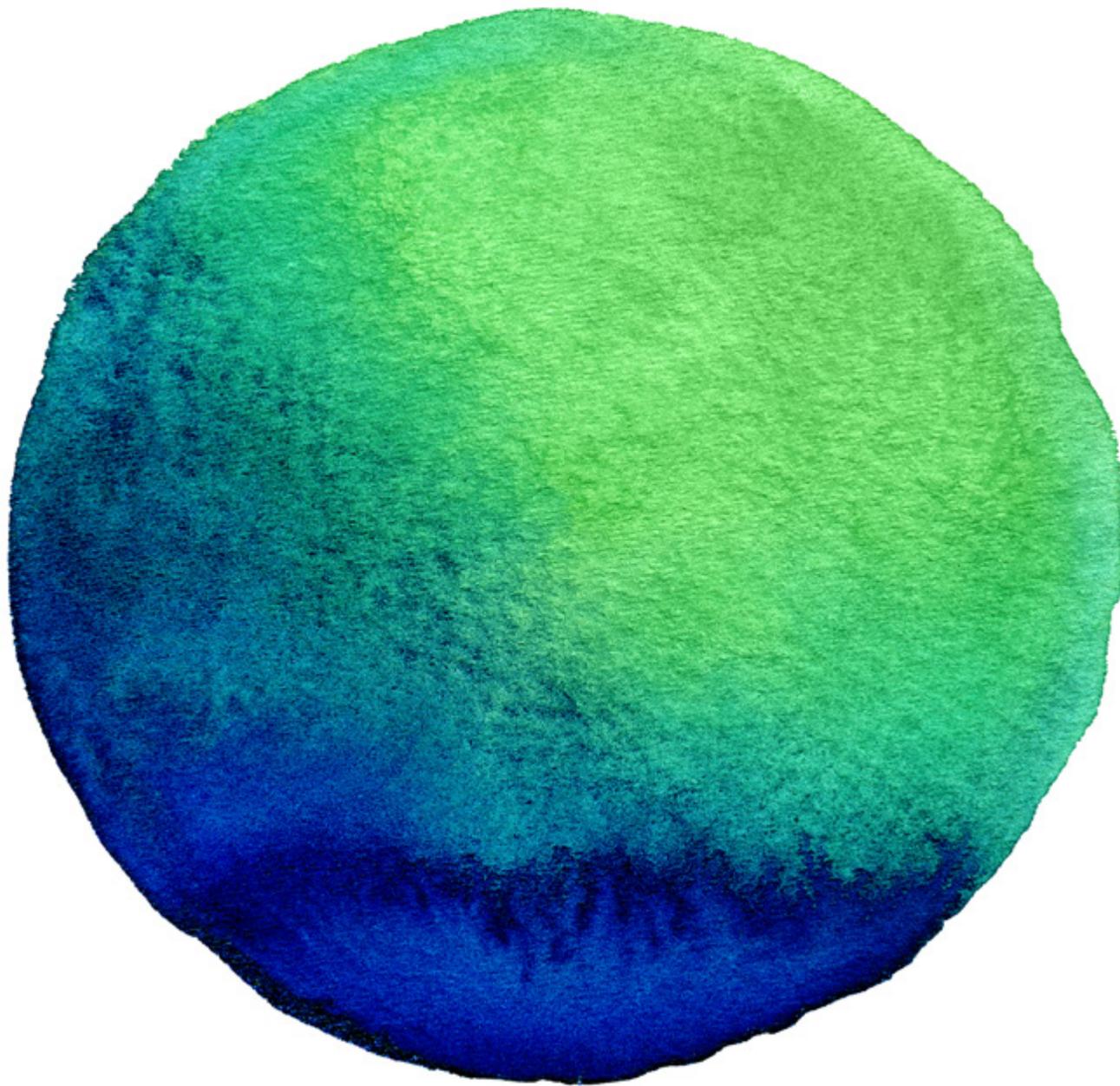


STAYING SUSTAINABLE



2021 SUSTAINABILITY
REPORT



APPROVED
by the Board of Directors
of PJSC MMC Norilsk Nickel
Minutes No. GMK/15-pr-sd
dated 30 May 2022

APPROVED
by the Management Board
of PJSC MMC Norilsk Nickel
Minutes No. GMK/3-pr-p
dated 22 April 2022

APPROVED
by the Sustainable Development
and Climate Change Committee
of MMC Norilsk Nickel's Board of Directors,
Minutes No. GMK/2
dated 20 May 2022

ABOUT THE REPORT

● GRI 102–50

The 2021 Sustainability Report of Norinickel Group (the "Report") is the eighteenth public non-financial report prepared by MMC Norilsk Nickel and addressed to a wide range of stakeholders.

● GRI 102–54

This Report has been prepared in accordance with the GRI Standards: Comprehensive option, constitutes a UN Global Compact communication on progress, and discloses the Company's contribution to the UN Sustainable Development Goals up to 2030.

● GRI 102–45

Among others, the Report relies on the following documents: GRI Mining and Metals Sector Supplement, UNCTAD Guidance on core indicators for entity reporting on contribution towards implementation of the UN Sustainable Development Goals, SASB Metals & Mining Sustainability Accounting Standard, ESG metrics recommended by the World Economic Forum (WEF), Accountability Standards AA1000SES (2015) and AA1000AP (2018), Reference Performance Indicators of the Russian Union of Industrialists and Entrepreneurs (RSPP), and recommendations of various other initiatives. In addition, the Report provides information on all disclosures specified in the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), with the relevant references made in the TCFD Disclosures appendix.

● GRI 102–48, 102–49

The Report covers operations of the Norilsk Nickel Group companies. For the purposes of this Report, Norilsk Nickel 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. Quantitative indicators for certain areas of sustainable development pertain to the Group's specific operations in accordance with the Report Boundaries appendix.

During preparation of the Report, there were no significant changes in the report boundaries compared to the 2020 Report. The Report contains updates of the data for previous years, which is indicated in the text.

● GRI 102–46

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. The list of material topics has been updated to reflect the needs of stakeholders and keep pace with the latest trends in reporting. For full details about material topics and the procedure for defining them, please see the Definition of Material Topics appendix.

● GRI 102–56

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.

● GRI 102–32

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 ESG highlights:
<https://www.nornickel.com/sustainability/esg-highlights/>
- Nornickel's annual reports:
<https://www.nornickel.com/investors/reports-and-results/>



2021 SUSTAINABILITY REPORT



ENVIRONMENTAL

SOCIAL

GOVERNANCE

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Sustainability report 2021

MMC Norilsk Nickel



Interactive version

To access the interactive version of theReport, scan the QR code using your mobile device.

The 2021 Sustainability Report of Norinickel Group has been prepared in accordance with the GRI Standards, constitutes a UN Global Compact communication on progress, and discloses the Company's contribution to the UN Sustainable Development Goals up to 2030.

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Norinickel supports UN Global Compact and UN Sustainable Development Goals



STATEMENT OF THE PRESIDENT AND CHAIRMAN OF THE MANAGEMENT BOARD

● GRI 102-14



Dear shareholders, investors, consumers, and colleagues,

I present to you Nornickel's 2021 Sustainability Report.

The facts it contains clearly demonstrate our Company's commitment to principles and goals of sustainable development, including the UN Global Compact, which Nornickel signed in 2016.

Last year, our Board of Directors adopted the Environmental and Climate Change Strategy. It follows a close collaboration with stakeholders and a benchmarking audit based on core environmental objectives. The Strategy covers six key areas of environmental impact: air, water, tailings and waste, land, biodiversity, and climate change.

Nornickel updated its corporate governance structure responsible for the environment so as to improve risk management processes and make sure the Strategy is successfully implemented. To that end, the Company put in place corporate functions responsible for sustainable development, with long-term targets approved for all focus areas of the environmental strategy and annual and long-term KPIs now updated.

We continue to prioritise occupational health and safety. Zero workplace fatalities are our key goal in this area. The Company has analysed all incidents that took place in 2021, including the incident at Norilsk Concentrator. At facilities deemed to be exposed to safety risks, repairs have started. Expenses on capitalised overhauls, industrial safety and fixed assets upgrade at the Group companies grew by more than 40% and surpassed USD 800 mln. Nornickel engages all of its employees into the transformation process and creation of a safety culture.

The Sulphur Programme is now in its active stage as Nornickel's largest and crucial environmental initiative that will see sulphur dioxide emissions in Norilsk reduced by 90% in five years. In 2021, emissions at Norilsk Division went down by 250 kt of SO₂, with total sulphur dioxide emissions at Kola Division declining by 90% (vs the 2015 base).

Nornickel is also involved in a pilot project introducing an automatic air quality monitoring system in Russia. The initiative will be part of the Environment national project and will expand nationwide going forward. Based on the data obtained as part of the project, appropriate regulations will be drafted and approved.

Last year, the Company ran a comprehensive programme to eliminate the damage caused by the environmental incident at HPP-3 in Norilsk. Extensive work was carried out to rehabilitate disturbed and contaminated land and restore biodiversity in the territory. All the efforts involve strong engagement of the scientific community, with yet another stage of the Great Norilsk Expedition completed in 2021. Comprehensive research undertaken by the Siberian Branch of the Russian Academy of Sciences will help forecast and plan further clean-up activities while also serving as a basis to develop recommendations for sustainable business practices in the Russian Arctic.

Also in Norilsk, the Company launched a large-scale programme to clean up areas contaminated with industrial and construction waste. Nornickel's total investment in the programme over the next ten years stands at RUB 40 bn. The clean-up programme will cover the entire Norilsk and will include demolition of old abandoned buildings and structures, pipelines, networks and grids, as well as removal of scrap metal accumulated near industrial facilities.

The climate change agenda calls for controls to be put in place to monitor relevant risks, above all rising temperatures in the Arctic. Nornickel is deploying a system in Norilsk to monitor permafrost under buildings, structures, and facilities of both the Company and the city, which will make it possible to forecast climatic and geocryological risks and develop measures to mitigate them.

The Company continues to take an active part in the social, cultural, and economic development of its regions of operation through the World of New Opportunities programme, as well as development agencies in Norilsk, Monchegorsk, and Pechengsky District. These agencies promote, among other things, the development of local small and medium-sized businesses, tourism, modern sports infrastructure, transportation systems, and telecommunications infrastructure, and encourage public initiatives in the region.

Sustainable development is becoming increasingly ingrained in the Company's corporate culture. This is evidenced by the active participation of over 3,500 Nornickel employees in the Plant of Goodness corporate volunteer programme.

Responsible production is Nornickel's major commitment as one of the world's largest industrial groups. One of our top priorities is to keep our greenhouse gas emissions at the lowest level in the metals and mining industry while at the same time increasing the output of metals that are essential for the global transition to a green economy.

In 2021, Nornickel made the first batch of 5 kt of carbon-neutral nickel. This was enabled by carbon offsets aimed at reducing greenhouse gas (CO₂) emissions across the value chain, from ore mining to concentration and refining.

Development of the territories where we operate is among our priority focus areas. By its decree, the Russian Government approved the Comprehensive Plan for Social and Economic Development of Norilsk, which is part of an agreement on cooperation among the Ministry for the Development of the Russian Far East and Arctic, Krasnoyarsk Territory, the city of Norilsk, and Nornickel. The plan contains a variety of initiatives aimed at improving the well-being of the city's community. In line with the document, RUB 120 bn will be disbursed until 2035, with RUB 81.3 bn of that amount to be provided by Nornickel.

Nornickel is working closely with organisations representing the indigenous peoples of the North who live in territories of operation. We make sure that any decisions we take are fully transparent and joint projects are as effective as possible. Nornickel was the first company to launch the Free, Prior and Informed Consent (FPIC) process in the Russian Arctic, enabling indigenous peoples of Taimyr to choose a relocation option for Tukhard residents. This procedure helps guarantee the protection of rights of indigenous minorities to independently define their political, social, economic, and cultural priorities.

In 2021, Nornickel increased its support for indigenous peoples of Taimyr by RUB 100 mln, in addition to the financing approved for a five-year programme focusing on the support of traditional indigenous activities and protection of native habitats. Under the programme, a total of RUB 2 bn are to be allocated.

Nornickel continues to set high standards of social guarantees and salaries and wages in the industry. Last year, MMC Norilsk Nickel signed an updated collective bargaining agreement for 2022–2024. As a responsible employer, we provide our people with support that is considerably above the statutory minimum. To enhance social protection of our employees, we stepped up targeted support for certain categories.

A major milestone was the launch of the first corporate healthcare centre in Norilsk, with four more to open their doors in the Norilsk Industrial District and Dudinka over the next few years.

As part of our long-term sustainability strategy, we are committed to green production and support for a global energy transition and shift to green transport. The strategy involves the modernisation of production assets using best available technologies and clean tech solutions, maintaining a low carbon footprint among global diversified metals and mining players, and improving energy efficiency and long-term resilience to climate risks. By delivering against these ambitious targets, we will be able to perform strongly across all our areas of operation while taking leadership in sustainable development.

Nornickel's strategic goals are inseparable from the sustainability agenda. This topic becomes even more relevant for our Company. Our key priorities are as follows: resource and energy efficiency, circular economy; social and labour matters; quality of corporate governance; environmental and social programmes in the regions of operations.

For us, ESG is a business philosophy, a mindset of management teams, a corporate culture and a long-term value platform.



Vladimir Potanin

President and Chairman of MMC Norilsk Nickel's Management Board

OUR 2021 HIGHLIGHTS

Environment¹

Climate change

10.3

MT OF CO₂ EQUIVALENT
GHG emissions
(Scope 1 and 2)
(up 6.3% y-o-y)

7.82

T OF CO₂ EQUIVALENT /
RUB MLN
GHG emission intensity
(down 10% y-o-y)

47%

of electricity consumed
came from renewable
sources
(up 1 p. p. y-o-y)

Air

1.65

MT
air pollutant emissions
(down 16% y-o-y)

1.25

T / RUB MLN
air pollution intensity
(down 29% y-o-y)

The Sulphur Programme
resulted in a 90%
reduction in sulphur
dioxide emissions
at Kola Division
at year-end 2021
compared to 2015

Water use

351.2

MCM
water withdrawal²
(down 6% y-o-y)

84.6%

share of water reused and
recycled
(down 1.8 p. p. Y-o-y)

193.8

MCM
Wastewater discharge
(down 4% y-o-y)

147

M³ / RUB MLN
wastewater discharge
intensity
(down 19% y-o-y)

Waste

156

MT
waste generation
(up 7.6% y-o-y)

99%

share of non-hazardous
class 5 waste
(flat y-o-y)

118.8

T / RUB MLN
waste generation intensity
(down 7.7% y-o-y)

73

KT
industrial waste
collected in the Norilsk
Industrial District

¹ Emission intensity per RUB 1 mln of consolidated revenue.

² Excluding water reused from NTEC networks.

Labour

Health and safety

0.38

LTIFR
(VS 0.20 in 2020)

11

fatalities
(VS 9 in 2020)

177

'000 RUB
health and safety expenses
per employee
(up 30% y-o-y)

Employment

73.6

K PEOPLE
Nornickel group's average
headcount
(up 1.7% y-o-y)

72%

male

28%

female

94%

Nornickel employees covered by
collective bargaining agreements
(up 0.3 p. p. y-o-y)

Payroll and social benefits

145.1

'000 RUB
average monthly salary
at Nornickel
(up 10.1% y-o-y)

11.34

average monthly salary
at Nornickel to Russia's statutory
minimum wage ratio
(up 4.4% y-o-y)

143.3

'000 RUB
average annual benefit package for
Nornickel Group's employees
(up 44% y-o-y)

Development of regions and local communities

44.3

RUB BN³
spent on social programmes,
charity, and social infrastructure
(down 5.4% y-o-y)

421.5

RUB MLN
compensations and support for
indigenous northern minorities
(up 5x y-o-y)

287.4

RUB BN
taxes paid to budgets
of various levels
(up 63.3% y-o-y)

³ Excluding contingent liabilities in relation to future social projects accrued in 2021.

ABOUT NORNICKEL GROUP

Overview

● GRI 102-1, 102-2

Nornickel is a leader of the Russian metals and mining industry, ranks No. 1 among the world's producers of refined nickel and high-grade palladium, and is one of the major producers of platinum, copper, and cobalt globally.

Nornickel's core operations include geological exploration, production, and sales of non-ferrous and precious metals, as well as research and development.

Nornickel's customers include over 350 companies in 36 countries across the world.

Nornickel's products

Nornickel is the largest industrial player in the Russian Arctic and one of the most attractive employers, with more than 60,000 employees permanently working beyond the Arctic Circle.

Ni Nickel	Pd Palladium	Pt Platinum	Co Cobalt
Cu Copper	Rh Rhodium	Au Gold	Ag Silver
Ir Iridium	S Sulphur	Te Tellurium	Se Selenium
Ru Ruthenium			

Position in the industry¹

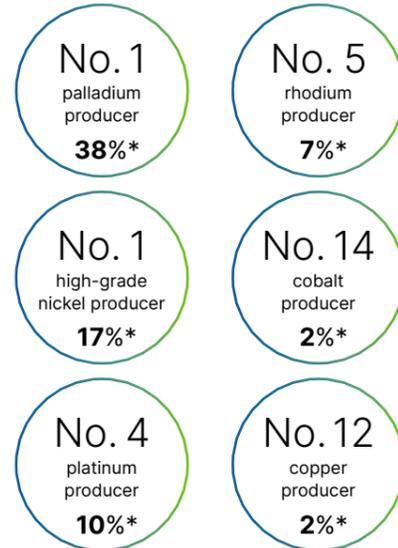
● GRI 102-7

36 COUNTRIES

Receive supplies of Nornickel's products

743 MT

Proven and probable reserves



¹ For palladium, nickel, platinum, and rhodium markets — in terms of refined metals production (including tolling arrangements), for copper and cobalt markets — in terms of mining.

* Market share.

Nornickel's contribution to the national economy in 2021

● GRI 102-7

1.0%

Nornickel's share in the national GDP

3.5%

Nornickel's share in Russia's industrial output

12.1%

Nornickel's share in Russia's metals production

3.3%

Nornickel's share in Russia's exports

Assets

● GRI 102-4, 102-7

As at the end of 2021, Nornickel Group comprises over 80 companies, with its production assets located in two countries — Russia and Finland.²

² In early 2021, the Company also held a 50% stake in Nkomati, a nickel mine in South Africa developed jointly with African Rainbow Minerals (ARM). In February 2021, Nkomati was shut down due to the end of the mine lifecycle following an agreement with ARM.

The Company's key assets are located in Russia and include:



Polar Division of MMC Norilsk Nickel

("Polar Division") which is engaged in ore mining and processing in the Talnakh Cluster located in the Norilsk Industrial District of the Krasnoyarsk Territory. It includes the Oktyabrskoye and Talnakhskoye copper-nickel deposits of rich, cupriferous, and disseminated ores.



GRK Bystrinskoye LLC

("GRK Bystrinskoye" or "Bystrinsky GOK") which refines and processes ores from the Bystrinskoye Deposit located in the Trans-Baikal Territory. Bystrinsky GOK is one of the Company's latest assets producing copper, iron ore, and gold concentrates.



Medvezhy Ruchey LLC

is engaged in ore mining and processing in the Norilsk Ore Cluster located in the Norilsk Industrial District of the Krasnoyarsk Territory.



Kola Mining and Metallurgical Company

("Kola MMC") which produces copper-nickel sulphide disseminated ores containing nickel, copper, and other valuable components. This business unit is a leading industrial facility in the Murmansk Region producing copper and nickel cathodes, carbonyl nickel, electrolytic cobalt, and cobalt concentrate.

In Finland, the Group operates **Norilsk Nickel Harjavalta** processing Nornickel's Russian and third parties' feedstock.

Nornickel has energy assets operating in the Norilsk Industrial District and ensuring the generation and supply of electricity and heat to both the Group's production facilities and other local consumers. It also operates gas production and gas transportation assets, which ensure natural gas supplies, and a fuel facility, which is used to deliver light and dark petroleum products to the Far North, covering important commercial and social functions, as well as to export gas condensate to European consumers.

The Group also comprises ancillary and support assets such as **Gipronickel Institute**, logistics companies, and a network of representative and sales offices in China, Hong Kong, the USA, and Switzerland.

All of Nornickel's assets and projects have a vertically integrated structure with unique mineral resource base.

