2 greenhouse gas emissions remained flat at 0.5 t of CO_2 equivalent per RUB mln of net added value
B.4 Ozone-depleting substances and chemicals	B.4.1: ozone-depleting substances and chemicals	–	Disclosed	No emissions

UNCTAD indicator		Page	Disclosure status	Information/comments
B.5 Energy consumption	B.5.1: renewable energy	–	Partially disclosed	The Report discloses the amount of electric power generated by HPPs and its share in total energy consumption. The current metering system does not allow the disclosure to be made in full compliance with UNCTAD guidelines. Along with in-house generation, Nornickel Group purchases electric power from third parties connected to Russia's unified energy system. In 2022, the share of power from renewable sources amounted to 51% for the Group and 52% for assets in the Norilsk Industrial District. For more details, please see the Climate Change and Energy Efficiency section. Share of renewable energy in the Norilsk Industrial District's total energy consumption: • Total electricity consumption: 6.59 bn kWh • including HPP generated: 3.8 bn kWh Electric power sold to retail consumers and third parties in the Norilsk Industrial District: • Total electric power sold to retail consumers and third parties: 1.16 bn kWh • including HPP generated: 649.9 mln kWh
	B.5.2: energy efficiency	–	Disclosed	In 2022, the ratio between total energy consumption by the Group and net added value was 0.18 TJ / RUB mln

UNCTAD indicator		Page	Disclosure status	Information/comments
C Social area				
C.1 Gender equality	C.1.1: proportion of women in managerial positions	–	Disclosed	The proportion of women in managerial positions is 25% The proportion of women on the Management Board is 40% (four out of ten members)
C.2 Human capital	C.2.1: average hours of training per year per employee	146	Disclosed	–
	C.2.2: expenditure on employee training per year per employee	–	Disclosed	Expenditure on employee training per year per employee: For all employee categories – RUB 18,500 thsd Blue-collar employees – RUB 10,400 thsd Managers – RUB 19,900 thsd White-collar employees – RUB 22,000 thsd
	C.2.3: employee wages and benefits with breakdown by employment type and gender	141	Partially disclosed	Data is disclosed on wages and remuneration package (excluding insurance contributions); the data disclosed is broken down by region. There is no statistics on wages and benefits broken down by labour contract type, employment type, age or gender.
C.3 Employee health and safety	C.3.1: expenditures on employee health and safety	119	Disclosed	Expenditures on employee health and safety make up 1.8% of the Group's consolidated revenue.
	C.3.2: frequency/ incident rates of occupational injuries	116, 348	Partially disclosed	The Report discloses information about the occupational injury rate and lost day rate in accordance with the GRI requirements.

UNCTAD indicator		Page	Disclosure status	Information/comments
C.4 Coverage of collective agreements	C.4.1: percentage of employees covered by collective agreements	138	Disclosed	–
D Institutional area				
D.1 Corporate governance disclosures	D.1.1: number of Board meetings and attendance rate	–	Disclosed	Number of Board of Directors meetings – 38 Attendance rate – 100%
	D.1.2: number and percentage of female Board members	–	Disclosed	The proportion of women on the Board of Directors is 23% (three out of 13 members)
	D.1.3: Board members	–	Disclosed	Disclosed in the 2022 Annual Report[1]
	D.1.4: number of meetings of the audit committee and attendance rate	–	Disclosed	Number of meetings of the Audit Committee – 15 (of which two jointly with other committees). Attendance rate – 100%
	D.1.5: compensation: total compensation per Board member(both executive and non-executive directors)	–	Disclosed	The 2022 Annual Report[1] discloses the total amount of compensations paid to the members of the Board of Directors.
D.2 Anti-corruption practices	D.2.1: amount of fines paid or payable due to settlements	351–352	Disclosed	–
	D.2.2: average hours of training on anti-corruption issues per year per employee	253–254	Partially disclosed	No records are kept on the length (in hours) of anti-corruption training. Reporting in the Company is based on the GRI standards; it means the Report discloses the number and proportion of employees trained in anti-corruption policies and practices.

[1] https://www.nornickel.com/investors/reports-and-results/annual-reports/.

TCFD disclosures

Section	Disclosure	Page	Assured by the auditor
Governance Describe the Board's oversight of climate-related risks and opportunities	• Describe the Board's oversight of climate-related risks and opportunities	53	Assured
	• Describe the management's role in assessing and managing climate-related risks and opportunities	53, 231	Assured
Strategy Disclose the actual and potential impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning	• Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term	57	Not assured
	• Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning	27, 49	Assured
	• Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	22, 28, 59	Not assured
Risk management Describe how the organisation identifies, assesses, and manages climate-related risks	• Describe the organisation's processes for identifying and assessing climate-related risks	57, 239	Not assured
	• Describe the organisation's processes for managing climate-related risks	60, 238	Assured
	• Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management	238	Assured
Metrics and targets Disclose the metrics and targets used to assess and manage relevant climate-related risks	• Describe the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process	43	Assured
	• Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	61	Assured
	• Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	43	Assured

GRI quantitative indicators disclosure

Direct economic value generated and distributed[1] (RUB bn)

GRI 201-1

Indicator	2018	2019	2020	2021	2022
Direct economic value generated	734.6	884.6	1123.3	1324.1	1183.6
Economic value distributed, including:	684.6	918.4	990.5	1141.2	919.5
• operating expenses[2]	228.5	239.1	449.0	281.8	281.0
• community investments and charity[3]	12.9	14.4	36.4	76.0	24.9
• payroll and other employee remuneration and benefits, including payroll taxes	128.8	136.8	146.6	163.6	222.9
• payments to providers of capital (interest, dividends[4])	243.1	383.7	213.8	412.2	202.8
• gross tax payments	71.3	144.4	144.8	207.6	187.8
Economic value retained	50.0	-33.8	132.8	182.9	264.1

Structure of the Board of Directors and the Management Board

GRI 405-1

Indicator	Board of Directors		Management Board	
	Men	Women	Men	Women
Under 30	0 (0%)	0 (0%)	0 (0%)	0 (0%)
30–50	5 (38.5%)	3 (23%)	4 (40%)	2 (20%)
Over 50	5 (38.5%)	0 (0%)	2 (20%)	2 (20%)

[1] Calculated on an accrual basis under the IFRS. The Company used an in-house calculation methodology developed in line with the GRI Standards.
[2] Since 2020, this line has included environmental and decommissioning provisions.
[3] Excluding CAPEX.
[4] Taking into account dividends accrued.

Total water withdrawal (mcm)

GRI 303-3, SASB EM-MM-140a.1

Indicator		Total water withdrawal from external sources[1]	Including			
			from surface water bodies	from underground sources	natural water inflow	Effluents from third parties and from municipal water supplies and other water utilities (excluding NTEC)
Group's total	2022	353.1	233.2	24.4	61.9	33.6
	2021	351.2	224.9	29.4	57.4	39.5
	2020	374.9	259.8	30.9	46.7	37.5
	2019	319.3	227.3	26.3	36.5	29.2
	2018	356.8	254.3	28.3	44.2	30.1
Including: Polar Division and Norilskenergo[2]	2022	26.2	0.0	0.0	24.2	1.9
	2021	29.8	0.0	0.0	24.36	5.5
	2020	25.6	0.0	0.0	20.1	5.5
	2019	26.5	0.0	0.0	12.85	13.7
	2018	38.1	0.02	0.0	22.4	15.7
Including: Norilsk-Taimyr Energy Company	2022	261.1	217.2	23.9	2.7	17.3
	2021	257.9	209.7	28.8	2.04	17.4
	2020	286.0	234.62	30.63	2.7	18.0
	2019	240.2	212.8	26.1	0.0	1.3
	2018	269.5	241.2	28.3	0.0	0.0
Including: Kola MMC	2022	39.1	12.3	0.0	13.3	13.6
	2021	32.5	11.1	0.0	13.1	8.3
	2020	38.2	21.3	0.0	8.7	8.3
	2019	27.9	13.2	0.0	6.1	8.6
	2018	32.8	11.7	0.0	12.4	8.7

[1] Excluding water reused from NTEC networks.
[2] Included in water withdrawal from NTEC.

Water withdrawal by water source and type in 2022 (mcm)

GRI 303-3, SASB EM-MM-140a.1

Indicator	2022
Total water withdrawal	353.1
Water from surface water bodies, including:	233.2
• fresh water	223.2
• other water	0.0
Water from underground sources, including:	24.4
• fresh water	24.4
• other water	0.0
Effluents from third parties and from municipal water supplies and other water utilities (excluding NTEC), including:	33.6
• fresh water	9.2
• other water	24.4
Natural water inflow, including:	61.9
• fresh water	0.0
• other water	61.9
Water from NTEC, including:	85.6
• fresh water	85.6
• other water	0.0
Sea or ocean water, including:	0.0
• fresh water	0.0
• other water	0.0

Water bodies used for water withdrawal and waste water discharge[1]

GRI 303-1, SASB EM-MM-140a.1

Branches and business units	Water bodies used for water withdrawal and the scale of impact associated with the Company	Water bodies used for wastewater discharge and the scale of impact associated with the Company
Polar Division	Water is withdrawn from the Yenisey River, the water bodies of the Norilsk-Pyasino water system and the Kara Sea.	Wastewater is discharged into water bodies of the Yenisey River and Norilsk-Pyasino water system.
Polar Transport Division		
Medvezhy Ruchey		
Norilskgazprom		
Norilsktransgaz		
Norilsknickelremont		
Polar Construction Company		
Norilsk Production Support Complex		
NN Technical Services		
Taimyr Fuel Company		
Yenisey River Shipping Company		
Norilsk Airport		
NTEC		
Renons		
Lesosibirsk Port		
Murmansk Transport Division	Water is withdrawn from the water bodies of the Barents Sea.	Wastewater is discharged into the water bodies of the Barents Sea.
Kola MMC		
Taimyr Fuel Company		
GRK Bystrinskoye	Water is withdrawn from the water bodies of the Amur River.	Wastewater is discharged into the water bodies of the Amur River.
Vostokgeologiya		
Zapolyarye Health Resort	Water is withdrawn from the Black Sea.	Wastewater is discharged into the Black Sea.

[1] The Company does not make a material impact on the water bodies specified. Water is withdrawn within the established limits. Waster water is discharged in accordance with the relevant permits and predominantly within the established limits.