Core companies and business units

Production

Polar Division
 Medvezhy Ruchey
 Kola MMC
 GRK Bystrinskoye

Exploration

NN Technical Services
 GRK Vostochnaya
 GRK Severnaya

Research and development

Gipronickel Institute

Fuel and energy

Norilskgazprom
 Norilsktransgaz
 Norilsk-Taimyr Energy Company
 Norilskenergo (MMC Norilsk Nickel's branch)
 Arctic-Energo
 Taimyr Fuel Company

Transport and logistics

Polar Transport Division
 Arkhangelsk Transport Division
 Murmansk Transport Division
 Krasnoyarsk Transport Division
 Bystrinsky Transport Division
 NordStar Airlines

Support functions

Yenisey River Shipping Company
 Norilsk Airport
 Krasnoyarsk River Port
 Norilsk Avia
 Nornickel-YRSC
 Norilsk-TAVS
 Lesosibirsk Port

Pechengastroy
 Kolabyt
 Norilsk Production Support Complex
 Norilsknickelremont
 Polar Construction Company
 Nornickel — Shared Services Centre

Distribution and sales

Normetimpex
 Metal Trade Overseas AG
 Norilsk Nickel Asia Ltd.
 Norilsk Nickel USA, Inc.
 Norilsk Nickel Metals Trading (Shanghai) Co., Ltd.

Foreign assets

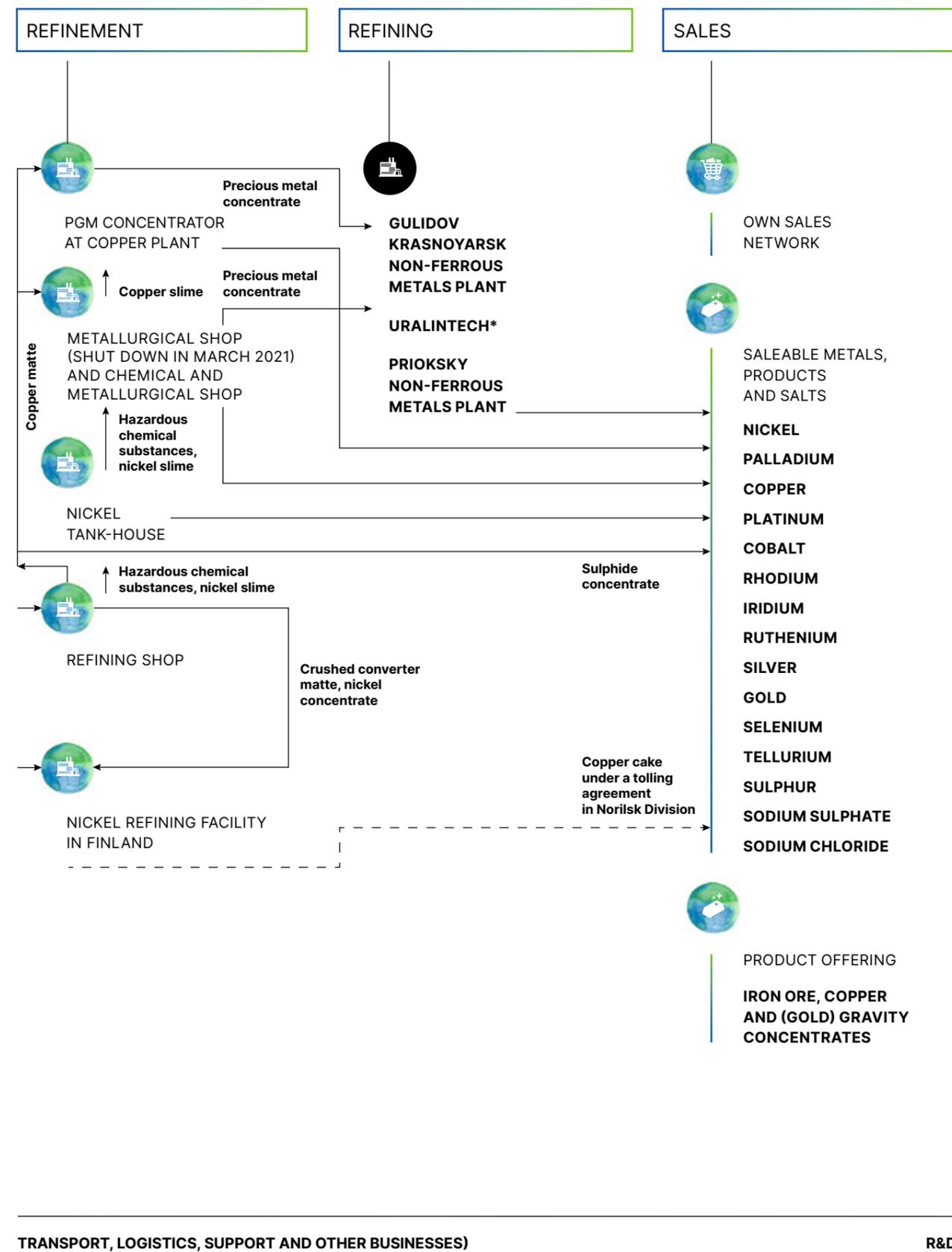
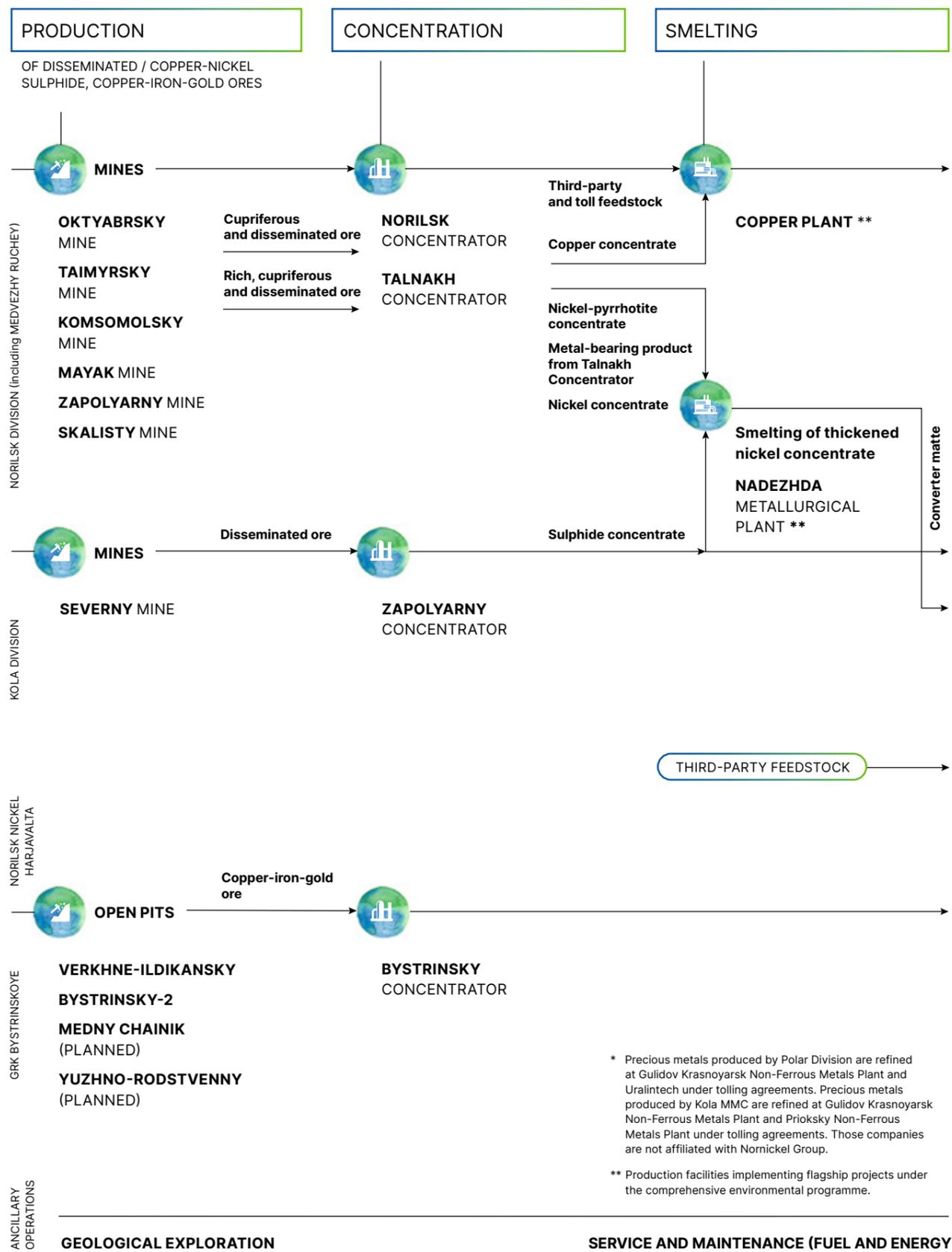
Norilsk Nickel Harjavalta (Finland)

Head Office

MMC Norilsk Nickel's Head Office

Production chain

GRI 306-1



* 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. Those companies are not affiliated with Norinickel Group.

** Production facilities implementing flagship projects under the comprehensive environmental programme.

STRATEGIC VISION

Nornickel's mission

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

Strategy for Sustainable Development

Nornickel's development strategy through 2030 aims to ensure the efficient implementation of the potential of the Group's unique mineral resource and production base for the benefit of its key stakeholders.

The global transition to a low-carbon energy mix offers unique opportunity for Nornickel to become one of the leaders in the market of metals required to accomplish the energy transition. The Company has an opportunity for long-term dynamic growth through an increased demand for its core products which are essential for improving the energy efficiency of transportation and renewable energy development.

However, sustainable growth through the expansion of mining and metal production alone is impossible in the existing conditions. The growing ESG requirements of major consumers, investors, and regulators require an in-depth modernisation of the main production facilities, ensuring the highest health, safety, and environment standards, and implementation of comprehensive programmes for the development of local communities.

Thus, the ESG agenda inevitably becomes both the main driver and the main requirement for Nornickel's strategic initiatives and major investment projects through 2030, which include mining volume growth, upgrade and expansion of processing facilities, contribution to combating climate change, large-scale reduction of sulphur dioxide emissions, and other areas of focus.

Key areas and performance targets under the sustainable growth strategy through 2030

Area ¹	Targets		
Mining volumes growth	Mining volumes growth in the Norilsk Industrial District ² :		
	By 2025 to 24–26 mt	2030+ to 32–34 mt	
Upgrade of processing facilities	Increase in metal output (2030+) ³ :		
	Nickel	Copper	Platinum group metals
	25-35%	25-35%	50-60%

¹ For more details on the Mining Volume Growth and Upgrade of Processing Facilities projects, please see the 2021 Strategy Day presentation at https://www.nornickel.com/upload/iblock/27f/strategy_day_presentation_2021.pdf and video materials at <https://www.nornickel.com/news-and-media/media-library/>

² Compared to the base year (2017)

³ Compared to the base year (2017)

Key areas and performance targets under the sustainable growth strategy through 2030

Area	Targets		
Implementation of Sulphur Programme 2.0	Reduction of SO ₂ emissions ⁴ :		
	Kola Division 85% (7 x) by 2021 (completed, with actual reduction totalling 90%)	Norilsk Division 90% (10x) by 2025	95%+ (20x) by 2030
Power infrastructure facilities modernisation ⁵ :	Hydropower facilities:		
	<ul style="list-style-type: none"> In 2021, we completed modernisation of Ust-Khantayskaya HPP, replacing hydroelectric units that had reached the end of their service life with modern ones (7 units with a capacity of 73 MW each). The project was run in 2012–2021, with ramp-up to design capacity in January 2022. For 2022–2030, we are planning a major modernisation project at Kureyskaya HPP to replace five hydroelectric units, main and auxiliary equipment of hydropower turbines and generators, as well as other equipment. 		
	Thermal power facilities:		
	<ul style="list-style-type: none"> In 2021, we completed the replacement of power unit No. 1 at HPP-2 with a capacity of 110 MW. In 2022, work is underway to replace power unit No. 2. By increasing the installed capacity of HPP-2, we will be able to cover future needs of the Company's industrial consumers in the vicinity of Talnakh. We started replacing two power units at HPP-2 and building two new units at HPP-3. 		
Contribution to combating climate change	Gas power facilities:		
	<ul style="list-style-type: none"> The Company is running a major programme to upgrade its gas field infrastructure, including projects to upgrade power supply systems, build booster compressor stations, and modernise tank farms at gas fields. As part of developing our gas transmission system, we are implementing a modernisation programme to replace the main gas, condensate, and methanol pipelines, with plans to build new ones at the Pelyatkinskoye–Messoyakha section. In 2024–2026, we intend to drill additional wells and construct new gas headers and inter-field pipelines. 		
	Fuel facilities:		
	<ul style="list-style-type: none"> A major upgrade is underway at the Norilsk, Dudinka and Kayerkan oil depots. 		
Lower workplace injury rate ⁷	Reducing Scope 1+2 GHG emissions by 28% to 7.7 mtpa taking into account the expected production growth and Sulphur Programme 2.0.		
	Reducing carbon intensity from operations by 37% ⁶ to 5.0 t of CO ₂ equivalent per t of Ni equivalent by 2028.		
	Zero tolerance policy on workplace deaths.		

⁴ Compared to the base year (2015). For more details on the implementation of Sulphur Programme 2.0 projects, please see the Air subsection of the Environmental section.

⁵ For more details on the implementation of the projects in this area, please see the Power Infrastructure Facilities Modernisation sub-section of the Climate Change section.

⁶ From the 2020 baseline. For more details on climate change projects, please see the Climate Change section.

⁷ For more details on related projects, please see the Occupational Health and Safety section.

Estimated CAPEX for strategic projects through 2030

The implementation of those strategic objectives will allow the Company to considerably increase supplies of its core products to customers, significantly improve industrial reliability, industrial safety and energy efficiency performance, and address the most acute environmental problems in the regions where it operates as early as in the medium term. The total investment in the implementation of the strategy through 2030 will be USD 35 bn. The planned capital investments increased y-o-y due to the expansion of the perimeter of energy and logistics infrastructure upgrading, expansion of the environmental programme, and an increase in the estimated total inflation of construction costs for the projects that are underway.

Long-term trends supporting consumption growth for the metal basket and the Company's strategic prospects

GRI 102-6

Nornickel meets the growing needs of the Russian and global economies for materials that are actively used in car manufacturing, electronics, electrical engineering, petrochemical and oil refining, power generation, construction, consumer goods, healthcare, and other industries.

Nickel consumption is predominantly driven by the stainless steel industry, with the steels used in multiple sectors — from mechanical engineering and construction to renewable energy. Another critical nickel consumer is the battery industry, which has been growing on the back of the electrification

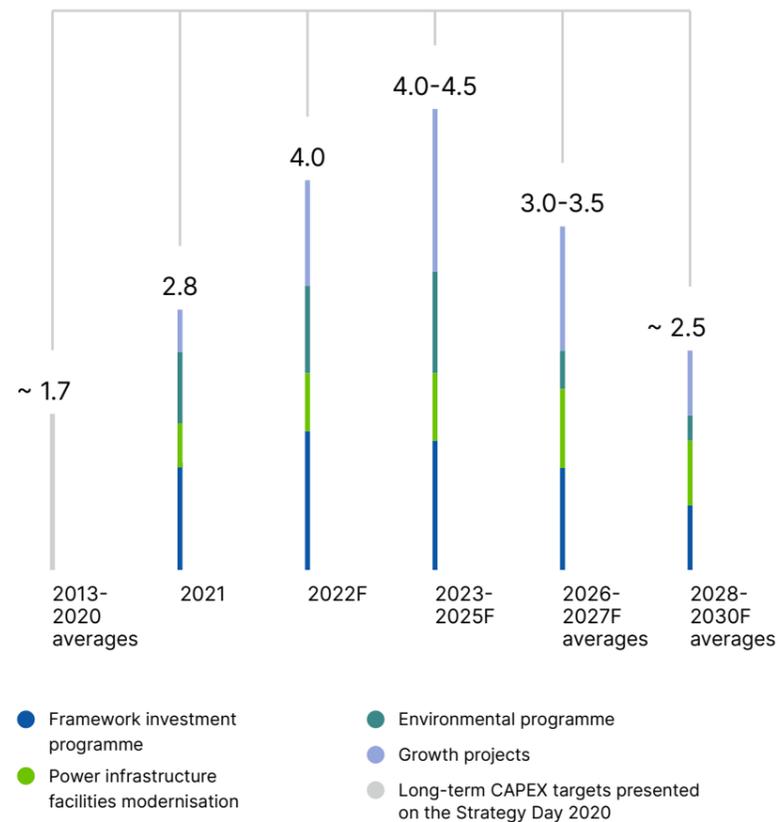
of transport, a rise in the number of electric cars and hybrid vehicles, and the cathode material production gravitating towards nickel-rich types. The main application of palladium is in automotive catalysis of gasoline engines. This metal is used in catalytic converters to detoxify exhaust fumes. In most countries, such converters are legally required to be installed on all cars. Palladium is also used in electronics, dentistry, and jewellery manufacturing.

The automotive industry is also the main consumer of platinum. Over 30% of platinum in this industry is used to manufacture exhaust gas catalysts for diesel vehicles. Another important consumer of platinum is the jewellery industry, which likewise accounts for about 30% of consumption. Platinum is also used in glass manufacturing to produce glass fibre and optical glass, and in electronics.

A variety of platinum group metals, including palladium, platinum, rhodium, ruthenium, and iridium are also extensively used as catalysts to manufacture key chemicals.

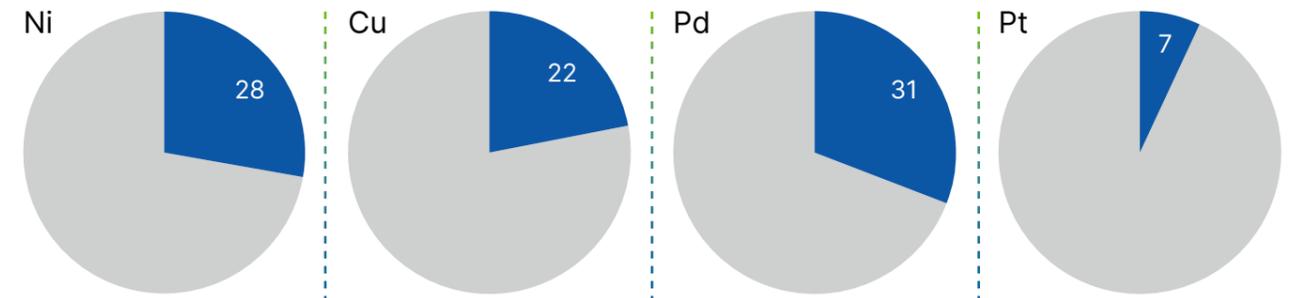
The electrical conductor industry, including the manufacture of various cables and wires, consumes up to 60% of the global refined copper output. This makes copper a key material for renewable energy development.

Estimated CAPEX for strategic projects through 2030, USD bn



Long-term market outlook for key metals produced by Nornickel¹

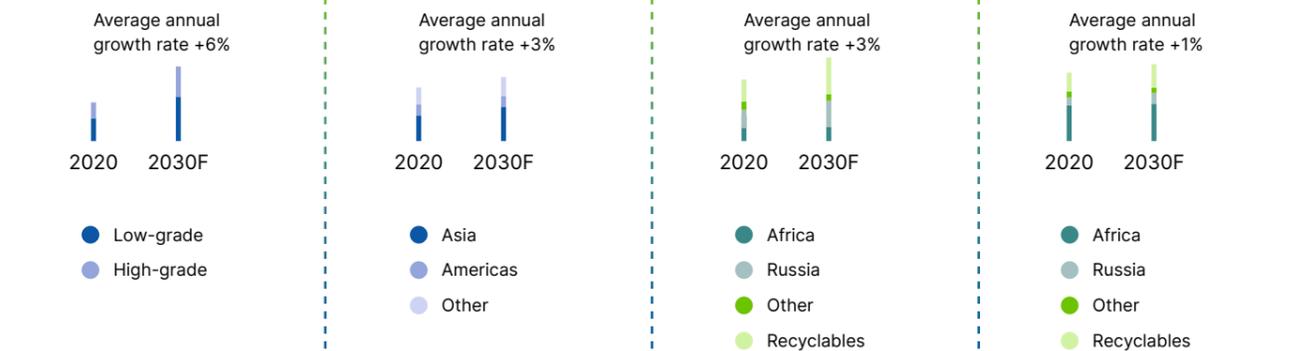
EXPECTED SHARE IN NORNICKEL'S TOTAL SALES IN 2030, %



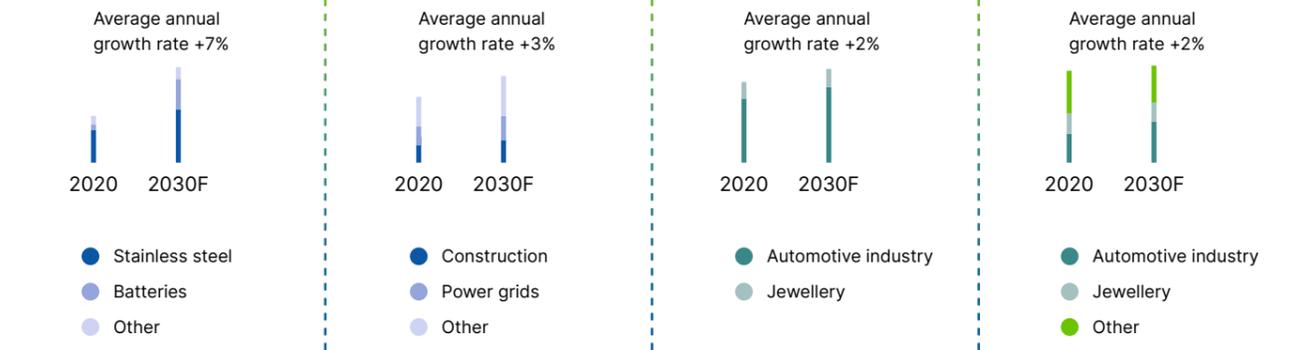
MARKET BALANCE OUTLOOK

DEFICIT	BALANCE	OVERSUPPLY	DEFICIT
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PRODUCTION



CONSUMPTION



LONG-TERM FUNDAMENTALS



¹ Revenue estimates are based on output forecasts taken from Nornickel's Strategy Day presentation (November 2021), long-term market consensus price, and CPI (Consumer Price Index) projections from the US Congressional Budget Office.

Key trends impacting Nornickel's metals consumption through 2030

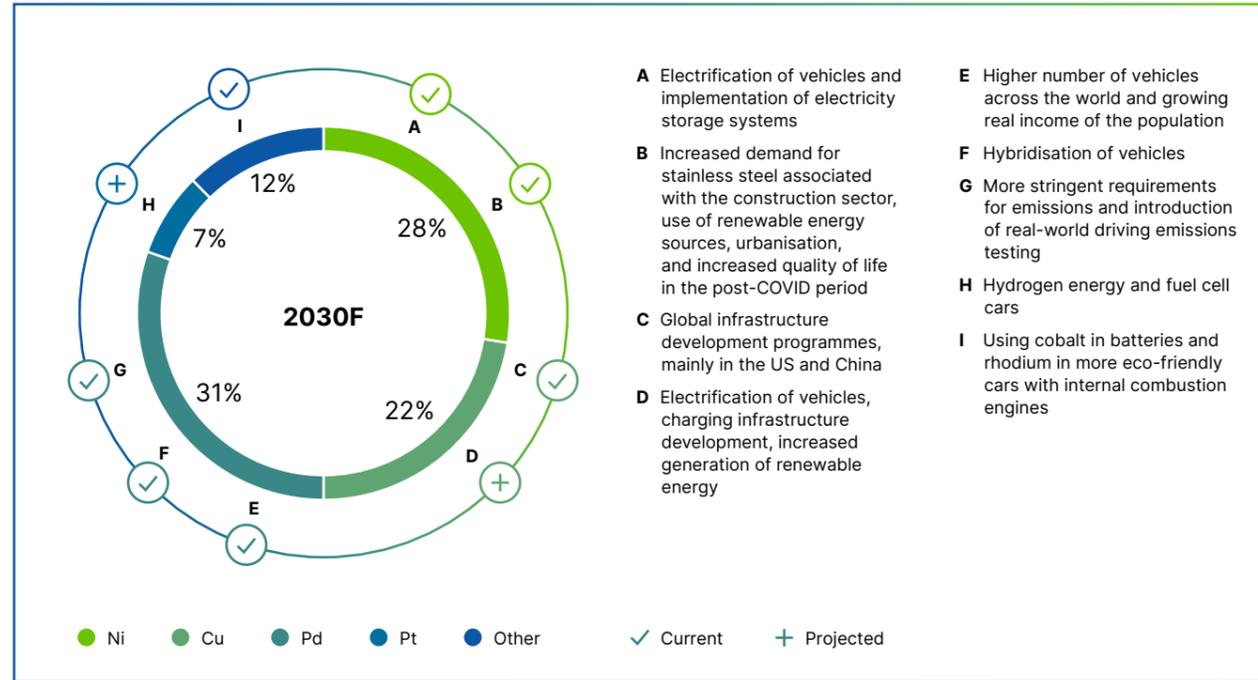
The key global trend is the tightening of requirements for the environmental safety of motor vehicles manufactured.

For more details on this and other trends relating to global decarbonisation and their impact on the Company's business, please see the Climate Change section.

In general, the estimated potential demand and supply under the International Energy Agency's Sustainable Development Scenario

through 2040 indicate good prospects for stable market growth as regards metals produced by the Company.

Key trends impacting Nornickel's metals consumption through 2030



ESG strategy

Our key ESG achievements and priorities

E Environment and climate change	S Social responsibility	G Governance
Key achievements <ul style="list-style-type: none"> The lowest CO₂ emission metrics per tonne of Ni equivalent in the global nickel industry The lowest CO₂ emission (Scope 1, 2 and 3) metrics among global mining peers First producer of carbon-neutral nickel 	<ul style="list-style-type: none"> Strong reputation of a socially responsible business Comprehensive support of local communities and national projects Long track record of supporting indigenous peoples; pioneering of the process to obtain their free, prior and informed consent to projects, unprecedented in the Russian mining industry 	<ul style="list-style-type: none"> Improved corporate governance and risk management frameworks Including ESG indicators in short- and long-term KPIs Balanced and efficient Board of Directors
↓	↓	↓
Strategic priorities <ul style="list-style-type: none"> Clean-up of accumulated legacy waste and remediation following environmental incidents in Norilsk Significant SO₂ emission reduction at two major sites Supporting environmental initiatives across the Company's geography Further development of a risk management system for physical risks across our footprint Reducing negative impact on biodiversity 	<ul style="list-style-type: none"> Zero work-related fatalities Reducing the impact of operations on indigenous peoples in the regions of presence Reconstruction of housing and social infrastructure in Norilsk 	<ul style="list-style-type: none"> Fostering a new corporate culture of sustainable development Compliance with core international sustainability initiatives

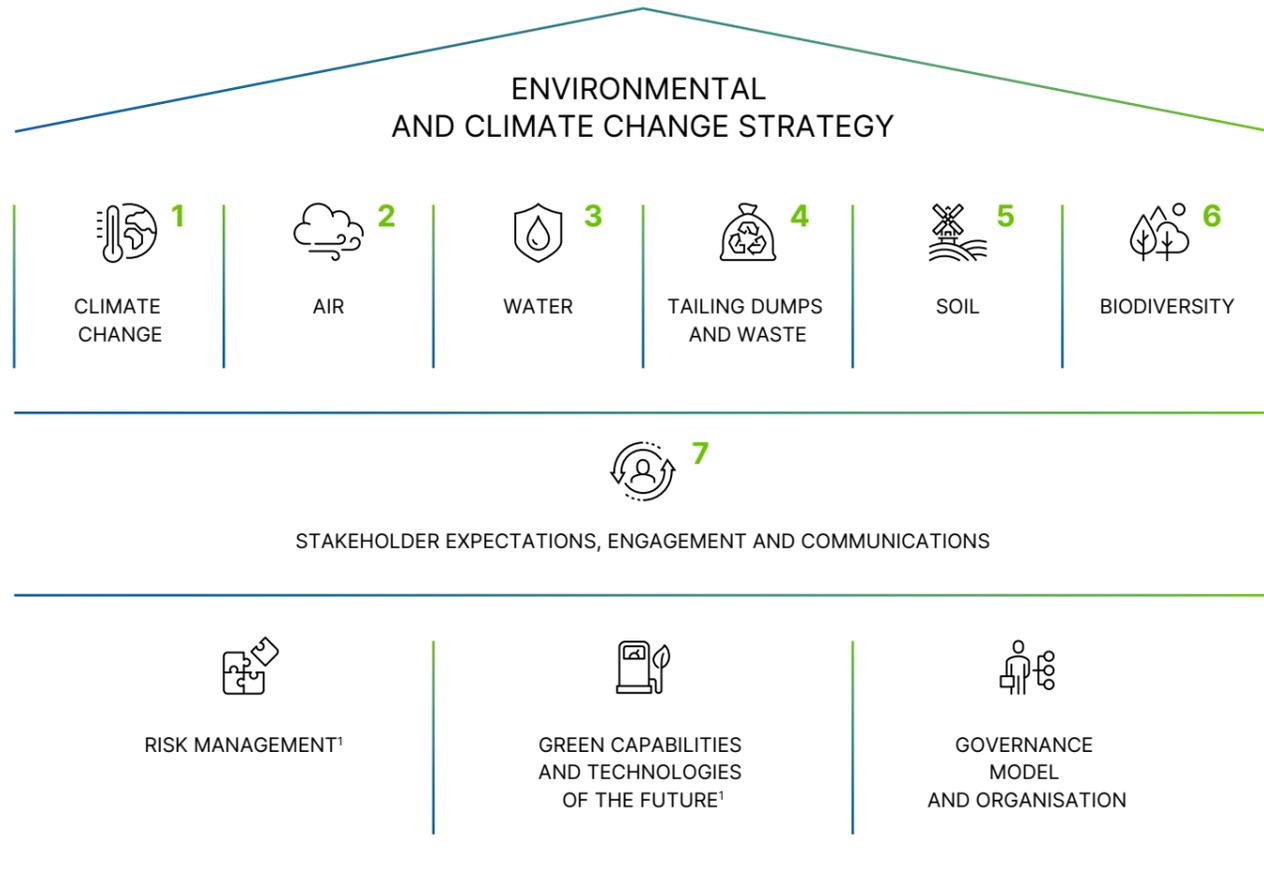
E — Environmental and Climate Change Strategy

In 2021, Nornickel's Board of Directors approved the Environmental and Climate Change Strategy through 2031. The strategy will be adopted company-wide to boost our environmental performance.

- The strategy's main objectives include:
- production upgrade and transition to advanced environmental technologies;
 - improving the environmental aspects and risks management system;
 - eliminating the accumulated pollution and full land rehabilitation after man-made incidents;
 - restoring biodiversity across the Company's footprint.

In total, Nornickel is going to invest over USD 6 bn (RUB 440 bn) in environmental initiatives through 2031, including over USD 4 bn in Sulphur Programme 2.0.

Key areas of the Environmental and Climate Change Strategy



¹ We plan to develop roadmaps for the technologies of the future in key strategic areas .

Targets of the Environmental and Climate Change Strategy through 2031

Strategic area	Target indicators
Climate change	<ol style="list-style-type: none"> 1. Reducing Scope 1+2 GHG emissions by 25% to 7.7 mtpa by 2028 taking into account the expected production growth and Sulphur Programme 2.0. 2. Reducing carbon intensity from operations² by 37% to 5.0 t of CO₂ equivalent per t of Ni equivalent by 2028.
Air	<ol style="list-style-type: none"> 3. Reducing SO₂ emissions by 85% at Kola Division in 2021 and by 90% at Polar Division in 2025 vs the base year 2015.
Water	<ol style="list-style-type: none"> 4. No interregional or national emergencies. 5. Reducing pollutant emissions by 25% vs the base year 2019 and achieving the maximum permissible emissions rate of 159 kt by 2031. 6. Keeping fresh water withdrawal (excluding mining water) for production needs below 120 mcm. 7. Keeping water recycling and reuse rates above 80%. 8. Eliminating the HPP-3 fuel spill consequences and clean-up to normalise the water indicators by the end of 2022.
Tailing dams and waste	<ol style="list-style-type: none"> 9. Disposing of 100% of tailings generated by new projects to environmentally safe facilities featuring best-in-class technologies, starting 2025. 10. Eliminating (collection and processing) 100% of accumulated waste by 2030. 11. Increasing/maintaining the share of mineral waste recycling above 15%. 12. Increasing/maintaining the share of non-mineral waste (other than gypsum) recycling. 13. Increasing the share of gypsum waste recycling.
Land	<ol style="list-style-type: none"> 14. Rehabilitation of 117 ha/year of disturbed land.
Biodiversity	<ol style="list-style-type: none"> 15. Biodiversity impact management.
Stakeholder expectations, engagement and communications ³	<ol style="list-style-type: none"> 16. Compliance with the TCFD principles. 17. Joining the ICMM. 18. Joining the IRMA. 19. Implementing Global Industry Standard on Tailings Management. 20. Joining the Responsible Minerals Initiative.

² From the 2020 baseline. For more details on climate change projects, please see the Climate Change section.

³ Targets 17 and 18 are temporarily on hold.

S — Nornickel's social strategy

As the foundation for further advancing its social activities, Nornickel formulated key pillars and goals in the area of social responsibility.

The Group's key areas of operation in Russia include the cities of Norilsk, Monchegorsk and Dudinka, 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.

For more details on our strategic social projects, please see the following sections: Development of Local Communities, Occupational Health and Safety, Human Rights, and Interaction with Indigenous Northern Minorities.

3.4%

share of social expenses in 2021 revenue.

We are one of the leaders among Russian metals and mining companies both in terms of absolute social expenses and their share in revenue.

● GRI 203-1

44.3

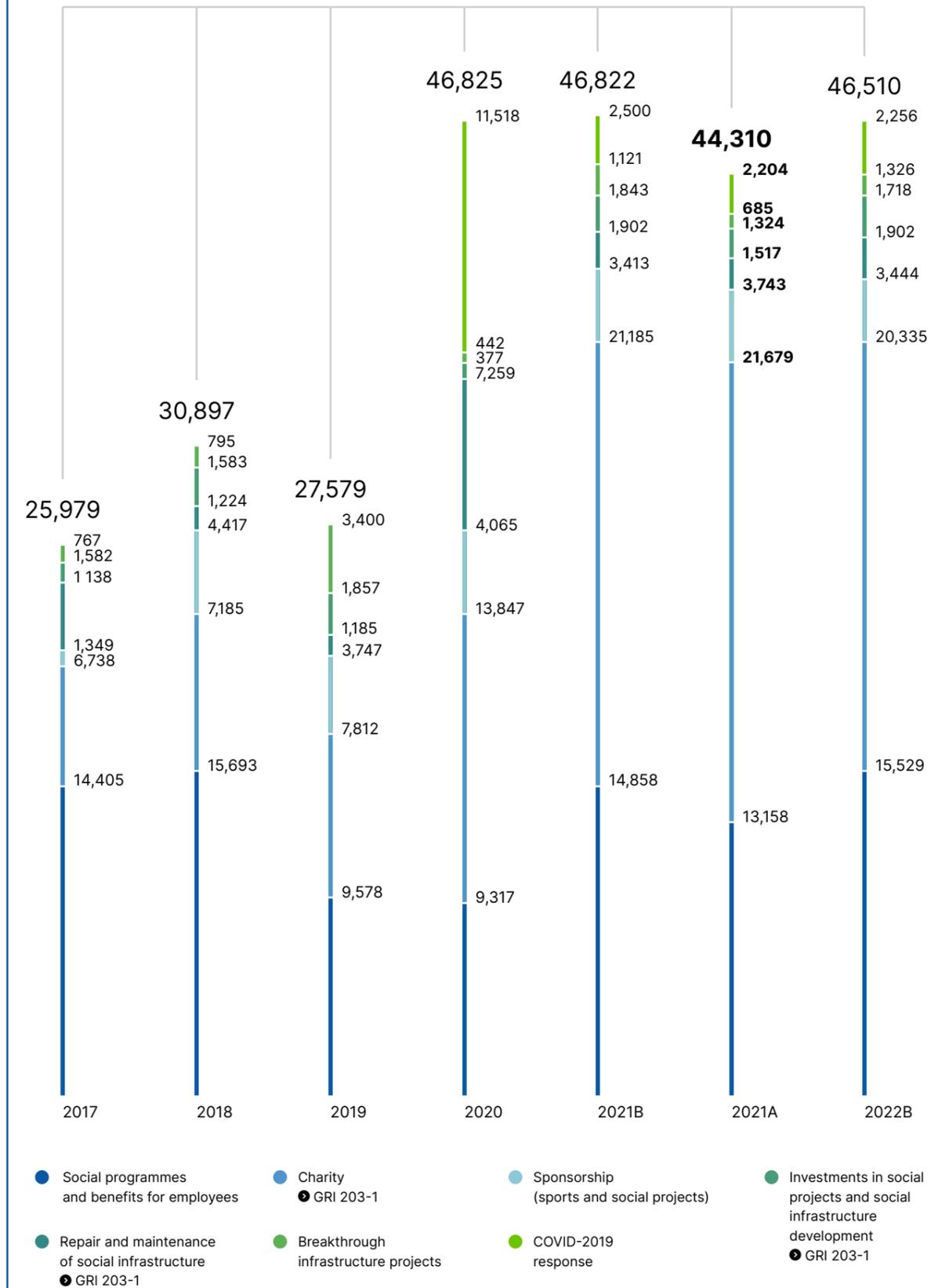
RUB bn — total social infrastructure, social, charity and sponsorship expenses in 2021.¹

Social strategy priorities

NORNICKEL'S SOCIAL STRATEGY			
<p>DECENT AND SAFE WORKING CONDITIONS</p> <p>Goals:</p> <ul style="list-style-type: none"> No workplace fatalities <p>Key initiatives:</p> <ul style="list-style-type: none"> Technology Breakthrough 2.0 (mining automation) Projects to foster a safe production culture Certification of key production assets for compliance with ISO 45001 Due diligence of safety standards and requirements in 2022 	<p>INVESTMENT IN LOCAL COMMUNITIES AND CHARITABLE ACTIVITIES</p> <p>Goals:</p> <ul style="list-style-type: none"> Norilsk renovation programme through 2035 Retaining the industry leadership as regards the share of social expenses in revenue <p>Key initiatives:</p> <ul style="list-style-type: none"> Norilsk social and economic development programme through 2035 World of New Opportunities charitable programme Agency support in the regions of operation Building and modernising social infrastructure under agreements with local authorities 	<p>REDUCING NEGATIVE IMPACT ON LOCAL COMMUNITIES AND DEVELOPING LOCAL HEALTHCARE</p> <p>Goals:</p> <ul style="list-style-type: none"> Reducing the overall morbidity among people living in the vicinity of Nornickel's production assets Corporate Healthcare project <p>Key initiatives:</p> <ul style="list-style-type: none"> Sulphur Programme 2.0 Corporate Healthcare project Modernising corporate healthcare facilities and medical examination rooms at our production sites Creating modern healthcare centres for local communities across our footprint 	<p>SUPPORT FOR INDIGENOUS PEOPLES</p> <p>Goals:</p> <ul style="list-style-type: none"> No violation of the rights of indigenous peoples A five-year comprehensive programme to support indigenous northern minorities Introducing the Free, Prior and Informed Consent (FPIC) process <p>Key initiatives:</p> <ul style="list-style-type: none"> Comprehensive Support Programme for Indigenous Minorities of the North through 2024 Interaction with the largest associations of indigenous peoples Day-to-day sustenance (fuel, materials, etc.) FPIC-related consultations with Tukhard residents

¹ Excluding 49.67 bn in accrued social liabilities and other social expenses and since 2021 including expenses of the Company's foreign assets.

Social infrastructure, social, charity and sponsorship expenses¹



G — sustainability governance

Sustainability management and ESG implementation are an integral part of Nornickel's corporate governance system.

In 2020, Nornickel introduced large-scale changes to its governance framework to improve the effectiveness

of the management actions to ensure industrial safety and reduce environmental risks.

As part of this process and in line with the best global ESG practices, Nornickel established a new role of Senior Vice President for Sustainable Development, to which Andrey Bougrov was appointed.

The Senior Vice President for Sustainable Development also leads the Sustainable Development Department acting as the key driver of integrating sustainability management practices into Nornickel's day-to-day activities, ensuring compliance with international standards and adopting a new ESG management framework.



Andrey Bougrov Senior Vice President for Sustainable Development at MMC Norilsk Nickel

- Member of the non-governmental Council on Foreign and Defence Policy
- Member of the Business Council at the Russian Ministry of Foreign Affairs
- Member of the Management Board and Vice President of the Russian Union of Industrialists and Entrepreneurs
- Member of the Expert Committee of the Russian Presidential Anti-Corruption Directorate

Member of the Management Board since 2013

Born in: 1952

Nationality: Russian Federation

Education: Moscow State Institute of International Relations (MGIMO), PhD in Economics

Employment record for the last five years:

- 2002–2020 — member of the Board of Directors at MMC Norilsk Nickel PJSC (MMC Norilsk Nickel OJSC until 1 June 2015)
- 2013–currently — Vice President at Interros Holding Company LLC (Interros Holding Company CJSC until 7 April 2015)
- 2015–currently — member of Non-Profit Partnership National Council on Corporate Governance
- 2016–2020 — Senior Vice President at MMC Norilsk Nickel
- 2016–currently — Chairman of the Issuer Committee at the Moscow Exchange
- 2018–currently — Chairman of the Council on Non-Financial Reporting at the Russian Union of Industrialists and Entrepreneurs
- 2018–currently — member of the Advisory Council at the Russo-British Chamber of Commerce
- 2020–currently — Senior Vice President for Sustainable Development at MMC Norilsk Nickel
- 2020–currently — member of the Climate Policy and Carbon Regulation Committee at the Russian Union of Industrialists and Entrepreneurs

Transition to division-based governance structure

As part of its effort to streamline the governance system, Nornickel migrated to a division-based structure in 2020–2021. Today, the Group's core operations are grouped into three geography-based divisions — Norilsk, Kola, and Trans-Baikal. The Company also has a standalone functional unit — the Energy Division consolidating its energy assets. In addition to retaining control over Group-wide business verticals (HR, finances, legal and security), the Head

Office continues to oversee logistics, distribution, operational activities and strategic projects. Divisions will bear comprehensive operational responsibility for production, infrastructure, financial performance, and risk management within their remit.