Water use, including water recycling (mcm)

Indicator		Total water used	Including				Water recycled and reused as percentage of total water used (%)
			utility water	production	Including		
					Water reused	Water recycled	
Group's total	2022	1345,9	21.6	1324,3	27.1	1077.8	82.1
	2021	1280.8	25.2	1255.6	31.6	1052.0	84.6
	2020	1458.1	23.0	1435.1	31.2	1229.0	86.4
	2019	1343.5	18.8	1324.7	30.7	1141.3	87.2
	2018	1412.1	20.1	1392.0	31.5	1178.5	85.7
Including: Polar Division and Norilskenergo	2022	435.6	5.2	430.4	23.4	350.3	85.8
	2021	460.8	14.9	445.9	27.7	384.2	89.3
	2020	471.2	13.6	457.6	27.7	384.2	89.4
	2019	461.2	10.5	450.7	29.4	388.7	90.7
	2018	463.5	12.1	451.4	29.2	389.5	90.4
NTEC	2022	715.6	9.9	705.7	0.9	584.2	81.8
	2021	626.9	0.9	626.0	0.9	514.2	82.2
	2020	764.5	0.9	763.6	0.1	641.1	84
	2019	656.5	0.9	655.6	0.1	551.1	84.1
	2018	709.1	1.00	708.1	1.1	578.2	81.7
Kola MMC	2022	109.8	1.8	108.0	0.1	88.7	80.9
	2021	100.3	1.8	98.5	0.1	98.4	98.2
	2020	141.4	1.6	139.8	0.2	139.7	98.9
	2019	156.5	1.7	154.9	0.1	150	95.9
	2018	171.6	1.8	169.8	0.0	158.6	92.4

Total effluents[1] and pollutants discharged[2]

GRI 303-4

Indicator		Total effluents (mcm)	Including: Insufficiently treated	Including: Contaminated untreated	Including: Treated to standard quality at treatment facilities	Including: Standard clean (without treatment)	Pollutants in effluents (kt)
Group's total	2022	168.0	34.1	40.7	3.7	89.5	208.6
	2021	193.8	33.8	60.3	4.9	94.8	237.0
	2020	202.4	33.1	54.8	4.3	110.2	244.3
	2019	142.4	26.2	36	4.6	75.6	210.6
	2018	164.5	31	34.3	6.6	92.6	232.4
Including: Polar Division and Norilskenergo	2022	23.5	1.0	22.1	0.4	0.0	26.6
	2021	37.0	1.2	35.4	0.4	0.0	60.0
	2020	33.7	1.7	31.6	0.4	0.0	66.7
	2019	23.7	1.4	21	0.8	0.5	58.3
	2018	35	3.7	28.7	1.9	0.7	72.7
Including: NTEC	2022	95.8	0.0	6.7	0.0	89.1	3.4
	2021	88.2	0.0	6.9	0.0	81.3	3.0
	2020	104.9	0.0	8.8	0.1	96.1	3.0
	2019	74.6	0.0	2.1	0.004	72.5	1.1
	2018	91.6	0.0	0.0	0.0	91.6	1.4
Including: Kola MMC	2022	26.7	26.4	0.3	0.0	0.0	129.1
	2021	27.5	25.9	0.9	0.7	0.0	122.0
	2020	25.8	25.1	0.7	0.0	0.0	126.7
	2019	22.1	21.8	0.3	0.0	0.0	124.4
	2018	25.6	25.5	0.1	0.0	0.0	148

[1] Effluents are measured instrumentally with certified gauges and also indirect indicators as approved by the territorial office of the Federal Water Resources Agency.
[2] The main pollutants of the Group include substances dominating in the volume of wastewater: suspended solids, oil products, metals, and nitrogen compounds.

NOx, SOx and other significant air emissions, including their type and weight[1] (kt)

GRI 305-7

Indicator			Group's total	Polar Division	NTEC	Kola MMC
Total amount		2022	1819.4	1778.9	9.8	16.4
		2021	1646.9	1601.4	12.6	19.6
		2020	1968.1	1857.5	10.1	83.4
		2019	1952.7	1819.2	10.6	110.8
		2018	1926.6	1789.0	11.7	117.4
Including:	NOx	2022	9.7	1.1	6.0	1.4
		2021	11.4	0.7	8.3	1.4
		2020	10.0	0.6	6.9	1.6
		2019	10.3	0.5	7.2	1.8
		2018	11.2	0.6	8.0	1.7
	Sulphur dioxide	2022	1778.4	1764.9	0.1	13.1
		2021	1601.4	1585.2	0.1	15.7
		2020	1910.8	1836.9	0.0	73.2
		2019	1898.1	1798.6	0.0	99.4
		2018	1869.6	1764.4	0.0	104.8
	Solids	2022	10.7	5.8	0.0	0.8
		2021	8.9	3.9	0.0	1.2
		2020	14.6	4.1	0.0	6.1
		2019	13.3	4.2	0.0	7.0
		2018	14.5	5.5	0.0	7.6

[1] Air pollutant emissions are determined on the basis of the Environmental Monitoring and Industrial Control data: emissions are calculated as per the applicable methodologies using data on feedstock and equipment running time, through sampling and analysing flue gases, direct measurements with gas analysers, etc.

Total weight of waste by type and disposal method (mt)

GRI 306-3, 306-4, 306-5, SASB EM-MM-150a.8

Indicator			Total (mt)	Including			
				Polar Division	Kola MMC	GRK Bystrinskoye[1]	Medvezhy Ruchey
Waste-related activity	Waste generation	2022	166.3	13.9	7.3	85.1	59.1
		2021	156.4	13.7	7.5	85.5	49.0
		2020	145.2	14.8	8.1	87.5	34.8
		2019	36.4	15.6	7.9	–	12.4
		2018	30.7	15.7	8.3	–	6.6
	Waste input from third parties	2022	2.0	0.3	0.0	0.0	1.6
		2021	1.6	0.3	0.0	0.0	1.2
		2020	1.0	0.1	0.0	0.0	0.5
		2019	0.6	0.6	0.0	–	0.06
		2018	3.1	3.0	0.0	–	0.03
	In-house waste recovery	2022	30.0	8.1	4.0	4.4	13.4
		2021	23.7	6.1	4.0	3.9	9.7
		2020	34.3	10.5	6.1	12.1	5.2
		2019	22.8	14.3	4.2	–	4.2
		2018	21.6	15.8	2.5	–	3.4
	In-house waste treatment	2022	0.0004	0.0	0.0003	0.0	0.0
		2021	0.0001	0.0	0.0	0.0	0.0
		2020	0.004	0.0	0.002	0.0	0.0
		2019	0.003	0.0	0.001	–	0.0
		2018	0.006	0.0	0.006	–	0.0
	Waste transfer to third parties (for recovery or treatment)	2022	3.1	1.8	0.02	0.002	1.3
		2021	5.76	5.39	0.04	0.003	0.2
		2020	3.48	3.23	0.04	0.003	0.2
		2019	0.50	0.24	0.014	–	0.2
		2018	1.52	0.03	0.01	–	1.5

[1] In 2020, Bystrinsky GOK was included in the reporting perimeter after it reached its design capacity in the reporting period. Its significant waste figures are driven by the first stage of the deposit development, which involves large volumes of waste generation, mainly overburden, to support further operations.

Indicator		Total (mt)	Including			
			Polar Division	Kola MMC	GRK Bystrinskoye[1]	Medvezhy Ruchey
Waste transfer to third parties (for disposal)	2022	0.7	0.2	0.0	0.0	0.01
	2021	0.6	0.2	0.0	0.0	0.01
	2020	0.2	0.1	0.0	0.001	0.01
	2019	0.6	0.1	0.0	–	0.01
	2018	1.6	0.1	0.0	–	1.5
Waste landfilling at in-house waste disposal sites	2022[1]	0.74	0.72	0.02	0.01	0.0
	2021	127.5	6.0	3.4	77.3	40.4
	2020	111.2	2.3	2.7	76.33	29.9
	2019	6.0	3.2	2.8	–	8.0
	2018	11.0	3.7	5.8	–	0.0

Waste management in 2022 by hazard class and waste type (kt)

GRI 306-3, 306-4, 306-5, SASB EM-MM-150a.4, EM-MM-150a.5, EM-MM-150a.6, EM-MM-150a.7, EM-MM-150a.8

Indicator	Hazard class I	Hazard class II	Hazard class III	Hazard class IV	Hazard class V	Total	Including hazard classes I –IV waste (% of total)
Generation	0.02	0.04	5.7	1,529.4	164,742.7	166,277.8	0.9
Waste generation after processing	0.0	0.0	1.6	1.2	0.0	2.8	100
Waste input from third parties	0.0	0.0	0.9	127.6	1,841.4	1,969.9	6.5
In-house waste recovery, including	0.0	0.0	1.9	0.2	29,964.7	29,966.7	0.0
• direct recycling	0.0	0.0	0.0	0.0	17,812.7	17,812.7	0.0
• other recovery activities	0.0	0.0	1.9	0.1	12,152.0	12,154.0	0.02
In-house waste treatment	0.0	0.02	0.3	0.1	0.0	0.4	91.8
Waste transfer to third parties (for processing)	0.0	0.0	0.1	1.4	9.3	10.8	14.0
Waste transfer to third parties (for recovery)	0.0	0.0	3.3	18.8	3,078.1	3,100.1	0.7
Waste transfer to third parties (for treatment)	0.003	0.001	1.0	0.8	0.3	2.2	85.4
Waste transfer to third parties (for disposal)	0.0	0.0	0.0	311.9	391.5	703.4	44.3
Transfer to local municipal solid waste operator	0.0	0.0	0.0	15.3	1.3	16.6	92.1
Waste disposal at in-house waste disposal sites	0.0	0.0	0.0	477.3	263.0	740.3	64.5
Waste handed over for economic utilisation (recovered at intragroup facilities or by contractors)	0.0	0.0	5.2	19.0	33,042.7	33,066.9	0.1
Waste handled (treated or disposed at intragroup facilities or by contractors)	0.003	0.021	1.4	806.8	665.5	1,473.8	54.8

[1] In 2022, the calculation methodology was changed in line with GRI 306-5, with this indicator including landfilling only since 2022.

List of protected species identified in the Company's impact area

GRI 304-4

List of protected species identified in Norilsk and Energy Divisions' area of operation based on observations during the warm season (9 species in total)

Species	Red List of the International Union for Conservation of Nature (IUCN) (status)	Red Data Book of the Russian Federation (status)	Red Data Book of the Krasnoyarsk Territory (status)	Red Data Book of the Yamal-Nenets Autonomous Area (status)
Animal				
Whooper swan (Cygnus cygnus)	LC	No	5, a sparse species with groupings varying degrees of vulnerability and knowledge	No
White-tailed eagle (Haliaeetus albicilla)	LC	5, Least Concern	5, a rare widespread species	5, a sparse species with recovering populations.
Peregrine falcon (Falco peregrinus)	LC	3, vulnerable	3, a rare, widespread, easily vulnerable species	3, a rare vulnerable species
Gyrfalcon (Falco rusticolus)	LC	2, endangered	2, a rare, declining, vulnerable species	1, a rare endangered species with sharply declining numbers
Golden plover (Pluvialis apricaria)	LC	No[1]	Not listed	No
Black-throated loon (Gavia arctica)	LC	No[2]	Not listed[3]	No
Bean goose (Anser fabalis fabalis)	LC	2, endangered	2, a rare, declining subspecies	No
Bean goose (Anser fabalis middendorffii)	LC	2, vulnerable	2, a vulnerable declining subspecies	No
Plants				
Northern spikemoss (Seleginella selaginoides (L.) P. Beauv. ex Schrank & Mart.	No	No	2, a vulnerable declining species	No

[1] Only the subspecies Pluvialis apricaria apricaria (Linnaeus, 1758) inhabiting the European part of the Russian Federation, is included in the Red Data Book of the Russian Federation.
[2] Individual populations of the Central European population (Central Federal District, Novgorod, Pskov, Leningrad and Vologda regions in the Northwestern Federal District) and the population from the south of the Far East (Amur and Sakhalin regions, Khabarovsk and Primorye territories) are listed in the Red Data Book of the Russian Federation.
[3] Only the Sayan population, which inhabits the south of the Krasnoyarsk Territory, is listed in the Red Data Book of the Krasnoyarsk Territory.