The new divisional structure has enabled the Company to strengthen oversight over auxiliary operations by vesting respective powers with the heads of regional production units while also providing greater investment flexibility with a three-fold increase of CAPEX limits for subsidiaries and divisions. Also, the transition to the new organisational

model came as an essential addition to the Company's plan to improve the efficiency of HSE controls, and will help improve the Board of Directors' oversight over Nornickel's ESG performance and ESG strategy implementation.

In 2021, all divisions set up ESG competence centres working in tandem with the Head Office's Sustainable Development Department and responsible for the ESG agenda and related initiatives on sites and in the regions of operation.

Nornickel's ESG model

Mission of the ESG management model

Making ESG part of our corporate life by integrating the principles into day-to-day management, developing new competencies, processes and tools and changing the mindset of employees and managers to transform Nornickel into a global leader in sustainability.

Our ESG vision

What kind of business does Nornickel strive to become?

All our people know, share and observe corporate ESG priorities in their day-to-day activities to enable Nornickel's transformation into a recognised global leader in sustainability.

ESG management principles

Hands-on teamwork: creating an environment for robust teamwork, solving specific ESG-related cases, encouraging cooperation.

Integrated management perimeter: the Company defined 21 ESG areas, consolidated them into a single list of tasks with owners and a team action plan for each area, and created a transparent updating procedure in case of environment changes.

Flexibility, speed and self-regulation: team coordination and supervision based on the contractual mechanism and a mechanism for interaction within the team.

Clear responsibilities and incentives:

currently formalised in approved documents, including organisational regulations, approved plans and Management Board resolutions, and to be included in KPIs going forward.

Involving the top management in decision-making: meetings with the President semi-annually or as needed, making ESG part of the agenda of dedicated strategy, risk management and HSE committees. Divisions: meetings led by the division head and dedicated committee meetings.

Single ESG hub: Senior Vice President for Sustainable Development and division heads supported by the Sustainable Development Department.

Action plan to implement an ESG agenda in 2021–2023

2021 objectives	Status	2022 targets	2023 targets
Drafting sustainability strategies at the division level and decomposing strategic KPIs to various management levels	Done	<ul style="list-style-type: none"> Preparation and opportunity analysis for attracting green financing Introducing matrix ESG management 	<ul style="list-style-type: none"> Preparing a separate climate change report Compliance with the global standard for tailing dumps
Approval and adoption of 12 new ESG policies and position statements on human rights, responsible sourcing, tailing dump and water management, biodiversity, etc.	Done	<ul style="list-style-type: none"> Improving internal risk management procedures, systems and mechanisms in accordance with ICMM, IRMA and international waste disposal standards 	<ul style="list-style-type: none"> Filing an application to ICMM¹ Launch of anchor Sulphur Programme 2.0 project at Nadezhda Metallurgical Plant to capture furnace gases
Drafting and independent verification of the methodology to calculate GHG emissions from key metals production	Done	<ul style="list-style-type: none"> Scenario analysis of physical risks and transition risks associated with climate change 	
First disclosure on forest protection under CDP	Done	<ul style="list-style-type: none"> Integration of climate change risks into corporate business processes 	
Drafting a roadmap to ensure compliance with TCFD standards	Done	<ul style="list-style-type: none"> Certification of mines for compliance with IRMA requirements¹ 	
Promoting decarbonisation initiatives	Done	<ul style="list-style-type: none"> RMI certification of Norilsk Division 	

¹ Temporary on hold.

Responsibilities for the achievement of the Company's sustainability goals and targets are distributed among the governance bodies and divisions of MMC Norilsk Nickel and its subsidiaries in accordance with the applicable laws and internal regulations and within the scope of their functions.

Environmental performance management

To create a full-fledged environmental monitoring system and ensure independent internal control over environmental protection issues, the Company set up an Environmental Department and an Inspection for Monitoring Technical, Production and Environmental Risks as part of the Internal Control and Risk Management Unit. The Environmental Department interacts with all units of the Company and is responsible for developing a policy to minimise the environmental impact and restore ecosystems in Norinickel's regions of operation.

Its key functions include effective management of environmental risks, expert review of investment projects, coordination of environmental regulation, control, and management systems, and obtaining authorisations and permits.

On top of that, Norinickel introduced the position of Deputy CEO for Industrial Safety and Environmental Protection at Polar Branch of Norilsk Division, its major production business unit, to strengthen control over its environmental performance.

Environmental Monitoring Centre

In late 2020, to ensure environmental monitoring across the regions of its operation, the Company also set up an Environmental Monitoring Centre reporting to the Senior Vice President and Chief Operating Officer.

The centre has the power to issue and serve the statements of deficiencies to heads of Norinickel's production enterprises. In case of identifying material breaches of environmental safety, it may temporarily shut down production facilities until such deficiencies are eliminated.

To improve response preparedness with regard to accidents and emergencies with environmental consequences, the centre organised and conducted on-site training at production facilities.

In 2021, it conducted 30 scheduled, ad hoc and follow-up audits and held 12 drills to check emergency preparedness.

As part of the centre's activities in 2021, 124 initiatives were developed and implemented to improve environmental safety across the Company and its Russian business units

The Environmental Monitoring Centre is creating an automated monitoring system to identify safety problems and conditions that could lead to incidents, accidents and emergencies with environmental consequences. The Company started to develop the relevant software in 2021, with the launch expected in 2024.

Compliance with international standards and best practices in ESG and quality management

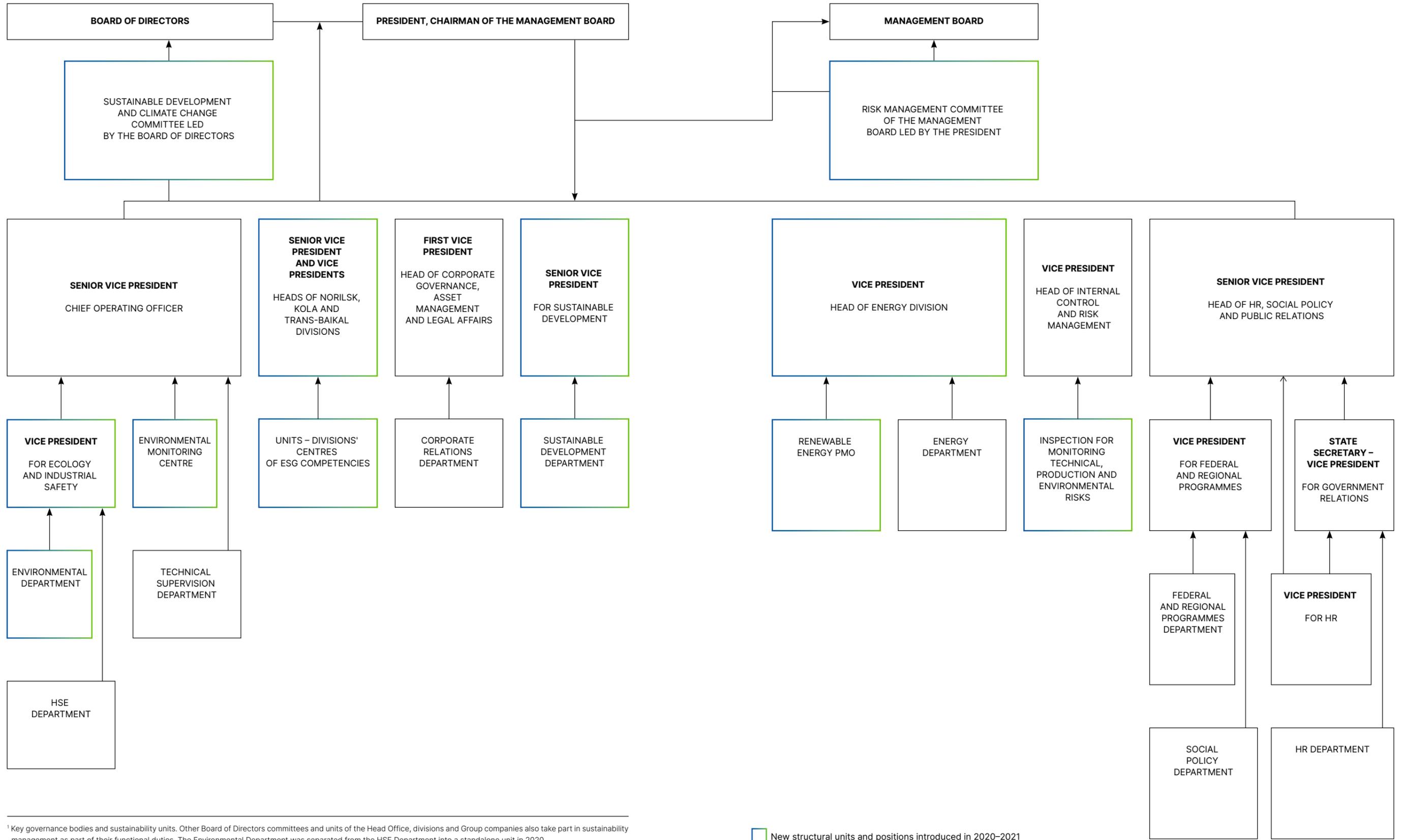
Norinickel's management systems are aligned with best international practices and standards. The Company's production assets are subject to regular certification and surveillance audits for compliance with international standards related to quality management, environmental management, labour protection, and information security.

Certification of our key production and transportation assets

Production asset	Standard	Audit frequency	Auditor
Head Office, Polar Division, Polar Transport Division, Murmansk Transport Division	ISO9001:2015	Surveillance audits — annually	BUREAU VERITAS Certification
	ISO14001:2015	Recertification audits — every three years	BUREAU VERITAS Certification
	ISO 45001:2018		BUREAU VERITAS Certification
Murmansk Transport Division, Nadezhda Metallurgical Plant, Copper Plant, Talnakh Concentrator	ISO/IEC 27001:2013	Surveillance audits — annually, twice a year	British Standards Institution
		Recertification audits — every three years	
JSC Kola MMC	ISO 9001:2015	Surveillance audits — annually	BUREAU VERITAS Certification
	ISO14001:2015	Recertification audits — every three years	BUREAU VERITAS Certification
	ISO 45001:2018		BUREAU VERITAS Certification
Norilsk Nickel Harjavalta	ISO 9001:2015	Surveillance audits — annually	BUREAU VERITAS Certification
	ISO 14001:2015	Recertification audits — every three years	BUREAU VERITAS Certification
	ISO 45001:2018		BUREAU VERITAS Certification

Sustainability management framework¹

● GRI 102-18, 102-20



¹ Key governance bodies and sustainability units. Other Board of Directors committees and units of the Head Office, divisions and Group companies also take part in sustainability management as part of their functional duties. The Environmental Department was separated from the HSE Department into a standalone unit in 2020.

New structural units and positions introduced in 2020-2021

Support of Russian and international sustainability standards and initiatives

● GRI 102-12, 102-13

We support leading global and national initiatives in sustainable development often pioneering integration of their requirements into our corporate practices.

Back in 2005, Nornickel was among the first Russian companies to join the Social Charter of the Russian Business adopted by the RSPP. In 2018, the Company was Russia's first business taking part in the project of reporting on contribution towards the implementation of the UN Sustainable Development Goals (UNCTAD).

On top of that, the Company contributes substantially to the country's National Projects in healthcare, environmental protection, housing and urban environment, productivity, employment, science, and digital economy.

Nornickel in ESG ratings

Description	Rating as at 31 December 2021
	After joining the UN Global Compact in 2016, the Company has continuously demonstrated its commitment to sustainability principles
	The agency confirmed the inclusion of Nornickel's shares in the FTSE4Good Emerging Index, with a score of 4.3 out of 5
	ISS Quality Score: environment — 2, social — 3, corporate governance — 6 on a scale from 1 (low risk) to 10 (high risk) ISS ESG rating — C+
	Score — 43 (out of 100)
	ESG Risk Score: 36.9 out of 100 on a scale from 1 (low risk) to 100 (high risk)
	ESG rating — "BB", score of 3.4 (out of 10)
	Ratings — "D" (Climate Change), "C" (Water Security)

Compliance with the leading global ESG and sustainability standards and initiatives

Standard/initiative	Compliance (certification) status
Global initiatives with certification	
EcoVadis ESG rating	✓
Together for Sustainability (TFS) initiative	✓
Responsible Sourcing Blockchain Network (RSBN)	✓
Own initiatives with certification	
Drafting the methodology and carbon footprint measurement for key metals (auditor — EY, independent verification — Sphera Solutions GmbH)	✓
Producing a batch of carbon-neutral nickel (auditor — EY)	✓
Compliance with global industry standards and initiatives with certification	
Global Reporting Initiative (GRI) (comprehensive option)	✓
Global industry standard on tailings management	Scheduled for 2023

Nornickel and UN SDGs

● GRI 102-15

Nornickel fully supports the UN Sustainable Development Goals (SDGs) up to 2030, and their integration into the Company's strategy was initiated back in 2018. The SDGs up to 2030 accepted internationally 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. In 2019, we performed an in-depth analysis of SDGs and matched them, among other things, against our current strategy, material risks, goals and commitments, investments in relevant projects and best peer practices.

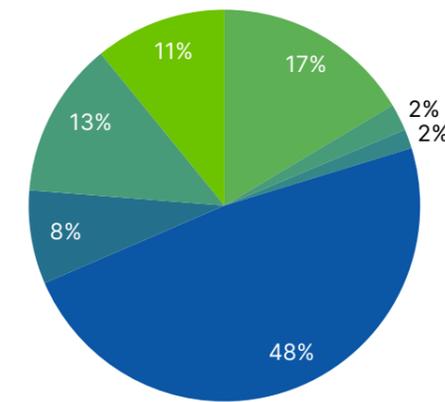
As a result, we identified six central SDGs:

- 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: Climate Action.

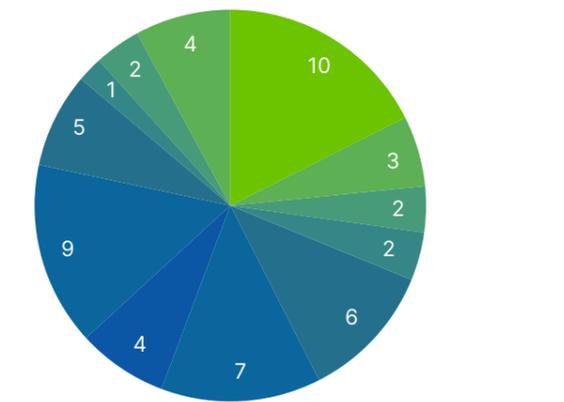
221.5

RUB bn spent on SDG-linked projects in 2021 (16.8% of consolidated IFRS revenue)

Spending on SDG projects in 2021

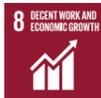


Number of SDG projects



Nornickel's key SDG-linked projects and programmes in 2021

SDGs	Projects and programmes	Contribution towards UN SDGs	2020	2021	Year-on-year change
 3 GOOD HEALTH AND WELL-BEING Central SDG Relevant targets: 3.4, 3.6, 3.9 Relevant national projects: *Part of the Healthcare domain (Russia's national projects) **Part of the Environment domain (Russia's national projects)	<ul style="list-style-type: none"> Health improvement and wellness programmes for employees and their families* Voluntary health insurance for employees and their families* Air protection projects** Water conservation and sustainable use projects** Waste management projects** Occupational safety initiatives* Corporate Healthcare project* COVID-2019 response measures 	Participants in health improvement programmes	13k	24.5k	+93.8%
		VHI policy holders (employees)	72.8k	75.3k	+3.4%
		LTIFR	0.20	0.38	+80%
		Fatal workplace injuries	9	11	+22%
 4 QUALITY EDUCATION Relevant target: 4.4. Relevant national projects: **Part of the Education domain (Russia's national projects)	<ul style="list-style-type: none"> Staff training and development* Corporate scholarships for university students and internships with Nornickel Group companies* The World of New Opportunities charity programme: grants for educational institutions and projects* 	Employees covered by Nornickel's staff training, professional development, retraining, and upskilling initiatives	70,902	115,576	+63%
		University students covered by Nornickel's corporate scholarship programmes	90	96	+6,7%

SDGs	Projects and programmes	Contribution towards UN SDGs	2020	2021	Year-on-year change
 6 CLEAN WATER AND SANITATION Relevant target: 6.3 Relevant national projects: *Part of the Environment domain (Russia's national projects)	<ul style="list-style-type: none"> Water use improvement and water supply projects* Water conservation and sustainable use projects* 	Effluents treated to standard quality at treatment facilities	4.34 mcm	4.92 mcm	+13.8%
		Water withdrawal	0.34 thousand m ³ / RUB mln	0.26 thousand m ³ / RUB mln	-24%
		Effluents	0.18 thousand m ³ / RUB mln	0.15 thousand m ³ / RUB mln	-15%
		Pollutants in effluents	0.22 t / RUB mln	0.18 t / RUB mln	-18%
		Share of total used water recycled and reused	86.4%	84.6%	-1.8 p.p.
 7 AFFORDABLE AND CLEAN ENERGY Relevant targets: 7.1, 7.3 Relevant national projects: *Part of the Environment domain (Russia's national projects) **Part of the Housing & Urban Environment domain (Russia's national projects)	<ul style="list-style-type: none"> Rollout of the Automatic System for Commercial Accounting of Power Consumption across Polar Division* Energy efficiency and energy saving projects* Projects to upgrade power and heat generation, electrical grids and heat networks** 	Share of renewables in the Group's electricity consumption	46%	47%	+1 p.p.
		Average monthly salary	RUB 131,800	RUB 145,100	+10%
		Employees covered by collective bargaining agreements	93.7%	94%	+0.3 p.p.
 8 DECENT WORK AND ECONOMIC GROWTH Central SDG Relevant targets: 8.2, 8.4, 8.5, 8.8 Relevant national projects: *Part of the Labour Productivity and Employment Support domain (Russia's national projects)	<ul style="list-style-type: none"> Ensuring decent compensation for labour* Securing employees' involvement in social partnerships* Programme to improve the workers' social and living conditions Health and safety initiatives Ensuring employees' involvement in improvement of the health and safety system* The Operating Unit's investment projects (concentration and metal production) 	Social facilities commissioned after renovation	138	123	-11%
		Average monthly salary	RUB 131,800	RUB 145,100	+10%
		Employees covered by collective bargaining agreements	93.7%	94%	+0.3 p.p.

SDGs	Projects and programmes	Contribution towards UN SDGs	2020	2021	Year-on-year change
 Central SDG Relevant targets: 9.1, 9.4, 9.5 Relevant national projects: *Part of the Housing & Urban Environment domain (Russia's national projects) **Part of Environment, Science, and Digital Economy domains (Russia's national projects) ***Part of the Digital Economy domain (Russia's national projects)	<ul style="list-style-type: none"> Projects to increase production and upgrade processing facilities Projects aiming to develop local communities' infrastructure (including transport accessibility improvement) as part of a public-private partnership and agreements with local administrations* Projects to develop power and heat generation, electrical grids, and heat networks* Research and development (R&D) and feasibility studies aimed to update Nor Nickel Group's Development Strategy expand production and protect the environment** Transportation and logistics projects Operational and management digitalisation projects*** Enhancing the reliability of the fibre optic communication line in Norilsk* 	Expenses on R&D and feasibility studies ¹	RUB 104.0 mln	RUB 241.4 mln	+132%
 Relevant target: 10.7 Relevant national projects: *Part of the Labour Productivity and Employment Support domain (Russia's national projects)	<ul style="list-style-type: none"> Complementary Corporate Pension Plan Relocation assistance to new employees* Assistance programme for residents of Norilsk and Dudinka relocating from the Far North Our Home and My Home social programmes (purchase of apartments for employees in various Russian regions) 	Complementary corporate pensions paid Expenses on relocating Norilsk and Dudinka residents to regions with better climate conditions People covered by the relocation assistance programme	RUB 411.3 mln	RUB 411.3 mln	0%
			RUB 830 mln	RUB 830 mln	0%
			829	1,370	+65.3%

¹ Including research and development (R&D) and feasibility studies to update the Group's Development Strategy, expand production and protect the environment.

SDGs	Projects and programmes	Contribution towards UN SDGs	2020	2021	Year-on-year change
 Central SDG Relevant target: 11.6 Relevant national projects: *Part of the Environment domain (Russia's national projects)	<ul style="list-style-type: none"> Sulphur Programme 2.0* Air protection projects* Waste management projects (including projects to eliminate inherited waste)* Response to environmental incidents Other environmental protection activities* 	Air pollutant emissions	1.76 t / RUB mln	1.25 t / RUB mln	-29%
 Central SDG Relevant targets: 12.2, 12.4, 12.5, 12.6 Relevant national projects: *Part of the Environment domain (Russia's national projects)	<ul style="list-style-type: none"> Waste management projects* Other environmental protection activities* 	Waste generation Non-hazardous class 5 waste Waste generation	145 mt	156 mt	+7.6%
			99%	99%	0%
			0.13 kt / RUB mln	0.12 kt / RUB mln	-7.7%
 Central SDG	<ul style="list-style-type: none"> Projects to upgrade power and heat generation, electrical grids and heat networks Energy saving and energy efficiency improvement initiatives 	GHG emissions (Scope 1 and 2) GHG emission intensity (Scope 1 and 2)	9.70 mt of CO ₂ equivalent	10.31 mt of CO ₂ equivalent	+6.3%
			8.68 tonnes of CO ₂ equivalent per RUB 1 mln of consolidated revenue	7.83 tonnes of CO ₂ equivalent per RUB 1 mln of consolidated revenue	-10%

SDGs	Projects and programmes	Contribution towards UN SDGs	2020	2021	Year-on-year change
 <p>Relevant targets: 15.1, 15.5</p> <p>Relevant national projects: *Part of the Environment domain (Russia's national projects)</p>	<ul style="list-style-type: none"> Cooperation with nature reserves (support for research and educational projects at the Pasvik, Lapland, Relict Oaks and Urumkansky nature reserves, Joint Directorate of Taimyr Nature Reserves, etc.)* Response to environmental incidents Scientific expeditions Fish stocking at water bodies across the regions of operation 	Total area of supported nature reserves and parks	2,334,000 ha	2,334,000 ha	0%
 <p>Relevant target: 16.5</p>	<ul style="list-style-type: none"> Anti-corruption measures Raising awareness of its anti-corruption practices among Nornickel Group's employees 	<p>Operating business units involved in anti-corruption activities</p> <p>Employees informed about anti-corruption practices</p>	100%	100%	0%
 <p>Relevant target: 17.16</p>	<ul style="list-style-type: none"> Cooperation with federal legislative and executive authorities, civil society institutions, and the business community Reporting on the Company's contribution to the achievement of UN SDGs in line with the UNCTAD guidance UN Global Compact membership and related reporting Plans to join other major sustainable development initiatives (ICMM, IRMA, TCFD) Support for corporate volunteering 	Working bodies (committees, expert and working groups, etc.) established by NGOs and government authorities where Nornickel Group is represented	25	25	0%

Nornickel's support for initiatives, standards, and participation in associations focused on sustainable development and corporate social responsibility

● GRI 102-12, 102-13

International

UN initiatives	<ul style="list-style-type: none"> UN Global Compact Sustainable Development Goals of the UN 2030 Agenda
Management standards	<ul style="list-style-type: none"> ISO 14001:2015 ISO 9001:2015 OHSAS 18001:2007 / ISO 45001:2018 ISO/IEC 27001:2013 ISO 26000:2010 AA1000AP, AA1000SES
Associations, charters, alliances, and initiatives	<ul style="list-style-type: none"> International Labour Organisation conventions International Platinum Group Metals Association International Information Security Research Consortium Nickel Institute Together for Sustainability (TFS) initiative Responsible Sourcing Blockchain Network (RSBN) European Battery Alliance (EBA) GRI Community
Rating agencies, ESG agencies and indices	<ul style="list-style-type: none"> EcoVadis FTSE4Good Index Sustainalytics MSCI ISS Corporate Solutions S&P Global CDP

Russian

UN initiatives	<ul style="list-style-type: none"> National Global Compact Network
Management standards	<ul style="list-style-type: none"> GOST R ISO 26000-2012
Associations and charters	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> RSPP Responsibility and Transparency index and Sustainable Development Vector index

Stakeholder engagement

Stakeholders and interaction mechanisms

102-42

Nornickel maintains an active dialogue and strives to foster relations with stakeholders. Effective stakeholder engagement enables us to properly manage risks and opens up new opportunities for integrating sustainability principles into our strategy.

Nornickel's guiding principles in cooperating with government bodies, local authorities and non-profit organisations are strict compliance with Russian laws, regional and municipal regulations, and the social responsibility principle, collaboration, and mutual respect of interests.

Stakeholder engagement principles and procedures are set out in MMC Norilsk Nickel's Business Ethics Code¹, Human Rights Policy, Local Community Relations Policy, Transparency Policy and other by-laws. We maintain dialogue with stakeholders in line with international standards and accountability principles².

We focus on timely collecting full information on the interests and proposals of our employees, shareholders, investors, business partners, national and local government authorities, local communities, Russian and international non-profit organisations.

We keep working to strengthen our relations with stakeholders, designing and updating tools to factor stakeholder interests in management practices, improving cooperation mechanisms and enhancing all aspects of dialogue across our footprint.

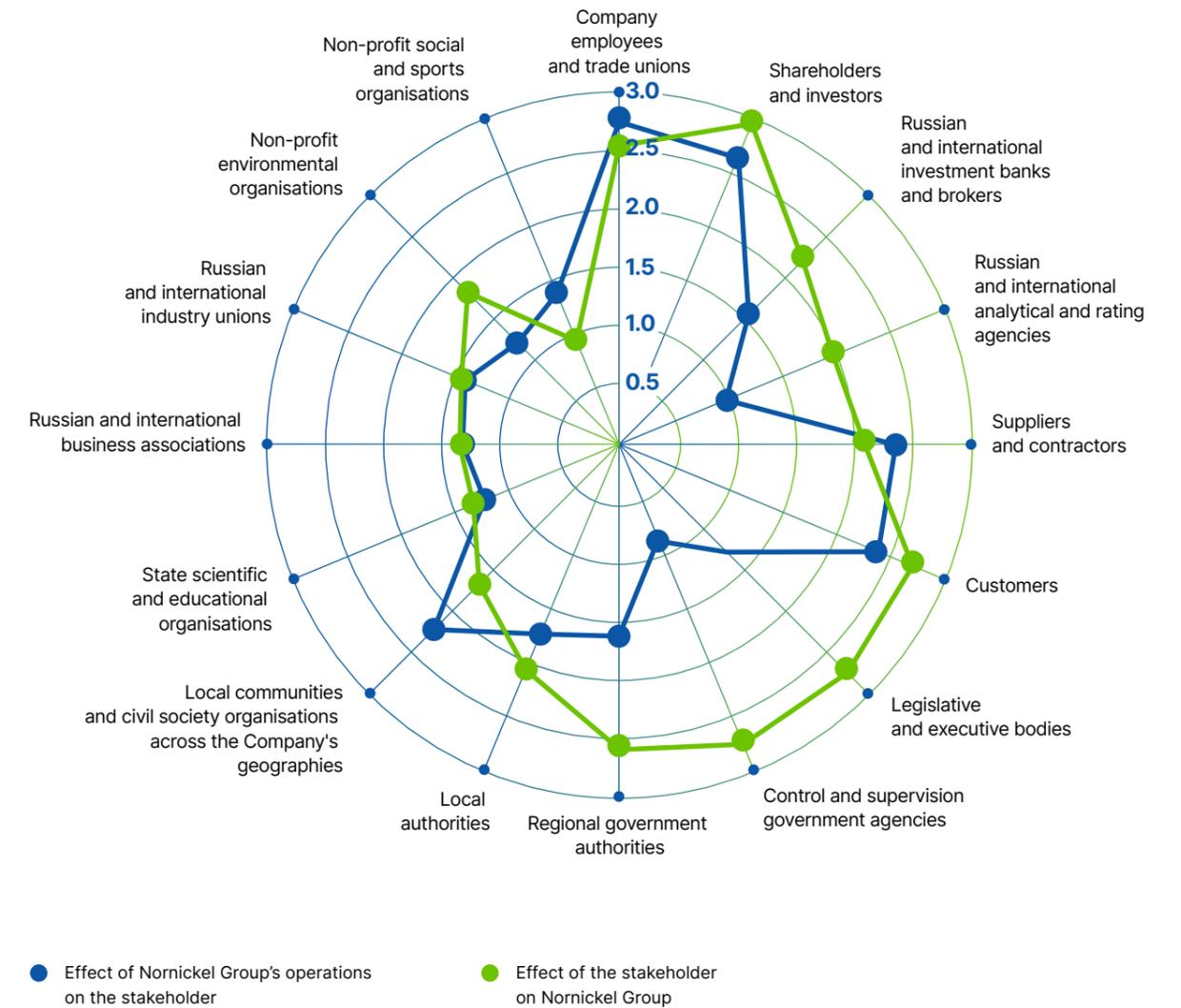
Since 2010, Nornickel has been operating its Corporate Trust Line, a permanent tool to manage complains and queries for a wide audience. It helps identify and quickly respond to matters of importance for stakeholders (for more details, please see the Corporate Trust Line section).

¹ Please see the corporate website at <https://www.nornickel.com/investors/disclosure/corporate-documents/>

² AA1000AP (AA1000 Accountability Principles), AA1000SES (AA1000 Stakeholder Engagement Standard).

Stakeholder map³

102-40



³ Put together in 2020, based on surveying the Company's managers and employees.

● GRI 102-43, 102-44

Stakeholders	Key interests of stakeholders	Interaction mechanisms
Shareholders, investors and rating agencies		
Shareholders and stock investors	Capitalisation growth	Meetings (including one-on-one meetings) and conference calls
Bond investors	Maintaining investment grade credit ratings	Phone calls and emails
Investment banks (brokers)	Dividends	Disclosures through presentations and press releases on the website
Credit, rating and ESG agencies	Transparency of information and timely disclosure of key facts	Holding Investor Days
	Strengthening ESG ratings	
	The Company's sustainable development	
Staff and trade unions		
Company employees	Social benefits and guarantees	Joint commissions, committees and working groups
Trade unions	Decent salaries	Discussions with trade unions and labour councils
	Favourable working conditions	
	The Company's stability as an employer (including matters associated with the shutdown of production facilities)	Offices for operational, social and labour matters
		Opinion polls
		Corporate media, booklets, information screens and boards
		Corporate web portals
Business partners		
Suppliers and contractors	Streamlining procurement as regards timelines and engagement procedures	Meetings, conferences, in-person and online negotiations
	Accessibility of procurement procedures	Procurement automation
	Participation in MMC Norilsk Nickel programmes	Comprehensive cost reduction and optimisation programme (dynamic discounting, reverse factoring, implementing electronic workflow, suppliers' online accounts)
Customers	Product quality	Meetings
	Packaging and labelling	Annual surveys
	Delivery terms	Working with customers on matters of product quality
	Information support of transactions	Processing customer complaints and grievances
	Sustainable growth of sales markets	Official meetings, conferences, exhibitions
	Registration of products in sales markets	Working with customers in connection with the consumption and market growth prospects analysis
	The Company's ESG activities	Working with regulators and commodity exchanges

Stakeholders	Key interests of stakeholders	Interaction mechanisms
Federal authorities		
Legislative and executive federal bodies	Socially important projects	Participation in working and expert groups, commissions, and committees
Control and supervision government agencies	Regulatory improvements in various areas	Public events and conferences
	Discussing draft regulations	Obtaining permits
	Reducing administrative barriers	Participation in intergovernmental commissions
	Improving business climate	
	Environmental protection	
	Support for domestic producers	
	Stability in taxes	
	Strengthening enterprises' economic security	
Regional government authorities and local communities		
Regional government authorities	Stable tax payments	Working and expert groups, commissions, committees and councils
Local authorities	Environmental impact regulation	Cooperation agreements
State-run research and educational institutions in the Company's regions of operation	Social stability support across the Company's geographies	Development plans for the Company's regions of operation
	Support for domestic businesses	Corporate and partnership programmes and projects
	Training highly skilled professionals to meet business needs	Forums, conferences, fairs, and round table discussions
Local communities and civil society organisations across the Company's footprint		Joint inspections, drills and training exercises
Russian and international non-profit organisations		
Russian and international business associations	Socially important projects	Involvement in the work of committees and commissions of Russian and international organisations
	Information exchange	
Russian and international industry unions	Removal of administrative barriers	Joint projects
	Discussing draft regulations	Events (congresses, meetings, round table discussions, conferences and competitions)
	Support for domestic producers	Membership in governing bodies and committees
Non-profit environmental organisations	Stability in taxes	
	Environmental protection and industrial ecology	Opinions, proposals, requests
Non-profit organisations involved in culture, sports, education, environment protection, and social activities		

Dialogue with investors

Nornickel maintains an active dialogue with a wide range of Russian and international investors and equity analysts.

The Company regularly organises conference calls and meetings with investors, takes part in all major investment conferences and arranges site visits across its footprint.

Twice a year, following the disclosure of 6M and 12M results, we organise conference calls for a wide range of investors and analysts involving the Company's top management to discuss financial and operating results, situation in the commodity markets, progress on strategic projects and implementation of sustainable development projects. Apart from that, we hold annual Investor Day attended by the Company's top management to discuss our strategic development.

As part of our dialogue with investors, we note their growing interest in responsible investing. We seek to increase transparency by improving and expanding sustainability disclosures on our corporate website and in investor presentations.

We introduced a dedicated [ESG Highlights](#) section of the corporate website to address the matters of environmental protection, social responsibility and corporate governance.

Dialogue with employees

Nornickel places a special focus on interacting with its employees. We establish social partnerships regulating labour relations as a key tool to build dialogue with our people. Moreover, the Company has in place offices for social and labour relations, a response centre and task forces at divisions.

For employees facing redundancy as a result of operations closure we provide a package of social guarantees, including comfortable relocation to other sites, retraining and pension plans. In 2020–2022, the Company invested RUB 1,636 mln in a range of social programmes for smelting shop employees.

The Company continuously implements measures to build a dialogue between its top management and employees, which helps raise employee awareness, improve trust between workers and leadership and ensure that employees have a better understanding of the Company's goals and values. To that end, the following activities were held in 2021:

- Nornickel Live, a Q&A session;
- spring and autumn corporate dialogues;
- Challenges-2022 conference.

These events ensure high quality and regularity of contacts between the staff and the top management, involving over 40,000 employees every year. They allow our staff to get first-hand information and ask questions (over 3,000 queries in 2021), which helps build trust. As a result, for the first time in four years, the Perception of Senior Management indicator left the risk zone as showed by the Let Everyone Be Heard survey.

In addition, we conduct regular surveys to measure employee engagement and assess social programmes, along with targeted polls.

Dialogue with business partners

Nornickel takes its reputation very seriously and seeks to maintain good relations with its partners.

The key projects centred around business partner cooperation in 2021 include:

- registration at, and interaction through, the Shipment Notice and SAP SRM portals;
- the reverse factoring, discounting, implementing electronic workflow, supplier online account, and SAP SRM piloting project;
- implementation of the Supplier Code of Conduct and Responsible Sourcing Policy.

Our plans for 2022:

- further roll-out of the SAP system;
- industry exhibitions in different areas;
- signing long-term agreements (contracts);
- encouraging more suppliers to take part in cost reduction and optimisation programmes.

In our relations with suppliers and contractors, we focus on building an open and productive dialogue supported primarily through competitive procurement, feedback via a dedicated Suppliers section on our website, conferences and SAP SRM interactions. For more details, please see the Supply Chain Responsibility section.

As a participant in the global supply chain, the Company shares its partners' sustainability values. To that end, it undergoes regular audits in accordance with sustainable development and responsible supply policies. These audits take place as part of systemic independent ESG reviews requested by our partners.

The core element of our relations with partners is advancing the responsible consumption of precious metals and metal-bearing products and creating a global mechanism to ensure the reliability of precious metal supplies as part of international non-profit organisations of producers and market players, such as the International Platinum Group Metals Association (IPA), International Information Security Research Consortium (IISRC) and the International Nickel Institute.

As a strategically important company, Nornickel places a special emphasis on supporting the development of its partners and keeping them updated on various matters. The Company's expertise and solid track record in creating powerhouse industrial businesses that leverage cutting-edge technologies have laid the groundwork for successful implementation of projects with partners in both traditional and emerging industries.

Twice a year, we publish nickel and PGM market reviews prepared together with ICBC Standard Bank. They offer the market a deep and high-quality insight into trends and forecasts in this domain.

Our contribution to sustainable development and the promotion of green economy takes the form of mutually beneficial partnerships. The Company entered into a strategic partnership with BASF to meet the growing demand for battery materials used in electric vehicles.

Dialogue with authorities, communities and non-profit organisations

We follow the information transparency principle and focus on constructive and effective cooperation with government bodies, local communities and non-profit organisations. We also actively participate in the work of regional authorities' expert boards across our geography.

As at the end of 2021, the Company was represented in 25 committees, commissions, expert and working groups established by governmental bodies in association with the business community, thus supporting socially important projects.

The Company takes part in parliamentary sessions and round table discussions 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.

In order to maintain a constructive dialogue with the government and cut administrative red tape, the Company's experts engage in draft regulation discussions held by community councils of the federal executive bodies, as well as in anti-corruption due diligence and regulatory impact assessments. This helps improve business climate.

In late 2021, the Company joined the Arctic Economic Council (AEC), an independent international business organisation created by the Arctic Council and representing the companies operating in the Arctic.

Local communities

When interacting with local communities, the Company focuses on collecting and taking into account all concerns of local residents on regional development and social projects. To that end, we organise targeted surveys, polls, focus groups, dialogue and other initiatives. We do our best to collect and take into account all the feedback from local residents on regional development and high-potential projects. Key parties to the dialogue are regional development centres established with Nornickel's support, such as the Norilsk Development Agency, the Second School Centre for social projects in the Pechengsky District, and the Monchegorsk Development Agency. For more details on these centres and our cooperation with local communities, please see the Development of Local Communities section.

Environmental protection dialogue

Environmental agenda is gaining momentum year after year, becoming the focus of stakeholder attention.

Our representatives are closely involved in developing key draft laws on environmental protection, control (including subsoil use), and economics.

Among other things, Nornickel interacts with its employees and local communities on environmental matters via volunteer movements. One of our major projects in this area is the Let's Do It environmental marathon bringing together thousands of our employees and local community members to support nature reserves, clean up certain areas, transplant young trees, and carry out other environmental initiatives.

Dialogue in public non-financial reporting

● GRI 102-43, 102-46

Each year, Nornickel engages in dialogues with stakeholders while drafting sustainability reports and conducts surveys to define the material topics.

As part of preparing the 2021 Sustainability Report, we held an online dialogue. Representing Nornickel were Andrey Bougrov, Senior Vice President for Sustainable Development, Stanislav Seleznev, Vice President for Ecology and Industrial Safety, and Svetlana Ivchenko, Head of the Sustainable Development Department.

In the course of the event, we presented the concept of the 2021 report and our strategy, updated to reflect the report's focus on the climate change. We also had our matrix of material and additional disclosures verified by the experts.

Public and media relations

Nornickel maintains a continuous commitment to enhancing transparency and information availability for all stakeholders.

The Company has in place the following key documents governing transparency:

- **Information Policy Regulations of MMC Norilsk Nickel;**
- **Procedure for the Interaction between MMC Norilsk Nickel's Officers and Russian and International Mass Media.**

In applying the information policy, the Company is guided by the principles of regularity, timeliness, accessibility, reliability, completeness, balance, and impartiality, all the while taking appropriate measures to ensure protection of its information resources.

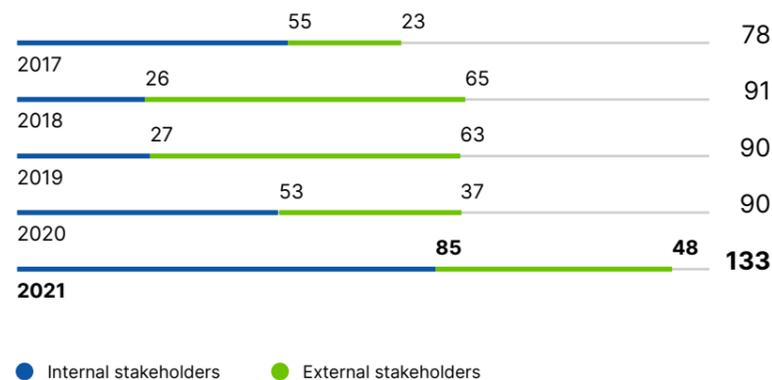
We stand by our commitments and go beyond the mandatory disclosure requirements. Nornickel timely responds to stakeholder requests to provide them with material information about its activities, while also making clear its standing on certain topics. We regularly inform the public about the Company's strategy and mission, policies, key events, and performance.