List of rare and protected species identified in the area of Kola Division facilities (4 species in total)

Species	Red List of the International Union for Conservation of Nature (IUCN) (status)	Red Data Book of the Russian Federation (status)	Red Data Book of the Krasnoyarsk Territory (status)
Plants			
Heath spotted-orchid (Dactylorhiza maculata)	LC	No	Biosurveillance
Fragrant orchid (Gymnadenia conopsea)	LC	No	3
Animals			
Whooper swan (Cygnus cygnus)	LC	No	3, rare, near threatened
Golden eagle (Aquila chrysaetos)	LC	3, vulnerable	3, rare, near threatened

List of rare and protected species identified in the area of Trans-Baikal Division facilities (12 species in total)

Species	Red List of the International Union for Conservation of Nature (IUCN) (status)	Red Data Book of the Russian Federation (status)	Red Data Book of the Krasnoyarsk Territory (status)
Animals			
Falcated duck (Anas falcata)	NT	2, endangered	1
Greater spotted eagle (Aquila clanga)	VU	2, endangered	1
Demoiselle crane (Anthropoides virgo)	LC	2, vulnerable	1, CITES, Appendix II
Eurasian curlew (Numenius arquata)	EN	2, vulnerable	3
Yellow-breasted bunting (Emberiza aureola)	CR	2, critically endangered	2
Hen harrier (Circus syaneus)	No	No	2
Chinese bush warbler (Bradypterus taczanovskius)	No	No	4
Plants			
Slipper orchard (Cypripedium macranthos)	LC	3	3
Bugbane (Cimicifuga dahurica)	No	No	3
Dwarf daylily (Hemerocallis minor)	No	No	2
Lilium pumilum	No	No	2
Siberian rowan (Sorbus sibirica)	No	No	3

List of rare and protected species identified in the area as part of marine surveys in the NSR and at the port of Murmansk (13 species in total)

Species	Red Data Book of the Krasnoyarsk Territory	Red Data Book of the Murmansk Region	Red Data Book of the Russian Federation	Red List of the International Union for Conservation of Nature (IUCN)
Murmansk port				
Lesser black-backed gull (Larus fuscus)	No	No	5	LC
NSR (Dudinka–Murmansk)				
Birds				
Northern gannet (Sula bassana)	No	3	-	LC
Great cormorant (Phalacrocorax carbo)	No	3	-	LC
European shag (Phalacrocorax aristotelis)	No	3	3	LC
Barnacle goose (Branta leucopsis)	No	3	-	LC
Common eider (Somateria mollissima)	No	5	No	NT
Peregrine falcon (Falco peregrinus)	3	2	2	LC
Great skua (Catharacta skua)	No	3	-	LC
Common murre (Uria aalge)	No	-	3	LC
Horned lark (Eremophila alpestris)	No	3	-	LC
Mammals				
Harbour porpoise (Phocoena phocoena)	No	No	4	LC
Common minke whale (Balaenoptera acutorostrata)	No	No	No	LC
Large whale sp. humpback whale (Megaptera novaeangliae) or fin whale (Balaenoptera physalus)	No	No	1 (2)[1]	LC/VU

0 – probably extinct;
1 – endangered;
2 – decreasing number;
3 – rare;
4 – uncertain status;
5 – rehabilitated and rehabilitating;
6 — bio surveillance: species needing constant monitoring of their status.

[1] 1 – humpback whale (Megaptera novaeangliae) and 2 – northern fin whale (Balaenoptera physalus physalus).

Social performance

Benefits for employees of Polar Division

GRI 401-2

Benefits	Full-time work		Temporary work[2]		Seasonal work		Part-time work
	full-time work	part-time work	full-time work	part-time work	full-time work	part-time work	
Reimbursement of vacation travel expenses (incl. return fare)	+	+	+	+	+[1]	+[1]	–[3]
All kinds of financial aid	+	+	+	+	+	+	+
Health resort treatment and vacations	+	+	+	+	–	–	–
Vouchers for children's wellness recreation tours	+	+	+	+	–	–	–
Pension plans	+	+	+	+	–	–	–
Termination benefits (apart from those prescribed by the applicable laws)	+	+	+	+	+[4]	+[4]	+[4]

[1] According to the collective bargaining agreement and local regulations, such categories of employees are not excluded from benefits; however, in practice, travel expenses are not reimbursed since no vacation is granted to such employees.
[2] Work under a fixed-term employment contract.
[3] According to the local regulations such categories of employees are excluded from the reimbursement of expenses associated with relocation.
[4] According to the collective bargaining agreement and local regulations, such categories of employees are not excluded from the reimbursement of expenses associated with relocation, it is practically possible. No severance pay is provided by mutual agreement.

Benefits for employees of Kola MMC

Benefits	Full-time work		Temporary work[1]		Seasonal work[2]		Part-time work
	full-time work	part-time work	full-time work	part-time work	full-time work	part-time work	
Reimbursement of vacation travel expenses (incl. return fare)	+	+	+	+	–	–	–
All kinds of financial aid	+	+	+	+	–	–	–[3]
Health resort treatment and vacations	+	+	+	+	–	–	–[3]
Vouchers for children's wellness recreation tours	+	+	+	+	–	–	–[3]
Pension plans	+	+	+	+	–	–	–
Termination benefits (apart from those prescribed by the applicable laws)	+	+	+	+	–	–	–

[1] According to the collective bargaining agreement and local regulations, such categories of employees are not excluded from benefits; however, in practice, travel expenses are not reimbursed since no vacation is granted to such employees.
[2] According to the local regulations such categories of employees are excluded from the reimbursement of expenses associated with relocation.
[3] According to the collective bargaining agreement and local regulations, such categories of employees are not excluded from the reimbursement of expenses associated with relocation, it is practically possible. No severance pay is provided by mutual agreement.

Headcount by type of employment, gender and region (employees)

GRI 2-7, 2-8

Indicator	2022		
	Total	Male	Female
Total[1] headcount in Russia as at the latest reporting date	83,103	–	–
Contractors whose work is controlled by the Group, as at the latest reporting date	907	–	–
Employees as at the latest reporting date, including:	82,196	57,930	24,266
• in the Norilsk Industrial District	55,470	–	–
• in the Krasnoyarsk Territory (except for NID)	3,455	–	–
• in the Kola Peninsula Industrial District (Murmansk Region)	12,404	–	–
• in Moscow and other regions of Russia	8,006	–	–
• in the Trans-Baikal Territory	2,861	–	–
Employees working under fixed-term contracts (temporary and seasonal jobs) as at the latest reporting date, including:	4,497	2,755	1,742
• in the Norilsk Industrial District	2,709	–	–
• in the Krasnoyarsk Territory (except for NID)	116	–	–
• in the Kola Peninsula Industrial District (Murmansk Region)	180	–	–
• in Moscow and other regions of Russia	1,353	–	–
• in the Trans-Baikal Territory	139	–	–
Employees working under unlimited contracts (permanent jobs) as at the latest reporting date, including:	77,699	55,184	22,515
• in the Norilsk Industrial District	52,761	–	–
• in the Krasnoyarsk Territory (except for NID)	3,339	–	–
• in the Kola Peninsula Industrial District (Murmansk Region)	12,224	–	–
• in Moscow and other regions of Russia	6,653	–	–
• in the Trans-Baikal Territory	2,722	–	–
Full-time employees as at the latest reporting date, including:	81,404	57,405	23,999
• in the Norilsk Industrial District	54,932	–	–
• in the Krasnoyarsk Territory (except for NID)	3,422	–	–
• in the Kola Peninsula Industrial District (Murmansk Region)	12,359	–	–
• in Moscow and other regions of Russia	7,843	–	–
• in the Trans-Baikal Territory	2,848	–	–
Part-time employees as at the latest reporting date, including:	88	27	61
• in the Norilsk Industrial District	3	–	–
• in the Krasnoyarsk Territory (except for NID)	7	–	–
• in the Kola Peninsula Industrial District (Murmansk Region)	16	–	–
• in Moscow and other regions of Russia	58	–	–
• in the Trans-Baikal Territory	4	–	–

[1] The Company has no significant seasonal fluctuations in the number of contractors. The year-on-year decline in the number of contractors in 2022 mainly results from the hiring of additional FTEs.

New and terminated employments (by gender, age and region of operations) in 2022 (employees)

GRI 401-1

Indicator	2022
New hires, including:	20,726
• male	14,926
• female	5,800
• 29 y. o. and below	7,099
• 30 through 44 y. o.	9,485
• 45 y. o. and above	4,142
• in the Norilsk Industrial District	14,693
• in the Kola Peninsula Industrial District (Murmansk Region)	1,846
• in the Krasnoyarsk Territory (except for NID)	964
• in Moscow and other regions of Russia	2,656
• in the Trans-Baikal Territory	567
• Terminated employments, including:	14,281
• male	10,366
• female	3,915
• 29 y. o. and below	4,032
• 30 through 44 y. o.	5,546
• 45 y. o. and above	4,703
• in the Norilsk Industrial District	10,416
• in the Kola Peninsula Industrial District (Murmansk Region)	1,345
• in the Krasnoyarsk Territory (except for NID)	795
• in Moscow and other regions of Russia	1,308
• in the Trans-Baikal Territory	417

Employee outflow ratio by region in 2022 (%)

Indicator	2022
Kola Peninsula Industrial District (Murmansk Region)	10.8
Krasnoyarsk Territory (excluding NID)	23.0
Moscow and other regions of Russia	16.3
Norilsk Industrial District (NID)	18.8
Trans-Baikal Territory	14.6

Employee inflow ratio by region in 2022 (%)

Indicator	2022
Kola Peninsula Industrial District (Murmansk Region)	14.9
Krasnoyarsk Territory (excluding NID)	27.9
Moscow and other regions of Russia	32.8
Norilsk Industrial District (NID)	26.5
Trans-Baikal Territory	19.8

Employee outflow ratio by gender and age in 2022 (%)

Indicator	2022
Employee outflow, total	17.4
Employee outflow, male	17.9
Employee outflow, female	16.1
Employee outflow, 29 y. o. and below	32.3
Employee outflow, 30 through 44 y. o.	13.1
Employee outflow, 45 y. o. and above	17.1

Employee inflow ratio by gender and age in 2022 (%)

Indicator	2022
Employee inflow, total	25.2
Employee inflow, male	25.8
Employee inflow, female	23.9
Employee inflow, 29 y. o. and below	63.2
Employee inflow, 30 through 44 y. o.	25.3
Employee inflow, 45 y. o. and above	16.6

Number of employees on maternity and/or childcare leave and those back from maternity and/or childcare leave in 2022

GRI 401-3

Indicator	2022
Employees on maternity and/or childcare leave as at the year-end, including:	1,526
male	69
female	1,457
Employees back from maternity and/or childcare leave over the year, including:	592
male	39
female	553

Assessment of employees in Russia in 2022 (% of average headcount)