The key channels used to relay information to the stakeholders and the public are the Company's official website www.nornickel.com, press conferences, briefings, conference calls, and stakeholder meetings and dialogues. Apart from scheduled meetings, we make sure to clarify the Company's position on events (including emergencies) that call for comments as part of press conferences, briefings, or press releases. We have put in place an efficient media communications system.

In 2021, Nornickel was the top Russian metals and mining company in terms of mentioning in the media. Over the past year, the number of media publications about Nornickel decreased by 17.6% compared to 2020, which saw a spike in media attention towards the Company due to the incident at HPP-3 in Norilsk. In 2021, this topic continued to get a lot of media coverage, although the number of publications on it went down from 35% to 12%. The focus of publications shifted from the incident's adverse effect to the clean-up activities, studies, and development of the Company's facilities.

Throughout 2020, the media covered the Company's efforts to mitigate the incident's consequences, in particular the second stage of the Great Norilsk Expedition, infrastructure upgrade and development in Norilsk and the Norilsk Industrial District, and the Clean Norilsk programme.

Number of survey participants as part of the 2021 Sustainability Report campaign, ppl¹



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

ENVIRONMENTAL

E — ENVIRONMENTAL

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HPP-3 incident clean-up

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Climate change
and energy efficiency

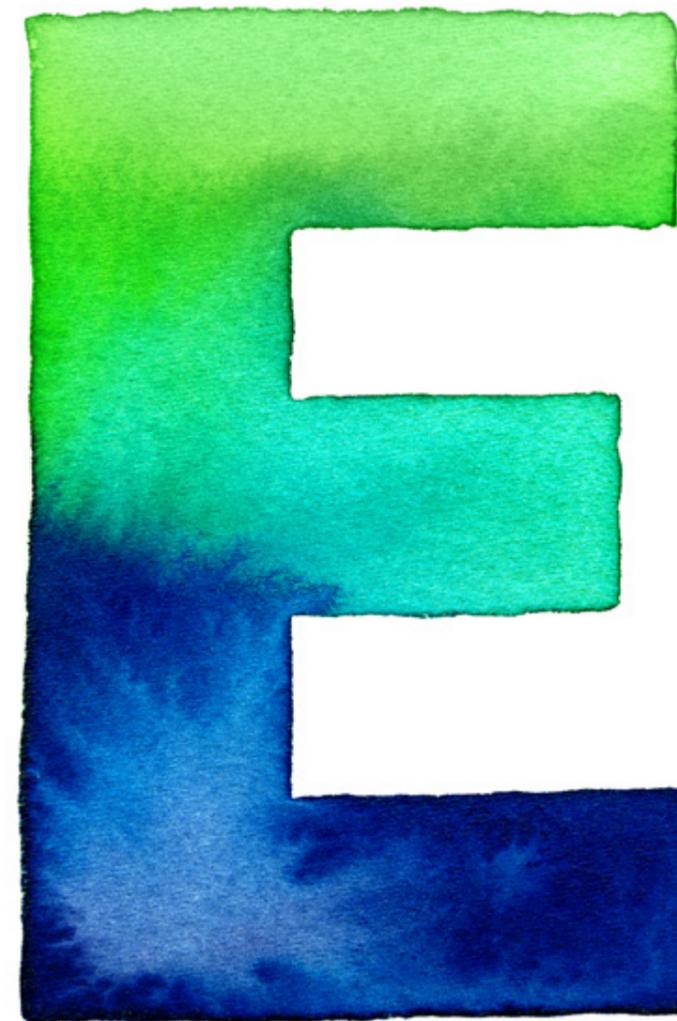
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Soil protection and responsible
mining

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ENVIRONMENTAL

Environmental management

Nornickel is committed to making a notable contribution to preserving natural riches and historical lifestyle across its footprint. The Company pays attention to environmental protection at each stage of production, takes all necessary efforts to reduce adverse environmental impact

and use natural resources sustainably. Nornickel complies with applicable laws and international standards.

In 2021, the Company elaborated and approved the Environmental and Climate Change Strategy to improve its environmental performance. The new strategy covers six key areas of environmental impact: climate change, air, water, tailings and waste, land, and

biodiversity, and takes due account of stakeholder expectations, involvement, and communications. The strategy defines 18 environmental and climate change objectives detailed in Nornickel's ESG Strategy section.

Nornickel has a system in place to distribute environmental responsibilities among different governance bodies in line with their competencies.

● GRI 102-26

Governance body	Responsibilities
Board of Directors	<ul style="list-style-type: none"> • approves environmental strategies and policies.
Sustainable Development and Climate Change Committee of the Board of Directors	<ul style="list-style-type: none"> • considers environmental and climate change issues, prepares recommendations for the Board of Directors.
Vice President — Ecology and Industrial Safety	<ul style="list-style-type: none"> • oversees preparation of initiatives and compliance with environmental laws; • assesses the environmental management system; • submits reports to the Board of Directors.
Environmental Department	<ul style="list-style-type: none"> • develops a policy to minimise the environmental impact and restore ecosystems in the regions of Nornickel's operations; • manages environmental risks effectively; • ensures compliance of the Company's operations with the applicable environmental laws, environmental policy and ISO 14001:2015; • reviews the Company's development projects from the environmental perspective.

Governance body	Responsibilities
Environmental Monitoring Centre	<ul style="list-style-type: none"> • conducts environmental safety audits directly at the Company's production facilities that (can) make an adverse impact on the environment; • develops and implements an automated environmental safety monitoring system; • controls the implementation of requirements and instructions of government supervisory bodies, and audits of compliance with the Company's internal requirements and the required environmental safety measures; • controls the implementation of environmental safety measures specified in design documents for capital construction, modernisation, and upgrade during construction, installation and commissioning works; • controls completeness of environmental emergency prevention plans, sufficiency of resources, and readiness to respond to emergencies and eliminate their consequences.
Inspection for Monitoring Technical, Production and Environmental Risks	<ul style="list-style-type: none"> • assures the accuracy of environmental, technical and production risks assessment in terms of their probability and impact under the applicable corporate procedures.
Production units	<ul style="list-style-type: none"> • implement environmental initiatives and prepare federal statistical and corporate reports.

Key environmental management regulations:

- Russian environmental laws;
- MMC Norilsk Nickel's Environmental and Climate Change Strategy;
- MMC Norilsk Nickel's Environmental Impact Assessment Policy;
- Renewable Energy Sources Policy;
- MMC Norilsk Nickel's Environmental Policy;
- MMC Norilsk Nickel's Climate Change 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
- Established maximum permissible environmental impact and its limits;
- Plans for reducing pollutant emissions;
- Plans for reducing pollutant discharges.

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.

Precautionary approach

● GRI 102-11

Assessment of potential impact of the Company's activity is a part of its risk management. 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.

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

Environmental management system

For over 15 years, Nornickel has been running an environmental management system as part of the Corporate Integrated Quality and Environmental Management System which covers production, project management, storage, supplies, and sales.

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 international standard.

In March–April 2021, the recertification audit of the environmental management system was held at the Head Office and production sites of Polar Division in Norilsk, Polar Transport Division in Dudinka, and Murmansk Transport Division in Murmansk. According to the auditors' conclusions, the Company showed successful implementation, maintenance, and constant improvement of the Corporate Integrated Management System, confirmed compliance with ISO 14001:2015, and received the compliance certificate for the next (sixth) certification period.

In November 2021, a surveillance audit was held to assess the performance of the Company's environmental management system and its compliance with ISO 14001:2015. The auditors highly commended the Company's Environmental Policy updated in 2021, which demonstrates leadership of the Company's senior management in addressing environmental issues.

Environmental protection expenditures

● GRI 307-1

Charges for violations of the environmental law imposed in 2021 exceeded RUB 146.2 bln, including the largest damages for diesel fuel spill at NTEC's HPP-3 in May 2020. The amount of environmental fines imposed on the Company in 2021 is below RUB 12 mln.

Environmental costs and expenditures, RUB mln

Expenditure item	2017	2018	2019	2020	2021
Current environmental protection expenditures	20,907.06	19,161.00	21,579.19	21,812.90	18,076.68
Capital investments to ensure environmental protection and sustainable use of natural resources	4,981.95	12,607.28	17,006.12	10,380.65	31,928.04
Charges for permissible and surplus emissions (effluents) and disposal of production and consumption waste	626.79	695.18	886.90	2,420.83	2,563.56
Charges paid by the Company to remedy damages arising from noncompliance with environmental laws (excluding environmental fines)	244.31	1.53	0	8.49	146,205.23
Environmental expenditures and costs	26,760.22	32,464.99	39,472.21	34,622.91	198,773.51

Environmental impact indicators

Item	UoM	2017	2018	2019	2020	2021
Air pollutant emissions	t / RUB mln ¹	3.44	2.64	2.22	1.75	1.25
Water withdrawal	thousand m ³ / RUB mln	0.63	0.49	0.36	0.34	0.26
Water consumption	thousand m ³ / RUB mln	2.50	1.94	1.53	1.31	0.97
Effluents	thousand m ³ / RUB mln	0.28	0.23	0.16	0.18	0.15
Pollutants in effluents	t / RUB mln	0.40	0.32	0.24	0.22	0.18
Waste generation	kt / RUB mln	0.06	0.04	0.04	0.13	0.12

¹ All figures in the table are given per RUB mln of consolidated revenue.

HPP-3 incident clean-up

On 29 May 2020, an incident occurred at NTEC's HPP-3 with 21.2 kt of diesel fuel flowing out on the adjacent area and into the Bezymyanny Stream.

The failed tank No. 5 was commissioned in 1985.

Independent investigation by ERM consulting company revealed that the incident was caused by a combination of factors that led to sinking of several piles in the base of fuel storage tank No. 5:

- violations during construction (completed in 1985): several piles were found to be shorter than the design length and were not installed into the bedrock under the fuel storage tank in violation of the design;
- permafrost thawing as a result of climate change.

During the clean-up, the Company published unbiased updates on the spill and all clean-up activities on its website in real time. World-class experts were invited to Norilsk to assess the causes and contributing factors of the diesel fuel spill and provide recommendations on prevention of such incidents in future. For more details on HPP-3 incident, please see the [White Paper](#), a special report prepared by the Company in 2021.

Clean-up efforts and their results

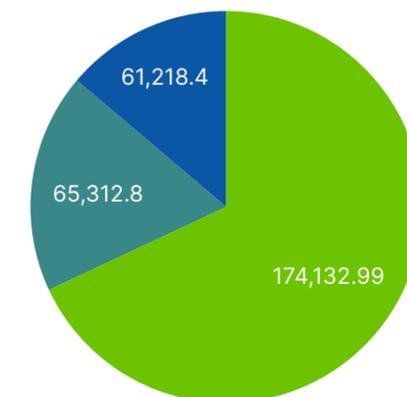
2020

- Soil at the industrial site adjacent to HPP-3 was excavated to the permafrost level and a waterproof layer was arranged. The contaminated soil was taken to dedicated sites and replaced with rock backfill. Special artificial watercourses were created to intercept residual petroleum products using sorbents.
- Measures were taken to contain the spill within the Ambarnaya River delta and prevent it from spreading to Lake Pyasino.
- 25,586 m³ of petroleum products were collected from the surface of the water bodies. The collected water and fuel mixture was transported to a temporary storage facility and separated into water and diesel fuel. The treated water was reused in the facility's water recycling system.
- The soil was flushed to a depth of 60 cm to clean the contaminated bank lines, and the flushed petroleum products were collected using various sorbents. In total, a bank area of 32,539 m² was cleaned up.
- Oil product waste collected during the clean-up is treated using the best available technologies to treat and dispose of oil-containing waste by a biological method.

2021

- A special site to dispose of the oil-contaminated soil was set up and approved by Rosпотребнадзор.
- The oil-contaminated soil was transported from the temporary storage and distributed for further recycling. In total, 127.5 kt of soil was transported.
- With the onset of 2021 spring floods, the Ambarnaya River saw containment booms installed to prevent any residual petroleum products from potentially getting into the river. Maintenance of the containment booms during the entire field stage of works in 2021 did not reveal any sign of their contamination with petroleum products.
- An inspection was carried out to review and amend the land rehabilitation programme. The area of contaminated land to be rehabilitated totalled 239,600 m², and the area of disturbed land — 510,000 m².
- In accordance with the rehabilitation programme, the surface soil was treated and a fertile layer was created by introducing peat and sowing permanent grasses in a contaminated area of 174,300 m² and disturbed land of 300,900 m². Rehabilitation efforts will continue in 2022.

Contaminated land, sq m



- Completed in 2021
- Scheduled for 2022
- Self-regeneration land

- Measures were taken to restore aquatic biological resources, including release of fry into water bodies to maintain the population of rare fish species. Construction of three fish breeding facilities is being explored. The project for remediation of damage to wildlife and other environmental components that was caused by the accidental fuel spill is also being carried out.
- As part of the programme for monitoring natural environment as well as to inspect pollutant behaviour, Nornickel collected samples from surface water bodies, bottom sediments, and soil for further laboratory testing. The Ministry of Environment Protection and Natural Resources of the Krasnoyarsk Territory also carried out laboratory tests which revealed that the presence of petroleum products is within the standard limits for content of residual petroleum products in soils.
- Rosprirodnadzor's claim regarding damage to soil and water, as well as requirements of the Ministry of Environment Protection and Natural Resources of the Krasnoyarsk Territory in connection with damage to wildlife were settled. The Company and the Rosrybolovstvo are also negotiating compensation in kind for the damage to water bodies.
- To prevent such incidents in future, a new system was implemented to monitor foundations built on permafrost soils. The real time foundation monitoring system is being designed and rolled out, and a comprehensive, long-term effort in monitoring assets to assess the impact of permafrost thawing in the Norilsk Region is being taken.

2022 (plan)

- Disposal of oil-contaminated soil.
- Agrotechnical operations and vegetative amelioration to improve soil agrophysical, agrochemical, and biochemical properties after spring floods according to the rehabilitation programme.
- Inspection of the area to assess efficiency of the rehabilitation operations and dynamics of contaminated and disturbed land restoration (in spring and autumn).
- Control over remediation works under the rehabilitation programme.
- Sampling of surface water bodies, bottom sediments, and soil under the programme for monitoring natural environment within the area polluted as a result of the diesel fuel spill.

Following the fuel spill clean-up, the Company conducted a large-scale ethnological expedition to support the indigenous peoples of Taimyr, engaging world-class experts and scientists. The accumulated data helped assess the ethnic and social, as well as economic status of the indigenous peoples of Taimyr and identify their development potential. Based on the results of the ethnological assessment, in 2020, the Company launched a five-year Programme to promote the social and economic development of Taimyr until 2024, with funding totalling around RUB 2 bn. It stimulates the economic activity of indigenous minorities and facilitates the recovery of renewables being the resource base underlying their traditional lifestyle and trades. For more details, please see the Interaction with Indigenous Northern Minorities section.

Great Norilsk Expedition

To work out effective and sustainable ways of addressing environmental challenges and restoring the areas affected by the fuel spill and prepare recommendations on how to minimise the environmental impact of operations in the Arctic, Nornickel and the Siberian Branch of the Russian Academy of Sciences completed the first stage of the Great Norilsk Expedition in 2020 (for more details, please see the [White Paper](#)).

In 2021, the Great Norilsk Expedition carried out fieldwork in June–October and desktop studies in November, and summed up the preliminary results in December.

In the course of four months, the researchers used water samples to examine the evolution of hydrocarbon makeup and track changes in its gross share. The detailed study covered all of the affected area's water bodies, including the Bezymyanny (Nadezhdinsky) Stream, Norilskaya, Daldykan and Ambarnaya rivers, Lake Pyasino and Pyasina River, as well as surrounding areas (Melkoye and Lama lakes, Boganida River and the adjacent plateau). In addition, the scientists studied the composition of soils on all floodplain territories and analysed their biodiversity.

Fish population assessment became one of the key focus areas of the Great Norilsk Expedition in 2021. The indigenous minorities of the North made a valuable contribution to the research by assisting scientists from the Siberian Branch of the RAS in collecting samples from the northern districts.

Key conclusions of the Great Norilsk Expedition in 2021:

- **Booms are efficient, and they are recommended for further use during spring floods;**
- **Rehabilitation measures are efficient;**
- **The general environmental impact of the diesel fuel spill abated;**
- **Considerable self-regeneration capacity of ecosystem when introducing biologicals is confirmed.**

In 2022, environmental remediation activities in the scope of the Great Norilsk Expedition will continue, including assessment of environmental recovery, risks associated with repeated contamination in the result of snowmelt and spring flood, ichthyofauna, biodiversity, and permafrost studies.

Climate change and energy efficiency

Climate change

Our approach to climate change

Climate change is one of the top items on the UN 2030 Agenda for Sustainable Development. Nornickel recognises the need for a response to the threat of climate change across all areas of society and the economy, for supporting the goals of the Paris Agreement to limit the increase in the global average temperature to below 2°C, and for efforts to limit the increase to 1.5°C.

It is our absolute priority to adapt to climate change by using a comprehensive approach and facilitating large-scale implementation of innovations in technology, organisation and management. We contribute to the global climate change agenda by:

- implementing our own strategy to increase the output of metals needed for the global energy transition, as well as boost their supply to the domestic and international markets;
- upgrading production facilities using best available technologies and advanced environmental solutions;
- keeping CO₂ emissions at one of the lowest levels among global diversified metals and mining players;
- developing renewable energy;
- ensuring resilience to climate risks, including by providing climate risk monitoring support and investing in housing and social infrastructure across the Company's footprint.

As its operations are largely concentrated in the Arctic, Nornickel focuses on cooperating with government authorities and the scientific community, supporting and promoting 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.

On top of that, we are actively involved as an expert in creating and promoting federal laws and provide expert and methodological assistance to other industry players in order to share experience and develop the best solutions to achieve the Paris Agreement's goals.

To that end, Andrey Bougrov, Senior Vice President for Sustainable Development at Nornickel, became an actively involved member of the Climate Policy and Carbon Regulation Committee of the Russian Union of Industrialists and Entrepreneurs. The Committee acts as an intermediary between the business community and federal regulators, articulates recommendations and proposals on the nation's climate policy, and is deeply involved in GHG emissions and absorption matters, including reporting, guidelines, standardisation, certification, verification, and green finance.



Climate change management

● SASB EM-MM-110a.2

Climate change management goals and principles are embedded in a number of Nor Nickel's strategic documents and policies approved by the Company's Board of Directors. For instance, the key principles and responsibilities in this field are set out in PJSC MMC Norilsk Nickel's Climate Change Policy¹. Our climate targets and key initiatives are regulated by the Environmental and Climate Change Strategy². Other by-laws related to the topic include the Environmental Policy and the Renewable Energy Sources Policy³.

Responsibilities

The Board of Directors is responsible for overseeing climate management, including the approval of the climate change policy, strategy⁴, and risk appetite, as well as monitoring climate risk management. In order to ensure a deeper focus on climate change, in 2021 the Board created the Sustainable Development and Climate Change Committee led by the Chairman of the Board of Directors⁵.

At the management level, climate change matters are reviewed and overseen by the Risk Management Committee of the Management Board led by the Company's President. Information on key risks, including those related to climate change, is reviewed on a quarterly basis.

Senior Vice President Sustainable Development is in charge of the Company's sustainable development policy, including climate change. Dedicated units of the Head Office, branches and Group companies are responsible for certain aspects of the climate change policy and strategy within their scope⁶.

Nornickel's roadmap to comply with the TCFD recommendations

In 2021, Nornickel approved, based on an order of the Senior Vice President for Sustainable Development, the Roadmap to Fulfil TCFD Recommendations for 2022 – Q2 2023. The document includes

over 50 measures aimed at bringing the Company's climate risk management, strategic and operational management of climate change matters, and targets, indicators and reporting in line with the TCFD recommendations and relevant global best practices.

The Company's key climate change principles, goals and commitments

Goals and commitments

Provide people with clean products reducing the carbon footprint of the global economy: by 2030, Ni production is planned to grow by 20–30%, Cu — by 20–30%, and Pt+Pd — by 40–50% compared to 2017

Ensure that climate factors are taken into account as part of our risk management system

Keep working to cut long-term GHG emissions across the value chain, from suppliers to customers

Strive to increase the share of low-carbon energy consumption

Promote low-carbon transition by supporting R&D to search for, and scale up, innovative solutions and encouraging intra- and cross-sectoral dialogue on climate change

Comply with globally recognised climate disclosure standards

Climate change 2030 targets

Reduce Scope 1+2 GHG emissions by 25% to 7.7 mtpa by 2028 taking into account the expected production growth and Sulphur Programme 2.0

Reduce carbon intensity from operations by 37%⁷ to 5.0 t of CO₂ equivalent per t of Ni equivalent by 2028

Core elements of the Roadmap to comply with the TCFD recommendations

Dimension	Key measures and projects
Corporate governance	<ul style="list-style-type: none"> Strengthening the role of the Board of Directors and top management in managing climate change-related issues, regular monitoring of climate risks, and overseeing the implementation of key mitigants Building an organisational structure of climate risk management and improving the Company's regulations and guidelines
Corporate strategy and financial planning	<ul style="list-style-type: none"> Analysing the impact of physical and transition risks on the corporate and sales strategies, operations, financial planning, supply chain, revenue, OPEX, CAPEX, etc. Considering these factors as part of strategic planning Analysing the resilience of the Company's strategy when it comes to climate change scenarios, including the less than 2°C warming by 2100 scenario
Risk management	<ul style="list-style-type: none"> Integrating physical and transition risks into corporate business processes. Keeping risk owners abreast of climate risk factors Implementing procedures and methods of qualitative and quantitative assessment of physical and transition risks, as well as internal audit processes to manage these risks
Goals and targets	<ul style="list-style-type: none"> Calculating and disclosing the carbon footprint generated during production Calculating and disclosing Scope 1, 2 & 3 GHG emissions Calculating internal carbon pricing Regularly updating and disclosing goals and target indicators used by the Company to measure progress in implementing the climate strategy

¹ For more details, please see the corporate website at https://www.nornickel.com/upload/iblock/5f0/PJSC_MMC_NORILSK_NICKEL_s_Climate_Change_Policy.pdf

² Approved by the Board of Directors on 1 June 2021. For more details, please see the corporate website at https://www.nornickel.com/upload/iblock/7b2/Norilsk_Nickel_Environmental_Strategy_2021_en.pdf

³ The documents are available at the corporate website at <https://www.nornickel.com/investors/disclosure/corporate-documents/#corporate-codes-and-policies>

⁴ Hereinafter — part of the Environmental and Climate Change Strategy.

⁵ For more details on the composition of the Board of Directors and its committees and their performance in 2021, please see the Corporate Governance section of this Report.

⁶ 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 at https://www.nornickel.com/upload/iblock/5f0/PJSC_MMC_NORILSK_NICKEL_s_Climate_Change_Policy.pdf

⁷ From the 2020 baseline. For more details on climate change projects, please see the Climate Change section.

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

2021 — results	2022 — plans	2023 — plans
<ul style="list-style-type: none"> Sustainable Development and Climate Change Committee of the Board of Directors PJSC MMC Norilsk Nickel's Climate Change Policy developed and approved by the Board of Directors Roadmap to Fulfil 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 in Norilsk Division 	<ul style="list-style-type: none"> Prepare climate scenarios and conduct scenario analysis of climate change risks and opportunities Scale up the project to assess physical risks across all Divisions Develop a permafrost programme Develop a corporate decarbonisation strategy Calculate the internal carbon price Integrate estimates of products' carbon footprint into strategic planning processes Calculate upstream Scope 3 GHG emissions Enhance public climate change disclosure based on TCFD recommendations 	<ul style="list-style-type: none"> Fully integrate climate change risks into corporate business processes Develop detailed plans to mitigate climate change risks (for individual production assets as well) Factor new standards and business practices into business processes Publish a dedicated public climate change report Cooperate and enter partnerships to promote the climate agenda in the professional community

Climate change impact on Nornickel's strategy

Resilience of Nornickel's strategy against climate change risks

● GRI 102-15, 201-2

Based on TCFD recommendations, the Company defines two main categories of climate change risks:

Physical risks

Their impact may manifest in the form of weather anomalies or irreversible changes of climatic conditions. Physical climate change effects may include permafrost thawing, changes of water levels in water bodies, precipitation volumes, wind loads, and other climate risk factors, which may have a material adverse impact on operations.

Transition risks

Associated with the transition to a low-carbon economy. The Company categorises as transition risks the respective political, regulatory, technological, market, and reputational risks.

Impact of physical risks:	Impact of transition risks:
<p>In 2020–2021, following the HPP-3 incident, the Company reassessed physical risks related to permafrost thawing in the Norilsk Industrial District and increased their materiality.</p> <p>Research conducted together with Russia's leading scientific organisations showed these risks to be significant, and the Company developed a set of management initiatives that include:</p> <ul style="list-style-type: none"> strategic investment programme to upgrade the energy infrastructure with planned investment of over RUB 600 bn; development and implementation of a system to monitor the foundations of buildings and structures. 	<p>Nornickel views risks associated with increased regulatory pressure vis-à-vis the carbon footprint of its output as an opportunity to make its products more competitive, given the Company's strong position in the market in terms of this measure.</p> <p>The proposed Carbon Border Adjustment Mechanism for the European Union does not apply to metals produced by Nornickel.</p>
Market opportunities presented by physical risks:	Market opportunities presented by transition risks:
<p>A long-term effect of physical risks on the Company's strategy under the 2°C global warming scenario would be more severe shortages on the global market and higher prices for the Company's products triggered by a possibly higher sea level and subsequent flooding of a number of production facilities in Southeast Asia.</p>	<p>Risks related to global decarbonisation and energy transition projects generally represent opportunities for the Company to increase production and shareholder value on the back of forecast significant growth in demand for its core products.</p> <p>These opportunities and related forecasts are described in more detail further in the Report, as well as in the Strategy of Sustainable Growth section.</p>

Project to assess physical climate change risks

In 2021, Nornickel launched a large-scale project to assess physical risks related to climate change.

In 2021, climate change was modelled in the Norilsk Industrial District until 2050, based on three global climate scenarios of the Intergovernmental Panel on Climate Change.

The analysis covered three baseline scenarios: SSP5-8.5, SSP2-4.5, SSP1-2.6 (compliance with the Paris Agreement scenario).

To this end, we engaged climate scientists from the Obukhov Institute of Atmospheric Physics of the Russian Academy of Sciences, who conducted a pilot assessment and formed a register of physical climate change risks for a number of facilities in the Norilsk Division, and drafted a methodology for quantitative risk assessment. To this end, we engaged climate scientists from the Obukhov Institute of Atmospheric Physics of the Russian Academy of Sciences, who conducted a pilot assessment and formed a register of physical climate change risks for a number of facilities in the Norilsk Division, and drafted a methodology for quantitative risk assessment.

In 2022, we plan to carry out a qualitative and quantitative (including the possible impact on the Company's financial performance) physical risk assessment for other assets of the Norilsk, Kola and Zabaykalsky divisions.

Registers of relevant risks will be compiled to further develop mitigation and adaptation measures.

Nornickel opportunity: impact of decarbonisation on the growth of demand for the Company's metals

Nornickel's strategic development is largely geared towards facilitating global transition to green transport, promoting renewables, and ensuring long-term competitiveness of the Company's products through keeping GHG emission intensity relatively low, increasing energy efficiency, and mitigating physical risks with due account for climate factors.

According to an International Energy Agency forecast, the total market size of critical minerals will grow almost sevenfold between 2020 and 2030 in the net zero pathway, which creates substantial new opportunities globally for mining companies¹. The Agency's sustainable development scenario projects substantial evolution

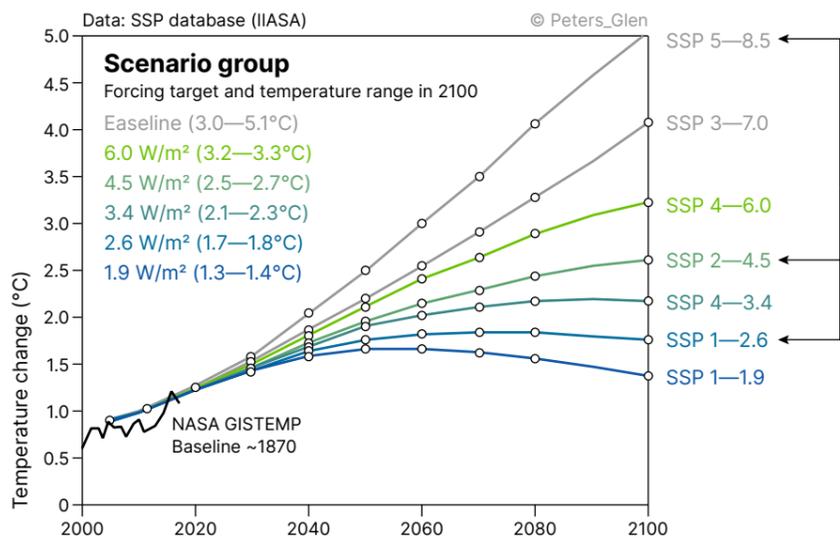
of the car market structure by 2030: electric vehicles (EVs) — 14%, internal combustion engine vehicles (including hybrids) — 86%, while by 2040, this breakdown may stand at 31% and 69%, respectively. CO₂ emission targets for passenger vehicles are forecast to go down from 3.6 bt in 2019 to 2.9 bt in 2030 and 1.4 bt in 2040.

According to Nornickel estimates, which take into account LMC Automotive and Bloomberg projections, the share of EVs and hybrids in car manufacturing may reach 36% as early as 2025.

If the strategic target is achieved, by 2030 Nornickel may supply enough PGMs to the global market to produce 25–40 mln catalysts for cars. Increased production of high-quality nickel may enable the manufacturing of 3.5–5.5 mln EV battery packs, which could translate into a 50–100 mt reduction of global CO₂ emissions.²

¹ Source: Net Zero by 2050: A roadmap for the global energy system — <https://iea.blob.core.windows.net/assets/4482cac7-edd6-4c03-b6a2-8e79792d16d9/NetZeroBy2050-ARoadmapfortheGlobalEnergySector.pdf>

² For more details on the impact of climate change trends on the markets of the Company's core metals, please see slides 62–84 of Nornickel's 29 November 2021 Strategy Day presentation at: <https://www.nornickel.ru/files/ru/media-library/presentation/strategy-day-presentation-2021.pdf>



Analysis scope:
SSP 5—8.5
SSP 2—4.5
SSP 1—2.6

The crucial climate change factors affecting the demand for the Company's key products³

	2040:	Ni	PGM	Cu
Growth of BEVs market share		↗	↘	↗
Growing hybrid vehicle market		↗	↗	↗
Growing fuel cell market		→	↗	→
Growth of renewables / low carbon fuel in power generation		↗	↗	↗
Storage and grid expansion to support growth in EVs		↗	→	↗
Net impact		↗	→	↗

³ The analysis is based on the 1.5 °C global warming scenario of the International Energy Agency.

Market research and sales prospects for Nornickel's metals in the automotive market until 2025⁴

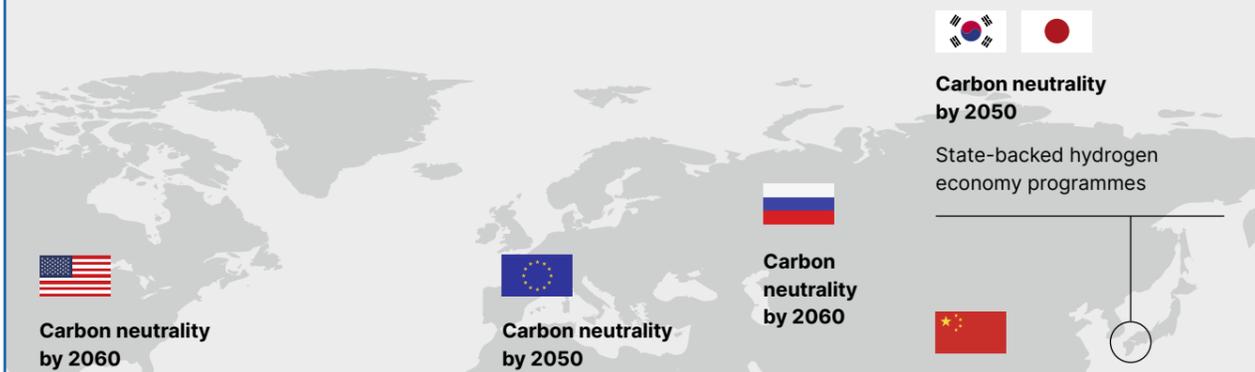
	Gasoline vehicles	Diesel vehicles	Hybrid vehicles (incl. PHEV)	Electric transport (BEV)	Hydrogen vehicles (FCEV)
CAGR ⁵	0%	0%	+24%	+36%	+43%
Market share ⁶	52%	11%	22%	14%	<1%
Nickel	Stainless steel and other parts		+ batteries		—
Weight per vehicle	2-4 kg	2-4 kg	5-15 kg	30-110 kg	2-3 kg
Copper	Cables and other parts		+ electric motors, generator windings, charging infrastructure		
PGM	Catalysts				Fuel cells
Weight per vehicle	2-5 g	3-6 g	4-10 g	—	25-35 g
Price of the metals per vehicle ⁸	USD 410-1,020	USD 340-610	USD 770-1,610	Up to USD 3,300	Up to USD 2,000

⁴ Sources: Company estimates, LMC Automotive, Bloomberg.
⁵ CAGR estimate for 2020–2025.
⁶ In 2025, based on manufacturing volumes.
⁷ In 2025, based on manufacturing volumes.
⁸ Based on the spot price as at 25 January 2022.



Key drivers of the demand for Nornickel's products. International CO₂ reduction agenda

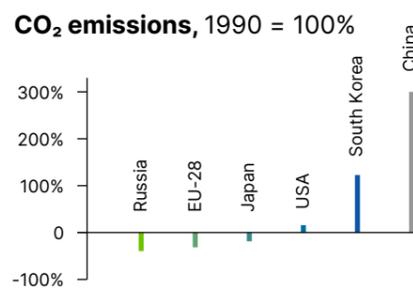
COP26. The initiative to completely decarbonise road transport by 2040 was supported by 38 countries (only 16% of auto market²) and 11 automakers, but the resolution was not signed, among others, by the USA, China, Germany, VW, Toyota, Stellantis, Renault-Nissan and Hyundai-Kia



- Rejoined the Paris Agreement
- Approved USD 1.2 tn in investment under Biden's "Build Back Better" plan, including USD 7.5 bn in funding for an EV charging network under the Bipartisan Infrastructure Deal
- 2030 CO₂ emissions target: 50% reduction

- Proposal to eliminate CO₂ emissions from transport, i.e. zero ICE sales by 2035
- CBAM introduced for some materials starting 2023¹
- 20+ battery gigafactories by 2025 announced
- EUR 1 tn of investment over 10 years under the European Green Deal

- CO₂ quotas trading mechanism launched in 2021
- NEV sales target: 20% in 2025 and 50% by 2035, with the rest of autos being hybrids



Source: Company estimates

¹ Nornickel's metals are not subject to the proposed Cross Border Adjustment Mechanism.

² Based on automotive production in countries that signed the agreement as a portion of global automotive production in 2021.

Potential for entry into new sales sectors

The growing demand for batteries and the increased need of European battery manufacturers to have a supply of feedstocks with a low carbon footprint open up opportunities for Nornickel to integrate deeper into new value chains. To embed itself into the European battery sector, Nornickel plans the following:

- analysing the demands of potential customers in the context of establishing a foothold in the battery feedstocks market;
- increasing the output of nickel that is fit for use in Finland's growing ecosystem that produces battery feedstocks;
- looking to widen capabilities through research and partnerships to promote integrated solutions for a future battery supply chain.

Strategic emphasis on low-carbon products

Already in the mid-term, the integration of responsible practices into production and the need to decrease the carbon footprint will materially boost the competitiveness of Nornickel's products in target markets.

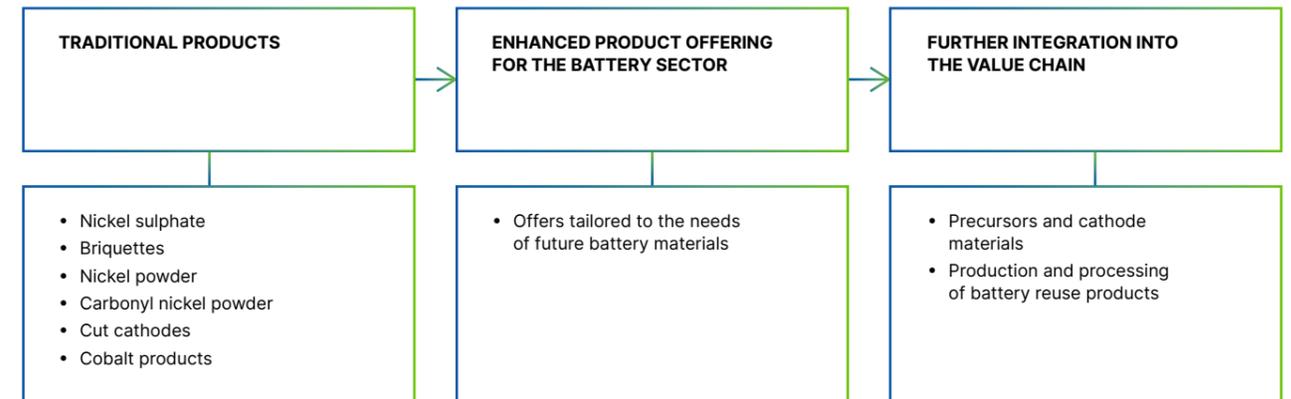
The Company already boasts a pole position in terms of absolute and specific GHG emissions, which are some of the lowest among international metals and mining peers.

In 2021, Nornickel conducted its first assessment of the per-unit carbon footprint for the entire metals basket, based on the calculation methodology developed in accordance with life cycle-based international standards (LCA ISO 14040/14044). The methodology had been certified by a recognised

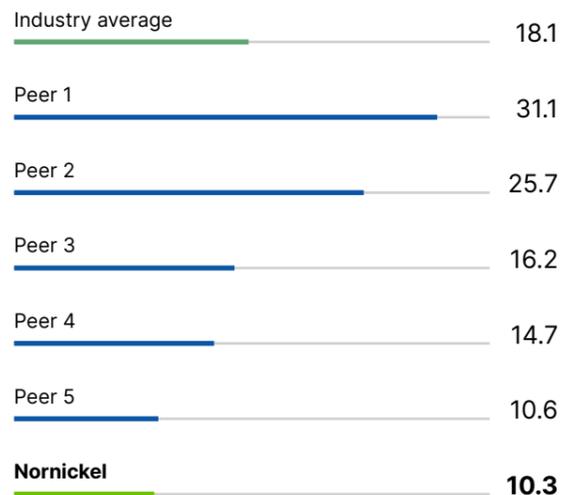
international LCA expert in metals and mining — Sphera Solutions GmbH, and 2020 carbon emissions per unit of product were calculated and certified by Ernst & Young (EY).

The carbon footprint of refined nickel produced by the Company amounted to 8.1 t of CO₂ equivalent per tonne — far below the industry average.

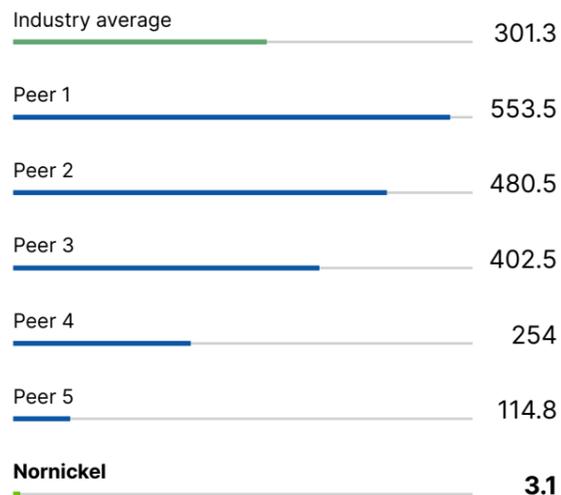
Transformation of Nornickel's product basket



GHG emissions (Scope 1 and 2),
mt of CO₂ equivalent¹



GHG emissions (Scope 3),
mt of CO₂ equivalent¹

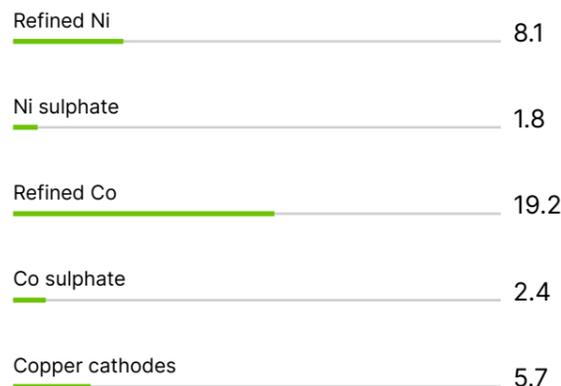


¹ Sources: Company analysis, peers – latest available data (2019–2020). The comparison includes leading global diversified metals and mining companies such as BHP Billiton, Rio Tinto, Vale, Glencore, and Anglo American. For Nornickel's Scope 3 emissions, only downstream supply chain data are provided.