GRI 404-3

Indicator	Blue-collar employees	White-collar employees	Managers	Group total
Competency assessment				
Share of employees covered by competency assessment	2.6	31.9	69.9	19.4
Share of male employees covered by competency assessment	3.0	39.6	71.4	19.3
Share of female employees covered by competency assessment	1.2	25.2	65.3	19.7
KPI-based assessment				
Share of employees covered by KPI-based assessment	0.04	60.1	59.5	22.1
Share of male employees covered by KPI-based assessment	0.02	56.0	54.3	16.6
Share of female employees covered by KPI-based assessment	0.1	63.7	75.4	35.9

Key occupational injury and occupational disease rates by region and gender in 2022

GRI 403-9, 403-10

Indicator	Across Norilsk Nickel Group	Kola Peninsula Industrial District	Norilsk Industrial District	Krasnoyarsk Territory (excluding NID)	Trans-Baikal Territory	Moscow and other regions
Fatal workplace injuries, including:	4	2	2	0	0	0
• Men	3	2	1	0	0	0
• Women	1	0	1	0	0	0
FIFR	0.034	0.12	0.03	0	0	0
Lost time workplace injuries, including:	66	17	43	3	2	1
• Men	56	15	35	3	2	1
• Women	10	2	8	0	0	0
LTIFR	0.57	0.92	0.56	0.48	0.41	0.09
Severe occupational injury rate	0.11	0.17	0.13	0.00	0.00	0.00
Total recorded workplace injuries in accordance with the Russian labour laws (minor + severe + fatal), including:	70	19	45	3	2	1
• Men	59	17	36	3	2	1
• Women	11	2	9	0	0	0

Indicator	Across Norilsk Nickel Group	Kola Peninsula Industrial District	Norilsk Industrial District	Krasnoyarsk Territory (excluding NID)	Trans-Baikal Territory	Moscow and other regions
Severe injuries, including:	13	3	10	0	0	0
• Men	11	3	8	0	0	0
• Women	2	0	2	0	0	0
Occupational diseases, including:	174	52	121	1	0	0
• Men	156	34	121	1	0	0
• Women	18	18	0	0	0	0
Occupational disease rate	1.49	3.0	1.57	0.16	0	0
Lost day rate	20.75	38.09	18.24	35.85	14.78	2.46
Absentee rate[1]	3.57	4.64	3.68	3.55	1.62	1.30
Injury rate[2]	0.60	1.10	0.58	0.48	0.41	0.09
Hours worked, million	116.5	17.3	77.1	6.2	4.9	10.9
Total recorded workplace injuries among contractors' employees engaged at the Group's sites, in accordance with the Russian labour laws	46	4	39	0	3	0
• Men	43	3	37	0	3	0
• Women	3	1	2	0	0	0
Including fatalities:	4	2	2	0	0	0
• Men	4	2	2	0	0	0
• Women	0	0	0	0	0	0

[1] Number of hours worked and absentee rate for Moscow and other regions exclude Zapolyarye Health Resort.
[2] Per million hours worked.

Employees and contractors covered by the corporate Health and Safety Management System (HSMS)

GRI 403-8

Indicator	HSMS coverage	including HSMS that underwent an internal audit	including HSMS that underwent an external audit or another independent review
Headcount of the Group's business units covered by HSMS	79,907	77,857	30,885
Share of employees of the Group's business units covered by HSMS in the Group's total headcount, %	100	97	39
Headcount of contractors working at the Group's sites and covered by HSMS	12,782	9,886	1,182
Share of employees of contractors covered by HSMS in the total headcount of contractors	100	77	9

Fines and non-financial sanctions related to environmental and social impacts in 2022

GRI 2-27

Indicator	Total number of non-compliances with laws and/or regulations during the reporting period	Number of non-compliances with laws and/or regulations during the reporting period: cases resulting in fines	Number of non-compliances with laws and/or regulations during the reporting period: cases resulting in non-financial sanctions	Total number of fines for non-compliance with laws and/or regulations paid during the reporting period	including fines for non-compliance with laws and/or regulations that occurred during the reporting period	including fines for non-compliance with laws and/or regulations that occurred in previous reporting periods	Total amount of fines paid during the reporting period, RUB '000	including fines imposed in the current reporting period, RUB '000	including fines imposed in previous reporting periods, RUB '000
Total fines and non-financial sanctions	**605**	**292**	**310**	**315**	**272**	**43**	**32,023.2**	**26,973.2**	**5,050.0**
Environmental laws and regulations	84	40	41	58	38	20	5,106.5	4,036.5	1,070.0
Anti-competitive behaviour and breach of antitrust laws	0	0	0	0	0	0	0.0	0.0	0.0
Non-compliance with labour laws	13	3	10	3	3	0	90,0	90,0	0.0
Non-compliance with health and safety laws	27	18	9	18	17	1	1,500.0	1,370.0	130.0
Non-compliance with consumer protection laws, including with respect to product information and labelling	0	0	0	0	0	0	0.0	0.0	0.0
Non-compliance with marketing (advertising) regulations	0	0	0	0	0	0	0.0	0.0	0.0
Non-compliance with regulations on the impact of products and services on health and safety	0	0	0	0	0	0	0.0	0.0	0.0
Failure to timely comply with the improvement notices issued by regulatory authorities	41	23	18	25	22	3	7,440.1	6,960.1	480.0
Non-compliance with fire safety requirements	23	4	19	8	4	4	1,020.0	460.0	560.0
Breach of sanitary and epidemiological laws unrelated to product requirements	20	14	6	15	14	1	285.0	275.0	10.0
Breach of capital construction laws	58	25	33	26	22	4	4,205.0	3,565.0	640.0
Breach of industrial safety laws	179	65	114	62	56	6	10,840.0	9,030.0	1,810.0
Breach of transportation security laws	49	25	24	25	25	0	331.3	331.3	0.0
Other grounds	111	75	36	75	71	4	1,205.4	855.4	350.0

Nornickel's support for initiatives, standards, and participation in associations focused on sustainable development and corporate social responsibility

GRI 2-28

International	
UN initiatives	• UN Global Compact • Sustainable Development Goals of the UN 2030 Agenda
Associations, charters, alliances, and initiatives	• International Platinum Group Metals Association • Nickel Institute • Together for Sustainability (TFS) initiative • Responsible Sourcing Blockchain Network (RSBN) • European Battery Alliance (EBA)
Russian	
UN initiatives	• National Global Compact Network
Associations and charters	• National Association of International Information Security • Security Charter for Critical Industrial Facilities • Social Charter of the Russian Business • Anti-Corruption Charter of the Russian Business • Environmental Charter of the Krasnoyarsk Territory
Rating agencies, ESG agencies and indices	• RSPP Responsibility and Transparency index and Sustainable Development Vector index

Certification of Corporate Integrated Management System (CIMS)

Company	Compliance of the management system with international standards	External audits in 2022	Certification body	Audit results	Certification scope
MMC Norilsk Nickel	ISO 9001:2015, ISO 14001:2015, ISO 45001:2018	Second surveillance audit (November 2022)	Bureau Veritas Certification (BVC)	The Company showed successful implementation, maintenance, and constant improvement of the Corporate Integrated Management System, confirmed compliance with ISO 14001:2015 (sixth certification period), ISO 45001:2018 (first certification period)	Production, project management, storage, delivery, including by sea, and sales (nickel, copper, cobalt, precious metals, sulphur, selenium, tellurium)
Kola MMC	ISO 9001:2015, ISO 14001:2015, ISO 45001:2018	Recertification CIMS audit (April 2022)	Bureau Veritas Certification (BVC)	The audit showed that the stated scope of certification is consistent with the operations carried out by Kola MMC. Kola MMC's commitment to maintaining the performance of and upgrading the CIMS to improve its operation was confirmed	Kola MMC Ore mining and concentration, production of nickel, cobalt and their compounds, precious metal concentrates, sulphuric acid
Gipronickel Institute	ISO 9001:2015	Surveillance audits were completed at the Head Office of the Institute (St Petersburg) and the Norilsk branch of the Institute (Norilsk)	Societe Generale de Surveillance (SGS)	Gipronickel Institute was certified as compliant with ISO 9001:2015	R&D, design, engineering surveys, engineering and environmental activities, project management in mining, concentration and smelting, and relevant inspection methods; development of standards for non-ferrous metal industry products and their inspection methods; development of reference standards for the composition of non-ferrous metal industry products
Norilsk Nickel Harjavalta	ISO 9001:2015, ISO 14001:2015 ISO 45001:2018	Surveillance audit Recertification audit	Bureau Veritas Certification (BVC)	Norilsk Nickel Harjavalta maintains certification to ISO 9001:2015, ISO 14001:2015, ISO 45001:2018	Manufacturing of nickel and cobalt products

Awards and accolades

Responsible production

- Nornickel's Polar Transport Division won Aleksei Gastev contest for the largest lean manufacturing project in Russia and the CIS.
- Norilsk Nickel Harjavalta Oy was recognised as a responsible cobalt supplier by the Responsible Minerals Initiative.

Social

- The Nickelisation platform won silver in the Open Dialogue category of the EMBRAS 2022 Award and the WOW!HR Award in the Digital Solutions category.
- The COVID-19 rehabilitation treatment programme developed by the Zapolyarye Health Resort won the Top 100 Russian Goods national competition in the Service for the Public category.
- Nornickel won the First National Corporate Sports Award in the category Best Corporate Sports Development Programme in Hard-to-reach Territories (for a company with a headcount of more than 5,000 employees).
- Nornickel was ranked No. 1 in the Polar Index and was among the leaders in AK&M's social performance rating.
- Nornickel was ranked among Top 20 employers according to the survey of students on the engineering and business degree programmes, and was recognised the best metals and mining company by independent rating companies Future Today and Changellenge.
- Nornickel was listed among Russia's most attractive employers based on a survey conducted by the Russian Public Opinion Research Centre (VCIOM) and Anews.
- HeadHunter ranked Nornickel No. 1 in the Best Russian Employer category among metals and mining companies and 12th among all employers in the Russian Federation.
- Nornickel won RSPP's 2021 Leaders of Russian Business: Dynamics and Responsibility contest in the Contribution to Sustainable Development of Territories.

Environmental

- Nornickel made it to the Top 10 of the Environmental Transparency Rating of Metals and Mining Companies following an annual survey conducted by the World Wildlife Fund (WWF).
- The Federal Service for Supervision of Natural Resources awarded a commendation to Nornickel's teams that organised the arrival of doctors and transportation of injured red-listed predators – two polar bears.
- Nornickel was honoured in the Sustainable Cities and Communities category. Nornickel was awarded a prize in the Responsible Consumption and Production category for the development and implementation of its Environmental and Climate Change Strategy. Nornickel's project of baseline biodiversity research and defining the areas of the Company's environmental impact was recognised as the best practice in the Partnerships for Sustainable Development category.

Innovations

- Nornickel was ranked among Top 50 blockchain companies by Forbes for the second year in a row.
- A project to create a digital twin of Kola MMC's Monchegorsk site won the 6th All-Russian competition Team Leaders 2021/22 in the category Information Modelling of Existing Industrial Facilities.
- A system for autonomous and remote control of self-propelled diesel-fuelled equipment at Skalisty Mine won the Underground Mining Digitalisation category in the Mining Industry 4.0 contest at Mining World Russia. The system also won the Digital Project of the Year category at the 3rd Russian Summit and CDO/CDTO 2022 Awards, and was recognised the best in the Metallurgy and Continuous Production nomination at the Global CIO Awards.
- The Buildings and Structures Monitoring System project won a silver award in the MineDigital competition. The system also won the Best Digital Industrial Safety Solution category at the ComNews Awards 2022.

Sustainability reporting awards[1]

- Moscow Exchange's Annual Report Competition – nominee (gold winner) in the Best CSR and Sustainability Report category.
- RAEX Annual Report Competition – Nominee (2nd place) in the Best Sustainability Report category, Laureate (1st place) in the Best Sustainability Report Design category.
- Visionaries. Change Management award – 1st place in the Best Sustainability Report in Line with Non-Financial Reporting Standards category, the Best Corporate Governance Disclosure.
- LACP 2021 Spotlight Awards – silver award in the Best Sustainability Report category.

[1] Awards received in 2022 by Nornickel's Sustainability Report 2021 (unless otherwise stated).

List of abbreviations

AA1000 SES	AccountAbility 1000 Stakeholders Engagement Standard
AA1000AP	Accountability Principles
AI Use cases	Artificial Intelligence
AML / CFT / prevention of WMD proliferation	Anti-money laundering / counter-terrorism financing / prevention of proliferation of weapons of mass destruction
BVC	Bureau Veritas Certification
CAHRA	Conflict Affected and High Risk Area
CIMS	Corporate Integrated Management System
CIS	Commonwealth of Independent States
CMS AS	Control. Management. Security Automated System
CO_2 equivalent	Carbon dioxide equivalent
COP27	27th Conference of the Parties
COSO ERM	The Committee of Sponsoring Organisations of the Treadway Commission Enterprise Risk Management
CTL	Corporate Trust Line
Cu	Copper
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation
EIA	Environmental Impact Assessment
EMERCOM	Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters
ERP	Enterprise Resource Planning
ESG	Environmental, Social and Governance
FIFR	Fatal-Injury Frequency Rate
FOCL	Fibre optic communication lines
FPIC	Free, Prior and Informed Consent
FZ	Federal law
GDP	Gross domestic product
GHG Protocol	Greenhouse Gas Protocol
GISTM	Global Industry Standard on Tailings Management
GJ	Gigajoule
GOK	Mining and processing plant
GOST	State standard
GRC	Governance, Risk and Compliance
GRI	Global Reporting Initiative
Group	Nornickel Group
GWP	Global warming potential
HO	Head Office
HPP	Hydropower plant
CHP	Combined heat and power plant
ICE	Internal combustion engine
ICMM	International Council on Mining and Metal
IFRS	International Financial Reporting Standards
ILO	International Labour Organisation
IPCC	Intergovernmental Panel on Climate Change
IRMA	Initiative for Responsible Mining Assurance
ISMS	Information Security Management System
ISO	International Organisation for Standardisation
IT	Information technologies
IUCN	International Union for Conservation of Nature
JDDS	Join Due Diligence Standard
JSC	Joint-stock company
Kola MMC	Kola Mining and Metallurgical Company
KPI	Key performance indicators
Li-ion	Lithium-ion
LLC	Limited liability company
LTIFR	Lost Time Injury Frequency Rate
Ni	Nickel
NID	Norilsk Industrial District
NMP	Nadezhda Metallurgical Plant
NPO	Non-profit organisation
NSR	Northern Sea Route
NTEC	Norilsk-Taimyr Energy Company
OECD	Organisation for Economic Cooperation and Development
OHS	Occupational health and safety

OJSC	Open joint-stock company
OPEX	Operational expenditure
PD	Polar Division
Pd	Palladium
PGM	Platinum group metals
PJSC	Public joint-stock company
PPE	Personal protective equipment
Pt	Platinum
R&D	Research and development
RMI	Responsible Mining Index
RSBN	Responsible Sourcing Blockchain Network
RSPP	Russian Union of Industrialists and Entrepreneurs
SAP	System Analysis and Programme Development
SASB	Sustainability Accounting Standards Board
SDGs	UN Sustainable Development Goals
SO2	Sulphur oxide
SRM	Supplier relationship management
SSP	Shared Socio-Economic Pathways
TCFD	Task Force on Climate-related Financial Disclosures
TJ	Terajoule
TPP	Thermal power plant
UN	United Nations
UNCTAD	The United Nations Conference on Trade and Development
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNGP	United Nations Guiding Principles on Business and Human Rights
UNIDO	United Nations Industrial Development Organisation
USA	United States of America
VAT	Value added tax
VCIOM	Russian Public Opinion Research Centre
VHI	Voluntary health insurance
VPSHR	Voluntary Principles on Security and Human Rights
WRI	World Resources Institute

Glossary

Business unit of the Company's Head Office: department, division or any other unit within the organisational structure of the Company's Head Office approved by the President of MMC Norilsk Nickel and/or Senior Vice President for HR, Social Policy and Public Relations.

Certification: confirming compliance of qualitative characteristics with quality standard requirements.

Charitable activities: the Company's voluntary transfer of property, including cash, free works and services, and other support, to legal entities or individuals free of charge or on preferential terms.

Collective Bargaining Agreement: legal instrument governing social and labour relationships within a company or a sole trader business and signed by the representatives of employees and the employer.

Compliance: conducting business in compliance with the requirements of government authorities, applicable laws, regulations, guidelines and standards, including corporate policies and procedures, and ethical business practices.

Corporate culture: combination of standards, values and beliefs that determine the way a company addresses the matters of internal integration and external adaptation, guide and motivate daily behaviour of employees, while also transforming under its influence.

Corporate social responsibility (CSR): corporate behaviour philosophy and concept applied by the business community, companies and company representatives to their activities aimed at meeting stakeholder expectations and ensuring sustainable development.

Environmental protection and resource efficiency: corporate programmes aimed at minimising the Company's environmental impact.

Global Reporting Initiative (GRI): independent organisation developing sustainability reporting guidelines and standards.

Health and safety: occupational health and safety protection system embracing legal, social, economic, organisational, technical, sanitary, hygienic, healthcare, rehabilitation and other activities.

HR management policy: end-to-end integrated HR management system including all stages of employee-employer interaction, from recruitment to retirement and post-retirement support.

HR policy: set of standards, rules, regulations, concepts and goals determining the Company's HR management practices (personnel planning and record keeping, recruitment, adaptation, training and development, remuneration and incentivisation, performance assessment, social security, etc.) in line with its development strategy.

Human rights due diligence: set of measures that includes assessing impacts and risks in the value chain and conducting business responsibly in order to prevent and mitigate human rights abuses and hold businesses accountable for such abuses in which the businesses may be implicated through their own operations or relationships.

Incentivisation: tools and methods of boosting staff performance and productivity, motivating an employee or a group of employees to achieve corporate goals.

Local communities: population with Russian citizenship.

Mediation: method of alternative dispute resolution based on finding a mutually acceptable solution through the mediation of an impartial third party (independent expert).

Mission: statement of the Company's goals and objectives that distinguish it from its peers.

Norilsk Industrial District: a territory of municipalities that includes the city of Norilsk, the Taimyrsky Dolgano-Nenetsky Municipal District, and the Turukhansky District.

Nornickel (Norilsk Nickel) Group: for the purpose of the 2022 Sustainability Report, MMC Norilsk Nickel and the totality of operations forming Nornickel Group. Unless otherwise specified or required by the context, the terms "Company", "Group", "Nornickel" or "the Group companies" shall mean Nornickel Group.

Occupational disease: health disorder caused by a systematic and lasting exposure to workplace factors or a combination of production-specific working conditions.

Payroll budget: total payroll and social payments.

Personnel development: set of initiatives aimed at employee recruitment, adaptation, retention, and fully unlocking their professional and creative potential.

Risk: negative factor that might result from current processes or future events and have a potential impact on the Company's ability to achieve its goals.

Safe working conditions: working conditions where occupational exposure to harmful and/or hazardous production factors is prevented or controlled within the set limits.

Senior executives: President, Vice Presidents, heads of departments in case of the Head Office, and general directors and their deputies in case of entities located in the Norilsk Industrial District and on the Kola Peninsula.

Significant regions of operation – the regions of the Russian Federation where the Company's core production is concentrated and where its key assets by headcount (with the headcount of 1,000 people and above) are located: the Norilsk Industrial District, Krasnoyarsk Territory (except for the NID), Kola Peninsula Industrial District (Murmansk Region), Trans-Baikal Territory, Moscow, and other Russian regions.

Social package: set of benefits, compensations, additional payments, statutory and additional services provided to employees by the employer on top of their salary.

Social partnership: framework of relationships among employees (their representatives), employers (their representatives), and federal and local government authorities aimed at reconciling interests of employees and employers on matters pertaining to the regulation of labour relations and other directly associated matters.

Social programmes: voluntary corporate initiatives pertaining to employee development and motivation, creating favourable working conditions, promoting corporate culture and charity, and supporting local communities. These initiatives are implemented on a regular basis in line with the Company's business strategy, and focused on satisfying balanced requests of various stakeholders. From the management perspective, a social programme is a set of initiatives carefully planned in terms of resources, workforce and timeframes, and efficiently addressing the Company's internal or external social objectives.

Soil thawing: process whereby soil receives heat in a quantity sufficient for its natural negative temperature to increase to 0 °C and also for its disseminated ice to turn to liquid.

Southern Cluster: Nornickel's promising project to develop reserves in the northern part of the Norilsk-1 Deposit.

Stakeholder engagement: the Company's activities aimed at identifying stakeholders' expectations and concerns and their engagement in the decision-making process.

Stakeholders: individuals and legal entities or their groups having certain expectations about the Company or affected by its operations, influencing its managerial decisions while being themselves influenced by such decisions. Stakeholders include the Company's shareholders, investors, employees, suppliers, contractors, consumers, trade unions and other public organisations, federal and local authorities, mass media, residents of areas where the Company operates, and others.

Standard: regulation containing a set of requirements for activities and their products.

Sulphur Programme: Nornickel's largest and most important environmental initiative, providing for a phased reduction of sulphur dioxide emissions in the Norilsk Industrial District and on the Kola Peninsula, as well as the establishment of green production.

Sustainability Report (non-financial report): accessible, accurate and balanced description of the main aspects of the Company's activities and achievements pertaining to its values, goals and sustainable development policy, and addressing the matters of most importance for the key stakeholders. This is a way of publicly informing the shareholders, employees, partners and other stakeholders of the Company's progress towards its goals and objectives set out in its mission statement and strategic development plans with respect to financial and environmental stability, and social security.

Sustainable development: concept developed by the UN that acknowledges the role of business in ensuring sustainable development of the society; a concept of global community development taking into account interests of both present and future generations.

System Analysis and Programme Development Governance, Risk and Compliance (SAP GRC): a SAP-based information system combining three main components – corporate governance, risk management and compliance.

Tailing dump: facility encompassing dedicated structures and equipment designed to store radioactive, toxic or other tailings resulting from the concentration process.

Top management: President, Senior Vice Presidents, Vice Presidents, members of the Management Board and heads of departments of MMC Norilsk Nickel; directors of branches of MMC Norilsk Nickel and their deputies; sole executive bodies (directors, general directors) of the Group companies and their deputies.

Young talents: graduates of universities and colleges whose post-graduate experience does not exceed three years.

Stakeholder dialogue minutes

Nornickel has been historically engaged in dialogues with stakeholders while drafting sustainability reports. On 15 December 2022, the Company held a foresight dialogue themed "Who needs sustainable development?"[1].

Stakeholder foresight dialogue minutes:

Date and time: 15 December 2022, 10:00–12:00 am

Format: online conference

Programme:

Item 1. Report: "Nornickel's contribution to preserving ecosystem biodiversity across its footprint. Safety culture transformation"

Item 2. Report: "Nornickel's social strategy: goals, targets, and business priorities"

Item 3. Report: "Nornickel's progress in addressing climate change: relevance for the stakeholders"

Item 4. Report: "Results of surveys to identify material topics for Nornickel's 2022 Sustainability Report"

Item 5. Report: "Assessment of material topics disclosure in Nornickel's 2021 Sustainability Report"

[1] For more details, please see the press release on the Company's official website: https://www.nornickel.ru/news-and-media/press-releases-and-news/v-nornikele-rasskazali-o-prioritetakh-dlya-ustoychivogo-razvitiya/type=news. For more details on stakeholder proposals, please see the Definition of Material Topics and Stakeholder Recommendations sections.

ITEM 1. Report: "Nornickel's contribution to preserving ecosystem biodiversity across its footprint. Safety culture transformation"

SPEAKERS:

Stanislav Seleznev
Vice President for Ecology and Industrial Safety at MMC Norilsk Nickel

Stanislav Seleznev spoke about a positive shift in the Company's and employees' mindset towards environmental and industrial safety.

In 2022, a number of projects were implemented in the field of preserving biodiversity, including the Big Scientific Expedition conducted in collaboration with the Russian Academy of Sciences. Such large-scale expeditions focused on biodiversity assessment had never been conducted in modern Russia before. Nornickel began to implement an agreement with the Russian Federal Agency for Fishery and has already released a substantial amount of rare and valuable fish species into water bodies. Among the unplanned activities, Stanislav Seleznev highlighted the initiative to save polar bears, which was successful. He also emphasised that Nornickel will continue to support specially protected natural areas. Stanislav Seleznev reiterated the Company's intention to continue research in the field of biodiversity in the coming years and called on other companies to join in.

In his report, he touched upon the problem of atmospheric pollution resulting from the Company's activities. Between 2015 and 2021, Nornickel made extensive progress as part of its Sulphur Programme and achieved a 90% reduction in sulphur dioxide emissions in its Kola Division. Two more stages of the Sulphur Programme are yet to be implemented. The first stage of them, which focuses on the sulphur dioxide recovery, has been underway at Nadezhda Metallurgical Plant for several years now. Nornickel is making every effort to launch the sulphuric acid production leveraging sulphur dioxide recovery at Nadezhda Metallurgical Plant before the end of 2023 and expects to see the first results as early as 2024. The second stage of the programme (to be implemented at Copper Plant) will be postponed due to the lack of specific technological equipment caused by the external economic and political headwinds.

Nornickel has revamped its approach and mindset towards injury prevention as part of its industrial safety management. As a result, the ratio of accidents to fatalities changed in 2022, with the overall number of accidents almost doubling and the number of fatalities going down by more than two times. Stanislav Seleznev spoke about the start of a project to transform the Company's safety culture. In 2022, Nornickel launched a project to train corporate coaches, who will then train the Company's workers and engineering staff to identify and handle risks and will also help build interaction between workers and managers. Nornickel plans to continue developing the institute of corporate coaches and the safety culture, including through the use of initiatives leveraging technology.

Following Mr Seleznev's report, additional questions were discussed about the impact of the conducted environmental research on the transformation of the Company's environmental protection initiatives across its operations, the achievement of national sustainable development goals, and the implementation of the National Technology Initiative.

ITEM 2. Report: "Nornickel's social strategy: goals, targets, and business priorities"

SPEAKERS:

Larisa Zelkova,
Senior Vice President – HR, Social Policy and Public Relations at MMC Norilsk Nickel

Larisa Zelkova talked about Nornickel's new approach in the sphere of corporate social responsibly, reflected in the Company's Sustainable Social Development Strategy. This approach covers the Company's various projects and activities in areas that are socially significant and have public importance. Larisa Zelkova provided an overview of the most ambitious and impactful programmes that are part of Nornickel's wider Sustainable Social Development Strategy, such as the Norilsk renovation programme, corporate healthcare development, a special programme to provide infrastructure investment and support to indigenous peoples of the North, and a programme (named In Good Company) aimed at developing talents and creating opportunities for employee professional and personal development.

Following Ms Zelkova's report, additional questions were discussed on the Company's approach to evaluating the effectiveness of social investments, the sustainability of the achieved results, the tasks set in this area, and their achievement.

ITEM 3. Report: "Nornickel's progress in addressing climate change: relevance for the stakeholders"

SPEAKERS:

Vladimir Zhukov,
Vice President for Investor Relations and Sustainable Development at MMC Norilsk Nickel

Vladimir Zhukov highlighted the significance of the climate change topic for Nornickel and discussed the Company's intention to follow a climate change adaptation strategy with a focus on managing physical risks. In his report, he presented global climate trends such as the transition to green energy sources, electrification of transportation, and the inevitable increase in physical risks caused by climate change.

Vladimir Zhukov shared insights into the Company's approach to managing climate risks and provided an overview of Nornickel's key tools for adapting to the changing climate. In 2022, Nornickel partnered with the Obukhov Institute of Atmospheric Physics of the Russian Academy of Science to develop climate change scenarios and with experts from the Institute of Economic Forecasting of the Russian Academy of Sciences to develop long-term social and economic forecasts for the global economy. For the past two years, Nornickel has been developing monitoring systems for its buildings and structures built on permafrost, as part of its efforts to adapt to physical risks. The Company plans to equip about 1,500 facilities located in the Norilsk Industrial District with various sensors that will transmit real-time data about any unfavourable changes in the foundations.

Following Mr Zhukov's report, additional questions were discussed about the Company's initiatives aimed at achieving its climate change goals and tools for assessing climate risks.

ITEM 4. Report: "Results of surveys to identify material topics for Nornickel's 2022 Sustainability Report"

SPEAKERS:

Svetlana Ivchenko,
Head of the Sustainable Development Department of MMC Norilsk Nickel

Svetlana Ivchenko talked about the Company's process for preparing non-financial reporting. Her report covered the reporting standards used, industry-specific standards for the metals and mining sector, as well as significant changes in the GRI standards.

Svetlana Ivchenko also discussed the changes in the process for identifying material topics, emphasising that topics are still selected based on their importance to stakeholders and that the Company's Sustainability Report provides a detailed and structured disclosure of these topics. Based on the results of the 2022 survey, the number of environmental topics identified as material increased, while the number of material topics related to governance decreased.

In conclusion, Svetlana Ivchenko thanked all stakeholders for their engagement with the Company, participation in surveys, and contribution to enhancing sustainable development practices at Nornickel.

Following Ms Ivchenko's report, an additional question was discussed about the Company's plans for implementing new non-financial reporting standards of the IFRS Foundation and the International Sustainability Standards Board (ISSB).

ITEM 5. Report: "Assessment of material topics disclosure in Nornickel's 2021 Sustainability Report"

The participants were asked to rate the quality of the material topics disclosure in the Company's 2021 Sustainability Report on a ten-point scale.

The participants then cast their votes.

Stakeholder recommendations

Recommendations	Company response
From external stakeholders	
Provide more detailed information on the Company's decarbonisation plans. Disclose specific measures and/or technologies for achieving climate goals.	Done. Disclosed in the Climate Change and Energy Efficiency section and the climate report.
Provide more detailed information about the risks, particularly those that were not managed (and therefore neither prevented nor mitigated) during the reporting period.	Partially done. Disclosed in the relevant sections.
Disclose information about the planned scope of environmental protection initiatives to be implemented in 2023–2025, taking into account the current economic environment.	Done. Disclosed in the Environmental section.
Provide more detailed information about the best practices in waste management across Nornickel Group.	Partially done. Disclosed in the Tailings and Waste section.
Provide more information on the Company's divisions.	Partially done. Disclosed in the Strategic Vision section.
Disclose findings of the human rights assessment.	Done. Disclosed in the Human Rights section and the Human Rights Report.
Hold public hearings on the draft Report.	To be done in the next reports
Provide more detailed information about the management's contribution to health and safety.	To be done in the next reports
Conduct a quantitative and qualitative assessment of social investments in terms of their actual impact on stakeholders.	To be done in the next reports
Prepare an abridged version of the Report.	To be done in the next reports
Conduct independent assurance of the most significant sustainability KPIs.	To be done in the next reports
From internal stakeholders	
Provide more information about the opportunities created by the Company in its regions of operation.	Done. Disclosed in the Development of Local Communities section.
Ensure that sustainability metrics are aligned with the financial impact and published simultaneously with it.	To be done in the next reports
Anonymous	
Disclose information about the Company's activities aimed at supporting education in the regions of its operation.	Partially done. Disclosed in the Development of Local Communities section.
Disclose more information about the Company's programmes for young employees.	Done. Disclosed in the HR Management and Social Partnership section.
Provide more detailed information about the Company's activities aimed at supporting small and medium-sized businesses in the regions of its operation.	Partially done. Disclosed in the Development of Local Communities section.
Provide more detailed information about IT projects.	Done. Disclosed in the Research and Development, Digital Technologies section.

Opinion of the RSPP Council on Non-Financial Reporting

РСПП

Российский союз промышленников и предпринимателей

СВИДЕТЕЛЬСТВО

об общественном заверении корпоративного нефинансового отчета

Отчет об устойчивом развитии Группы компаний «Норникель» за 2022 год

прошел общественное заверение в Совете РСПП по нефинансовой отчетности

Развернутое заключение Совета РСПП об общественном заверении Отчета об устойчивом развитии Группы компаний «Норникель» за 2022 год направлено в Компанию, которая может публиковать его без каких-либо изменений и использовать как для внутрикорпоративных целей, так и в целях коммуникаций с заинтересованными сторонами.

Регистрационный номер 216.01.002.03.22

Президент РСПП А.Шохин

Москва, 2023

At the request of MMC Norilsk Nickel (the "Company, "Group", "Nornickel"), the Council on Non-Financial Reporting, ESG Indices and Sustainability Ratings of the Russian Union of Industrialists and Entrepreneurs (RSPP) (the "Council") reviewed Nornickel Group's 2022 Sustainability Report (the "Report").

The Company requested the RSPP to arrange for the public assurance of the Report, with the Council providing an opinion on the materiality and completeness of the Report's information about the Company's operations from the perspective of the Social Charter of the Russian Business. The Charter sets out key principles of responsible business conduct aligned with those of the UN Global Compact, as well as domestic and international CSR and sustainability standards and guidelines.

The public assurance process took place from 7 to 26 April 2023 based on the Report review and assessment by the Council, which issued this Opinion in accordance with its approved Procedure for Public Assurance of Corporate Non-Financial Reports. The Council members possess all the required competencies in corporate responsibility, sustainable development and non-financial reporting, comply with the ethical requirements for independence and impartiality, and provide their personal expert opinion rather than the opinion of organisations they represent.

The Report was assessed based on the below-listed criteria of information materiality and completeness.

Information is considered to be material if it reflects the company's efforts to implement the principles of responsible business conduct set out in the Social Charter of the Russian Business (see www.rspp.ru).

Completeness implies that the Company provides a comprehensive overview of its operations, including the underlying values and strategic benchmarks, governance systems and structures, stakeholder relationship framework, accomplishments, key results, and performance indicators.

The procedure for the public assurance of the Report factors in the Company's application of international reporting frameworks; this Opinion does not, however, purport to assess the Report's compliance with such international frameworks.

The Company is responsible for the information and statements provided in the Report. The accuracy of the Report's information is beyond the scope of the public assurance procedure.

This Opinion has been prepared for MMC Norilsk Nickel. The Company may use it for both corporate and stakeholder communication purposes by publishing the original version without any changes.

CONCLUSIONS

Based on the review of the Report and the information publicly available on the Company's official website, assessment by the Council, and a collective discussion of the results of the Report's independent assessment, the Council confirms as follows:

Nornickel Group's 2022 Sustainability Report covers the key areas of responsible business conduct in accordance with the principles set out in the Social Charter of the Russian Business, and provides sufficient information about the Company's operations in relation thereto.

The recommendations made by the Council following the public assurance of Nornickel Group's 2021 Report were addressed in the 2022 Report, with disclosures including information on ESG matters considered by the Board of Directors. The Company provided a more detailed description of its contribution to 2030 national development goals and national projects, while also presenting data on its efforts to restore and preserve biodiversity, social impact in the regions of operation and effects of external social programmes.

The Company's 2022 Report contains relevant information relating to the below-listed aspects of responsible business conduct:

Economic freedom and responsibility: The Report presents information on the Company's assets, production chain, key financial indicators, and measures introduced to minimise risks related to the geopolitical situation in 2022. There is an outlook on consumption of the Company's metals taking into account long-term global market trends supporting such outlook and climate change. The Company disclosed strategic priorities through 2030, key objectives and steps taken to achieve them in the reporting period, including programmes to upgrade production and energy infrastructure. Initiatives to ensure technological independence became a new and high-priority focus of Nornickel's digital development strategy. Nornickel participated in the Russian Government's experiment to launch a system for remote control over industrial safety. The Report features information on the OHS management system and its second surveillance audit conducted in the reporting year at Nornickel's divisions. The audit confirmed the system's conformance to the ISO 45001:2018 international standard. Nornickel also presents its corporate governance model and sustainability management system, including the related regulatory framework and responsibilities of units across their lines of operation. The Company shows its commitment to the UN Global Compact principles and discloses the key items of the ESG agenda reviewed by the Board of Directors and its committees in the reporting year. The Report contains a detailed map of risks, including those linked to sustainable development, their assessment and mitigation efforts. It also describes the Company's contribution towards the UN Sustainable Development Goals (SDGs) and national projects in health and healthcare, environmental protection, housing and urban environment, labour productivity and employment, research, digital economy and growth of SMEs, with relevant corporate projects and programmes serving to illustrate such contribution. The Report describes the Company's anti-corruption and compliance system, including a grievance mechanism, as well as additional procedures on pre-trial dispute resolution based on dialogue and mediation.

Business partnerships: The Report presents a stakeholder map, engagement mechanisms and key 2022 highlights while also listing corporate documents outlining the main principles, obligations and standards of stakeholder engagement.**Investors**. The Company keeps working to expand the pool of retail investors, among other things by holding webinars on the platforms of major retail brokers. **Consumers**. The Report covers the main focus areas of customer relations, including continuous monitoring of how the Company fulfils relevant contractual obligations. The Company presented the results of customer satisfaction survey in the reporting year, which were in line with the target. The Report's another topic is fostering cooperation with **government authorities** at all levels. Key highlights in this area include agreements with Rosprirodnadzor on preserving the environment and ensuring environmental safety, as well as cooperation agreements with local authorities in the Company's regions of operation. The reporting year saw Nornickel implement initiatives as part of the Norilsk renovation project. The Company shared information on its membership in various commissions, expert groups and task forces established by governmental bodies in association with the business community, thus supporting socially important projects. The Report also contains information on activities of business associations and sustainability and corporate responsibility initiatives that Nornickel supports.

Human rights: The Report has a section dedicated to human rights, and the Company's principles and management approaches in this domain formalised in the Human Rights Policy and other by-laws. To demonstrate how it protects social and labour rights of its employees, the Company described relevant development and social support programmes, measures to ensure decent working conditions, and social partnerships. There is also information on protecting the rights of vulnerable groups and the disabled, who can take advantage of specially arranged employment opportunities. Nornickel discloses how it respects the rights of indigenous peoples, especially their rights to land, resources, culture, spiritual traditions and history, as well as social rights related to improvement of living standards. The Company adopted the Indigenous Peoples' Rights Policy, which defines Nornickel's key commitments in this aspect. Nornickel states a zero tolerance approach to any violations of human rights across the supply chain. Nornickel built a five-stage target model for the human rights due diligence and took steps to implement it. As stated by the Company, relevant information is included in a standalone 2022 Human Rights Report. The Report contains details on the grievance procedure and updates to relevant mechanisms following discussions with stakeholders.

Environmental protection and climate change agenda: The Company shares with stakeholders its progress against the Environmental and Climate Change Strategy and activities related to key environmental aspects. In particular, Nornickel defines 2031 strategic goals, shows changes in key indicators of environmental impact, and describes innovations adopted to reduce the Company's footprint. Detailed information is available on the progress of the Sulphur Programme, including assessment of its social and economic effects. Nornickel presents its climate change policy and governance framework, approaches to managing relevant risks and assessment of carbon footprint based on three scenarios, while also articulating corporate goals and commitments to improve controls in climate risk management. The Report overviews the core elements of the roadmap to comply with the TCFD recommendations, and measures to reduce GHG and pollutant emissions, including the start of developing a new management tool – an internal carbon price. Disclosures also cover principles and risks in managing water resources, measures to monitor waste generation and processing, including tailings management, along with initiatives to ensure continuous power supply of production facilities in adverse climate conditions and improve energy efficiency. The Company's environmental management framework is also presented in the Report. The reporting year saw yet another surveillance audit, which confirmed compliance of Nornickel's corporate integrated environmental management system with ISO 14001:2015. Nornickel gives details on its comprehensive approach to developing energy infrastructure, modernisation plan through 2030, and the most essential projects to improve equipment reliability, boost energy efficiency, and increase production output. Energy generation and consumption indicators are also covered in the Report. The Company highlights its consistent efforts to provide the facilities with more economical and green energy sources. In particular, the total share of consumption of from renewable energy sources reached 51% in 2022. The Company analysed possible options for the development of in-house power generation facilities up to 2050 based on low-carbon technologies. As regards biodiversity, the Report specifies relevant goals, management approaches and impact as part of the value chain and facility life cycle. In the reporting year, the Company and experts from the Siberian Branch of the Russian Academy of Sciences organised the Big Scientific Expedition, a large-scale study into biodiversity in the regions of the Company's operation. Another step in this area was drafting a corporate standard on conserving and monitoring biodiversity in ecosystems. The Report dwells on Nornickel's cooperation with nature reserves to develop research and technology and support their social, volunteering and environmental awareness programmes. Environmental protection is also fostered through volunteering, which brings together the Company's employees, local communities and government authorities.

Contribution to the development of local communities: The Report highlights the Company's contribution to social, economic and environmental development and collaboration with local governments in the regions where it operates. A dedicated section contains information on key projects, spending on social initiatives and infrastructure, charity and sponsorship along with tax and non-tax payments to budgets of all levels, while also outlining the Company's employment policy across its key regions of operation. Nornickel discloses its efforts to integrate local businesses into its production chain, and presents projects to develop infrastructure across the regions of operation as part of public-private partnerships and agreements with local governments to create an accessible and comfortable urban environment and improve core types of transportation. The Report also provides a list of documents governing the Company's external social policy in the regions of operation, information on key 2022 programmes to help local communities (the World of New Opportunities charitable programme, Plant of Goodness corporate volunteering programme, and sports and fitness support initiatives) and examples of themed projects and contests along with feedback from participants. The Company presents focus areas of the Norilsk Development Agency, which carries out its activities in cooperation with local authorities, representatives of local communities, and Nornickel, and five work streams of the Monchegorsk Development Agency. Initiatives to promote tourism and attract visitors to the regions of Nornickel's presence, statistics for projects with the Russian Arctic residency status, and results of interactions with indigenous minorities are also available. The Report also states

that the Company completed the Free, Prior and Informed Consent (FPIC) process in the Russian Arctic with respect to the Tukhard relocation and development programme.

Final provisions

The information contained herein generally describes the Group's strategy, responsible business practices and results in sustainable development and corporate social responsibility as well as the supporting governance systems. The Report discloses in detail the results of the Company's efforts to help achieve the UN SDGs by 2030 and targets set out in Russia's national projects, as well as describes the Company's climate risk management and actions to minimise its environmental footprint. An impressive range of social, economic and environmental performance indicators is available to assess in full the Company's contribution to solving local challenges and ways of managing sustainability risks. When making a list of material topics, the Company took into account feedback from stakeholders.

The Report has been prepared in compliance with the GRI Standards (2021). Among others, the Report relies on the following documents: the UN Global Compact, SASB Metals & Mining Sustainability Accounting Standard (2021), UNCTAD Guidance on core indicators for entity reporting on contribution towards implementation of the UN Sustainable Development Goals, recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), RSPP Reference Performance Indicators, AccountAbility Standards AA1000SES (2015) and AA1000AP (2018).

The 2022 Report is the Company's nineteenth non-financial report, which demonstrates its determination to consistently develop reporting processes and enhance transparency. The Company uses various forms of independent assessment and confirmation of disclosed information (professional audit and public assurance). This reflects the Company's commitment to maintaining the high quality of disclosures.

RECOMMENDATIONS

While acknowledging the Report's strengths, the Council calls attention to some aspects of disclosures' materiality and completeness, which should be addressed in the future reporting cycles.

The Council notes that the recommendations made following the review of the previous reports remain valid and good for use going forward.

The Report highlights Nornickel's contribution to the Labour Productivity national project, but the indicator itself is not included in disclosures. However, this indicator is important as it is used, among other things, in an independent assessment of companies' performance based on the review of their public reports.

The Company and the Siberian Branch of the Russian Academy of Sciences organised the Big Scientific Expedition, a unique large-scale environmental study to assess biodiversity, with identified negative effects and problems included in the Report. Taking into account the relevance of this research, we recommend that future reports disclose decisions made and environmental initiatives held at Nornickel's sites on the basis of the expedition's results.

The Report describes some key strategic goals, including those related to the environment, which is a positive trend in Nornickel's disclosures. This approach should be applied more consistently and extensively in all priority sustainability areas when presenting progress against the strategy in the next reports by comparing planned and actual results.

Even though the Report presents in detail the Company's contribution to the development of local communities, it is advisable to add the following information: social effects and approaches to their evaluation, estimates regarding the sustainability of results in long-term projects, and assessments of changes in the living standards of local communities after solving certain social problems by means of these projects.

The Company gives details on its approach to building a responsible supply chain and increasing the efficiency and transparency of procurement. The next reporting cycles should feature specific examples of how the Company monitors compliance with its requirements on the part of suppliers and contractors and measures taken to ensure their reliability.

The Report shows the Company's considerable efforts invested in selecting material topics for the Report and presents a table illustrating reporting boundaries for these material topics. Given considerable differences in defining the boundaries for topics and assets, we believe it is reasonable for future reports to clarify in detail approaches to defining these boundaries, principles of selecting thresholds and the established ways of differentiation.

While presenting Nornickel's positions in international ESG ratings, reports should also provide more detailed disclosures on the Company's Russian ESG ratings and positions in indices, including those compiled by RSPP, ratings as regards disclosing information about contributions towards the UN SDGs, and other widely recognised mechanisms of assessing the Company's responsibility and sustainability.

The Report contains a lot of valuable information. Going forward, it would be a good practice to add its summary containing key messages and highlights with references to the report's respective sections for more details, in order to deliver information in an easily digestible way and improve navigation in reports.

The RSPP Council on Non-Financial Reporting, ESG Indices and Sustainability Ratings hereby takes a positive view of this Report, supports the Company's commitment to responsible business practices, notes consistency in developing the reporting process, and confirms that Nornickel Group's 2022 Sustainability Report has passed the public assurance procedure.

Chairman of the Council on Non-Financial Reporting, ESG Indices and Sustainability Ratings

Independent assurance report[1]

GRI 2-5

JSC "Kept"
Naberezhnaya Tower Complex, Block C
10 Presnenskaya Naberezhnaya
Moscow, Russia 123112
Telephone +7 (495) 937 4477
Fax +7 (495) 937 4499

kept

Independent Audit Firm's Limited Assurance Report on selected GRI indicators and selected TCFD disclosures in the Sustainability Report of PJSC "Mining and Metallurgical Company "Norilsk Nickel" for 2022

To the Shareholders of PJSC "Mining and Metallurgical Company "Norilsk Nickel"

Introduction

We were engaged by the Management of PJSC "Mining and Metallurgical Company "Norilsk Nickel" (hereinafter – "the Management") to report on GRI indicators[1] and TCFD disclosures[2] (as explained below) in the Sustainability Report of PJSC "Mining and Metallurgical Company "Norilsk Nickel" ("the Group") for 2022 (hereinafter – "the Report") in the form of a limited assurance conclusion on whether the Management's Statement that the GRI indicators and TCFD disclosures are prepared in accordance with the applicable criteria (presented in the section "Applicable criteria" of this report) and are free from misstatement is, in all material respects, fairly stated.

Our conclusion applies to the following indicators and information:

- the information disclosed in the Report in accordance with the recommendations of TCFD in the Appendix to the Report "Disclosures in accordance with the TCFD guidelines" and marked "Assured" in the column "Assured by the auditor" (hereinafter - "selected TCFD disclosures")
- GRI indicators included in the Report in the Appendix to the Report "GRI Content Index" and marked "Assured" in the column "Assured by the auditor" (hereinafter - "selected GRI indicators").

Our conclusion does not extend to any other indicators or information included or disclosed in the Report.

Management's Responsibilities

Management is responsible for the preparation and presentation of the Report that is free from material misstatement in accordance with the applicable criteria, and for the information contained therein.

This responsibility includes designing, implementing and maintaining internal control system relevant to the preparation of the Report that is free from material misstatement, whether due to fraud or error. It also includes: determining the Group's objectives in respect of sustainable development performance and reporting, including the identification of key stakeholders groups and their material issues; selecting applicable requirements of the Standards used to prepare the Report; preventing and detecting fraud; identifying and ensuring that the Group complies with the laws and regulations applicable to its activities; selecting and applying appropriate policies; making judgments and estimates that are reasonable in the circumstances; maintaining adequate records in relation to the information included in the Report; ensuring that staff involved in the preparation of the Report is properly trained; information systems are properly updated and that any changes in the reporting system encompass all key business units.

[1] Indicators prepared in accordance with Global Reporting Initiative (GRI) Sustainability Reporting Standards.
[2] Information disclosed in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD).

Engaging entity: PJSC "Mining and Metallurgical Company "Norilsk Nickel"
Registration number in the Unified State Register of Legal Entities: No. 1028400000298.

Audit firm JSC "Kept"
Principal registration number of the entry in the Register of Auditors and Audit Organizations No. 12006020351

kept

Our Responsibilities

Our responsibility is to perform procedures to obtain evidence in respect of the selected GRI indicators and selected TCFD disclosures in the Report prepared by Management and to report thereon in the form of a limited assurance conclusion regarding Management's Statement in respect of the selected GRI indicators and selected TCFD disclosures in the Report in accordance with applicable criteria based on the evidence obtained.

We conducted our engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* (ISAE 3000) issued by the International Auditing and Assurance Standards Board.

ISAE 3000 requires that we plan and perform our procedures to obtain a limited level of assurance about whether the Management's Statement that the selected GRI indicators and selected TCFD disclosures have been prepared in accordance with the applicable criteria (presented in the "Applicable Criteria" section of this report) and are free from misstatement, is fairly stated in all material respects.

Our Independence and Quality Management

We have complied with the independence and ethical requirements established by the Russian *Rules on Independence of Auditors and Audit Firms* and the Russian *Code of Professional Ethics for Auditors* and by the *International Code of Ethics for Professional Accountants (including International Independence Standards)* issued by the International Ethics Standards Board for Accountants, which are based on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

We apply the *International Standard on Quality Management* 1, which requires our organization to develop, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Procedures Performed

The procedures selected, and our determination of the nature, timing and extent of these procedures is a matter of our professional judgment, including the assessment of risk of material misstatement during the preparation of the Report, whether due to fraud or error, our understanding of the Group's activities, as well as other engagement circumstances.

In making these risk assessments, we considered internal control system relevant to the Management's preparation of the Report in order to design procedures that are appropriate in the circumstances, but not for the purposes of expressing a conclusion as to the effectiveness of the Group's internal control.

Our engagement also included: assessing the appropriateness of the information included in the Report regarding selected GRI indicators and selected TCFD disclosures, and the suitability of the criteria used by Management in preparation of the selected GRI indicators and selected TCFD disclosures in the Report in the circumstances of the engagement; evaluating the appropriateness of the methods, policies and procedures, used in the preparation of the selected GRI indicators and selected TCFD disclosures in the Report, and the reasonableness of estimates made by Management.

The procedures we developed based on the performed risk assessment are a combination of inspections, confirmations, recalculations, analytical procedures and inquiries.

Our procedures included, but were not limited to, the following:

– inspection of the processes used by PJSC "Mining and Metallurgical Company "Norilsk Nickel" to identify topics and issues material to the Group's key stakeholder groups, with the purpose of understanding such processes in the Group, as well as analysis of information from open sources on topics and issues material to key stakeholder groups of other organizations in the industry, with the purpose of determining the level of completeness of disclosure of such topics and issues in the Report;

[1] The auditor of the Sustainability Report was approved by the General Meeting of Shareholders as recommended by the Board of Directors.

- interviews with Management representatives and officers at the head office regarding the sustainable development strategy and policies regulating material issues in areas of importance for the Group, stage of implementation of such policies, and procedures for collecting information on sustainable development;
- interviews with employees of the head office responsible for providing the information for the Report;
- conducting procedures at the level of the following companies of the Group and a division:
  - Head office (PJSC "Mining and Metallurgical Company "Norilsk Nickel");
  - Polar division (PJSC "Mining and Metallurgical Company "Norilsk Nickel")
  - Medvezhy Ruchey LLC
  - JSC Kola MMC
  - GRK Bystrinskoye LLC
  - JSC NTEC

  which were selected based on risk analysis using qualitative and quantitative criteria;
- comparing the information presented in the Report regarding the selected GRI indicators and selected TCFD disclosures with data from other sources to determine its completeness, accuracy and consistency;
- assessing the completeness of qualitative and quantitative information on sustainable development against the criteria used;
- reading and analyzing information on sustainable development included in the Report to determine whether it is in line with our understanding and knowledge of the Group's sustainable development activity;
- recalculation of quantitative data and inspection of underlying documentation.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Applicable Criteria

The applicable criteria comprise relevant requirements and recommendations on the methodology for preparing the Report, as well as necessary reference information contained in the following documents:

- Recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD)[3];
- Global Reporting Initiative Sustainability Reporting Standards (GRI)[4]

Management's Statement

Management states that the selected GRI indicators and selected TCFD disclosures in the Report are prepared in accordance with the criteria used (presented in the section "Applicable criteria" of this assurance report) and are free from misstatement.

Inherent Limitations

Greenhouse Gas quantification is subject to inherent uncertainty because of the incomplete scientific knowledge used to determine emission factors of different gases.

[3] https://www.fsb-tcfd.org/recommendations/
[4] https://www.globalreporting.org/standards

Conclusion

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this report. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Based on the procedures performed, nothing has come to our attention that causes us to believe that Management's Statement that the selected GRI indicators and selected TCFD disclosures in the Report are prepared in accordance with the applicable criteria (presented in the section " Applicable Criteria" of this report) and are free from misstatement, is not, in all material respects, fairly stated.

Velichko N.N.

Director, JSC "Kept"

Moscow, Russia

23 May 2023

Disclaimer

The information contained herein relies on the data available to MMC Norilsk Nickel as at the date of this Sustainability Report. After this Sustainability Report was prepared, the Company's operations as well as forecasts and overview of the current situation presented in the Sustainability Report may have been affected by external or other factors, including the escalation of the geopolitical conflict in Ukraine, sanctions imposed by the United States, 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, the COVID-19 pandemic and other factors beyond the Company's control. In particular, the United States, 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 Sustainability Report discloses the Company's short-, medium-, and long-term goals and plans. All plans and intentions outlined in this Sustainability Report are provisional and subject, among other things, to a number of economic, political and legal factors, including the factors mentioned above, beyond Nornickel'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 Sustainability Report. MMC Norilsk Nickel hereby disclaims any liability for any loss resulting from the use of this Sustainability Report, and assumes no obligation to update any forward-looking statements contained herein.

Information about the 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 operating 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.

This Sustainability Report is not part of a securities advertisement, an offer or invitation to sell, issue or offer the right to sell or subscribe for MMC Norilsk Nickel shares and other securities.

In line with global best practices, the Sustainability Report is also prepared in the XBRL format. Considering that report disclosures in this format are voluntary, the Company does not assume any obligation to comply with any legal requirements for the disclosure of its statements in this format, including obligations to comply with the requirements of UK legislation.

Any and all logos and trademarks used in this Sustainability Report are the property of their immediate owners, and the use thereof in this Sustainability Report should not be construed as a promotion or advertisement for those owners' goods or services.

Contacts

GRI 2-3

Head Office

15, 1st Krasnogvardeysky Drive, Moscow, 123100, Russia

Phone: +7 (495) 787-76-67

Email: gmk@nornik.ru

Sustainable Development Department

Svetlana Ivchenko
Head of Department
Phone: +7 (495) 797-82-50

Email: social_report@nornik.ru

Nornickel on social media

vk.com/nornickel_official

youtube.com/user/NornikOfficial

Norilsk through the eyes of its residents

www.norilskfilm.com

Corporate website

https://www.nornickel.com/