Global Warming Potential (100 years)
based on ISO 14044,
kg CO₂e per kg of metal



Global Warming Potential (100 years)
based on ISO 14044,
kg CO₂e per kg of product



Global Warming Potential (100 years)
based on ISO 14044,
semi-products



● Nornickel 2020

Figures include the Company's estimated prospective GHG emissions associated with the implementation of Sulphur Programme 2.0.

Production of carbon-neutral nickel

In 2021, Nornickel started producing carbon-neutral nickel. The first batch of carbon-neutral products was put out by the Group's Kola Division and totalled 5 kt of nickel cathodes.

Replacement of hydro turbines and thermal power generation units, upgrade of heating systems and power equipment, and improvement of insulation allowed Nornickel to reduce GHG emissions by 48 kt of CO₂ equivalent in 2019–2020, which has been independently verified by EY.

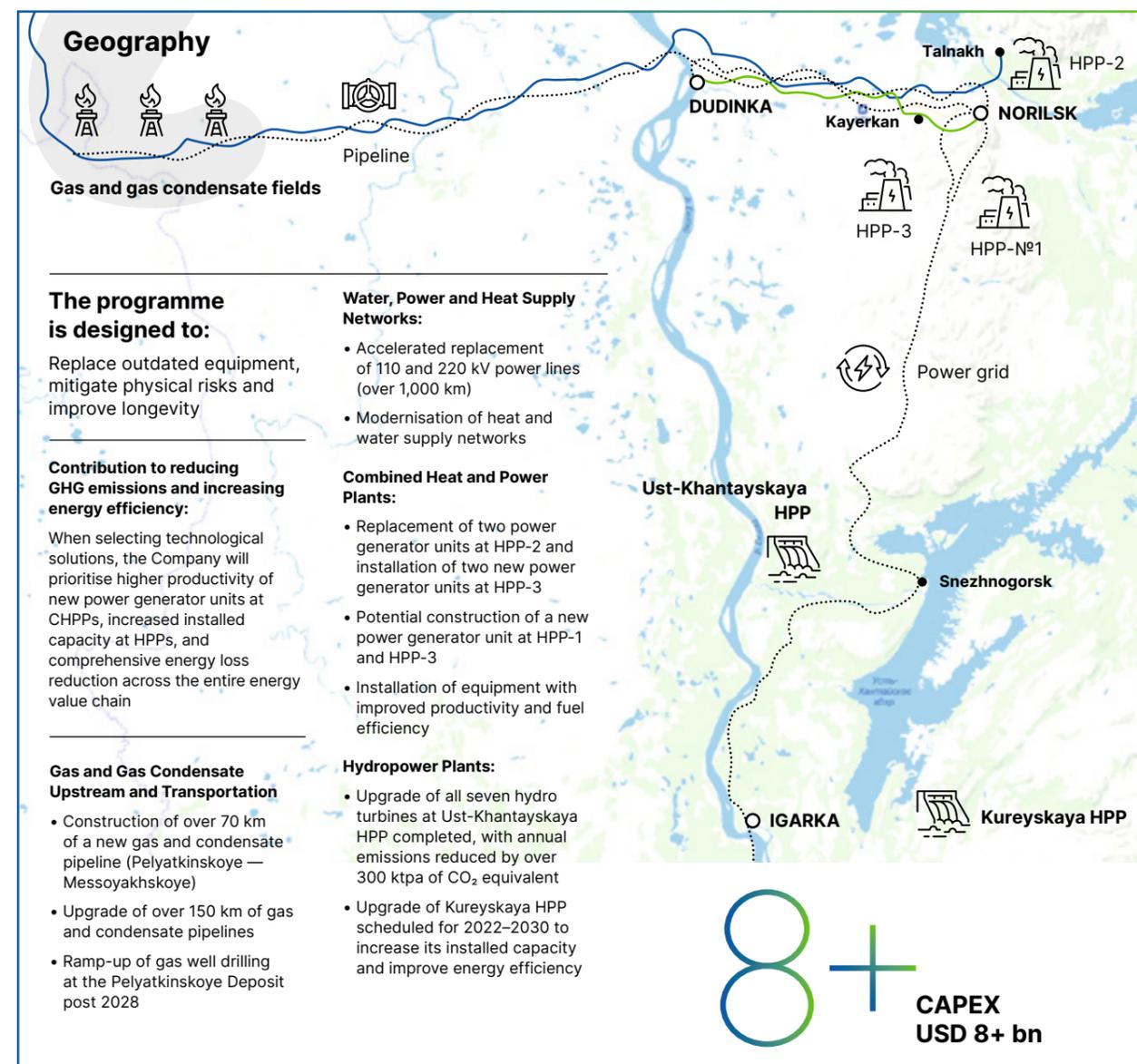
Further initiatives to reduce GHG emissions that are slated for 2021–2025 will make it possible to produce over 40 kt of carbon-neutral nickel until 2025.

Energy infrastructure modernisation

To contribute to the climate change agenda, mitigate physical risks related to permafrost thawing, which had been moved to the front burner, and meet the newly set strategic targets to reduce specific GHG emissions, Nornickel included in its updated Strategy 2030 a large-scale RUB 600 bn investment programme focused around a comprehensive upgrade of the Norilsk Industrial District energy infrastructure and renewables development.

The programme provides for, among other things, the replacement of equipment at heat and hydro power stations (including increasing installed hydropower capacity), upgrade of heat transmission, power transmission lines and gas pipeline systems, and modernisation of fuel storage tanks.

Plan for energy infrastructure modernisation





Climate change risk management

● GRI 102-15, 201-2

Nornickel recognises the need to maintain resilience to climate change risks by taking measures to adapt, managing GHG emissions in line with the announced targets, and harnessing innovations to brace for future challenges.

Our risk management practices include measures to track climate changes and limit their impact on the Company's targets indicators. The Company's governance bodies receive quarterly reports on key risks, including those related to climate change.

Risk of permafrost thawing

Soil thawing is the key climate change risk faced by the Company as it causes loss of bearing capacity, which may subsequently lead to the destruction of buildings and structures.

The 2020 fuel spill at HPP-3 exposed the climate change-induced geocryological factor as one of the two main causes that with a high likelihood led to the incident.

Nornickel is faced with a unique and complex challenge of managing conventional climate risks while also having to study the Arctic Zone's distinctive climate change processes and their consequences for permafrost soils, as well as project future developments and incorporate these risks into management decision-making.

In 2021, the Company's risk management initiatives and achievements included:

- Nornickel is developing a multi-level geotechnical monitoring system that would include, among other things, satellite remote sensing;
- satellite imaging (optical and interferometry) of the Norilsk Industrial District performed, with the images interpreted and data on vertical and horizontal displacement of structures obtained;

- the Company retrofitted the Buildings and Structures Monitoring Centre in Norilsk, and increased and reinforced its staff. In 2019, the Centre was responsible for geotechnical monitoring and inspection of 223 foundations and piles of structures, and in 2021 this number almost doubled. The Company introduces new methods of soil study, nondestructive testing and measuring, including georadiolocation, electromagnetic soil surveys, seismoacoustic surveys of buildings and structures, 3D laser scanning of buildings, etc.;
- the Company made significant progress in the dialogue with the professional and academic communities. As part of its first and second stages in 2020–2021, the Great Norilsk Expedition did a wide range of engineering, geocryological, soil, hydrobiological, and other studies. The expedition's primary goals were to investigate the causes of the diesel fuel spill and provide an evidence-based picture of the actual contamination and environmental damage. The research yielded new data that will help mitigate the risk of incidents caused by geocryological factors and processes;
- Nornickel is working to design and build new diesel fuel tanks to replace those at NTEC's HPP-3 that had been decommissioned and dismantled. Simultaneously, the Company is engaged in a large-scale, in-depth engineering and geological survey of the area's geocryological properties taking into account climate risks. We are also considering foregoing the use of diesel fuel as HPP backup fuel to fully eliminate the spill risk;
- the Company is planning to develop a digital twin of Norilsk to create short-, medium-, and long-term models for managing risks under various climate scenarios.

Insufficient water resources is another significant risk related to climate change. For more details on the assessment and management of these risks, please see the Risk Management section.

Assessment of climate change impact on tailing dumps

To minimise the Company's risks and ensure that the necessary timely measures are taken to respond to possible changes in the condition of the Company's tailing dumps, the first stage of work was performed seeking to look into 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). This resulted in the development of climate change models for the period through 2050 in the Norilsk Industrial District.

The forecast until the middle of the 21st century is based on the ensemble averaging of calculations by using 40 CMIP5 generation climate models for two greenhouse gas emission scenarios, RCP8.5 and RCP4.5. The forecast is for an increase in air temperature, snow cover depth, and summer precipitation by the middle of the 21st century versus the baseline period of 1981–2005. For quantitative prediction of climate-driven changes in factors affecting the safety of tailing dumps, calculations will be carried out by using a non-stationary permafrost soil model.

Geotechnical monitoring of buildings and structures

The project aims

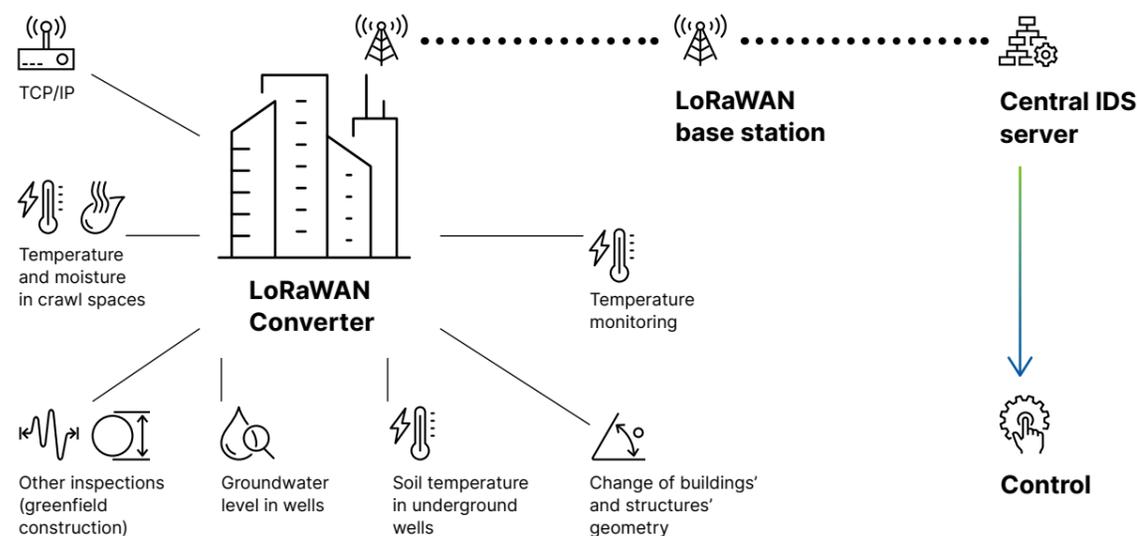
To outfit around 1,500 facilities, including tanks, pipelines, production sites and administrative buildings, with real-time alert sensors connected to the IDS.

The monitoring is done using various types of sensors that enable us to monitor the temperature condition of wells or along long linear facilities; pressure sensors to determine the level of groundwater; water level sensors and inclinometers to measure deformation of structural components of buildings; strain gauges to determine strain in steel constructions; satellite monitoring system to track movements of elements using the GLONASS satellite navigation system and other technical means.

Key results for 2021:

- the Buildings and Structures Monitoring Centre of Norilsk Division, which is responsible for engineering and geological monitoring and technical audits, was upgraded, and its staff was increased;
- over 1,200 sensors were installed at 39 fuel storage tanks and 115 other buildings and structures in Norilsk, including over 400 temperature sensors, over 700 inclinometers, and over 100 moisture and temperature sensors. All data is collected and analysed in real time within a centralised monitoring system;
- 417 new wells were drilled to install temperature sensors and monitor the temperature and moisture of foundation soils underneath buildings in real time;
- a pilot project was completed to monitor 11 tanks at backup diesel fuel facilities of NTEC's HPP-1, HPP-2 and HPP-3;
- technical inspections of crawl spaces were carried out (over 800 facilities vs almost 700 in 2020);
- geodetic measurements identifying deformations of structural parts of buildings and structures were taken (over 11,000 points of measurement vs 6,000 in 2020).

Process flowchart for online monitoring systems



Greenhouse gas emissions and energy efficiency

The Company has established a regular practice of assessing emissions (Scope 1 and 2) in accordance with the GHG Protocol methodology. The calculation of GHG emissions for the Group takes into account the following greenhouse gases: carbon oxide (CO₂), nitrous oxide (N₂O), methane (CH₄), 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 Sulphur Programme 2.0.

Based on the results of 2021, direct and indirect GHG emissions (Scope 1 and 2) increased by 0.6 mt of CO₂-eq. y-o-y to total 10.3 mt. At the same time, the Company's production emissions amounted to 9.1 mt of CO₂-eq., with 1.22 mt of CO₂-eq. of GHG emissions resulting from providing local communities with heat and electricity. The growth dynamics was caused primarily by weather factors, i.e. the need to provide businesses and households with heat and energy in cold winter conditions. Diesel reserves were used for heat and power generation and are subject to replacement. In addition, data from the non-production sector were added to the calculations in 2021. The intensity of GHG emissions (Scope 1 and 2) was 7.82 t of CO₂ equivalent per million roubles of consolidated IFRS revenue.

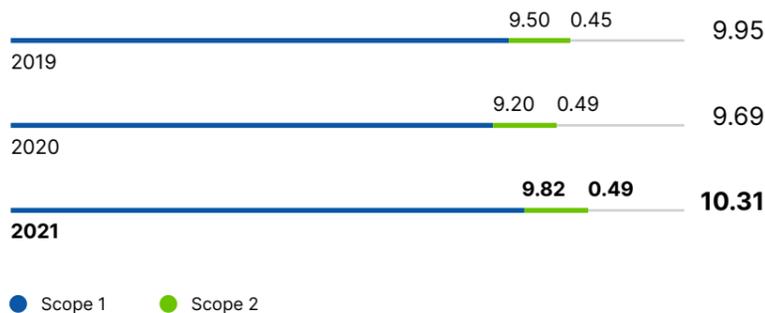
In 2021, the Company proposed a quantitative assessment of indirect GHG emissions (Scope 3 downstream) to the extent relating to product sales. According to the GHG Protocol, such emissions as regards the Company include emissions associated with product transportation from the Company's production facilities to the customer and the first stage of product processing.

In 2021, Norilsk Nickel Group's volume of such emissions amounted to 3.1 mt of CO₂-eq., up 18% y-o-y. The main growth driver was an increase in iron ore concentrate sales, with its processing, i.e. steel making, being a highly carbon-intensive process. It accounts for 83% of Scope 3 downstream emissions.

The further processing of the Company's finished metal products is much less carbon-intensive. Due to the structure and size of its product portfolio, Nornickel's Scope 3 downstream emissions are lower than those of its global metals and mining peers.

GHG emissions (Scope 1 and 2), mt of CO₂ equivalent¹

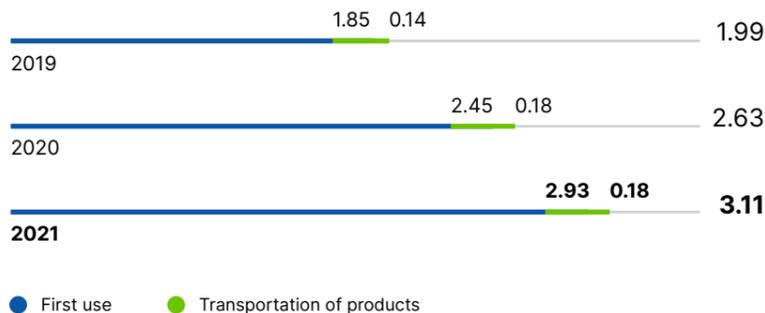
● GRI 305-1, 305-2, 305-4/ SASB EM-MM-110a.1



¹ In 2021, the emissions data for 2019–2020 were updated and supplemented, including in terms of inventory boundaries; therefore, the information presented may differ from data disclosed in previous reports.

GHG emissions (Scope 3 downstream), mt of CO₂ equivalent

● GRI 305-3



Energy efficiency improvement and use of renewable energy sources

● SASB EM-MM-130a.1

Nornickel Group's key production facilities operate in the Far North, which is why the Company's fuel and energy services are tasked with an important mission of ensuring a reliable and continuous power supply to production facilities and households across the footprint.

Nornickel takes a comprehensive approach to the development of energy infrastructure facilities, combining reliability improvement tasks with those of the reduction of GHG emissions. We make continuous efforts to reduce the consumption of such energy sources as diesel fuel and coal and to develop hydropower in order to provide our production operations with reliable and efficient energy sources in the long term.

Electrical power from renewable sources is generated at the Ust-Khantayskaya and Kureyskaya HPPs (part of NTEC). The use of other renewables such as solar, geothermal, and wind energy, is constrained by the length of the polar night and severe climatic conditions that cause wind power generation facilities to go out of service.

In 2021, the Company launched the Ust-Khantayskaya HPP after upgrading. Starting in 2012, seven hydroelectric units at the Ust-Khantayskaya HPP were replaced step by step. This refurbishment also included the following operations:

- revamping the main generator hall and the electrical shop;
- construction of a new compressor station;
- implementation of a new automated dispatch system.

Following the upgrade, the installed capacity of the plant increased from 441 MW to 511 MW. The new equipment has an efficiency factor of almost 95%.

In 2022–2030, the Company is also planning to carry out a comprehensive upgrading project at the Kureyskaya HPP with a scheduled increase in installed capacity.

In 2021, the total share of electricity consumed by Nornickel's production operations from renewable energy sources reached 47%, up 1 p.p. y-o-y.

In 2021, Bystrinsky GOK purchased 20,000 IREC certificates from Azov Wind Farm owned by Enel Russia, for the first time in the company's history. The use of the certificates allowed the company to include 20,000 MWh of electricity from renewable sources in its energy consumption balance, which is equivalent to 5.8% of Bystrinsky GOK's annual consumption.

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



“Trans-Baikal Division is progressing in accordance with the approved environmental strategy covering all major areas of environmental impact, in particular climate change. For instance, about 40 initiatives will be implemented under the strategy through 2031. Some of them deal with improving energy efficiency and reducing our carbon footprint. Buying certificates is the first, tentative step. Also, to reduce our carbon footprint and GHG emissions, we are considering the construction of a solar power plant that could cover up to 20% of Bystrinsky GOK's energy consumption by 2031.”

Alexander Popov,
Nornickel Vice President,
Trans-Baikal Division CEO

Total energy consumption by Nornickel Group, TJ

● GRI 302-1, 302-3

Indicator	2017	2018	2019	2020	2021
Fuel consumption	156,568	148,910	144,772	141,237	151,235
Energy from renewable sources (HPPs)	12,414	14,877	15,058	15,310	14,586
Electricity and heat procurement from third parties	10,483	10,931	11,331	11,200	10,891
Electricity and heat sales to third parties	19,503	18,926	18,766	17,254	19,974
Group's total energy consumption (1 + 2 + 3 - 4)	159,962	155,792	152,395	150,493	156,738
Energy intensity, GJ / RUB mln ¹	298	214	174	135	117

¹ RUB mln of consolidated revenue.**Fuel consumption by Group companies by type of fuel, TJ**

Indicator	2017	2018	2019	2020	2021
Fuel consumption	156,568	148,910	144,772	141,237	151,235
Natural gas	134,709	129,335	125,329	122,216	130,867
Coal	1,460	1,660	2,087	2,180	1,557
Diesel fuel and fuel oil	15,221	13,788	13,535	13,939 ²	15,097
Gasoline and jet fuel	5,178	4,127	3,820	2,902	3,715

² Taking into account the diesel fuel lost as a result of the NTEC's HPP-3 accident on 29 May 2020.**Electric power and heat consumption by the Group companies, TJ**

Indicator	2019	2020	2021	Including in 2021	
				Electricity	Heat (hot water and steam)
Electric power and heat consumption by the Group companies	62,994	59,996	60,771	30,486	30,285
including					
Polar Division	32,012	30,869	30,727	14,049	16,678
JSC NTEC	6,214	6,185	6,439	4,295	2,144
JSC Kola MMC	12,126	11,542	9,393	6,309	3,084
HPP share in total electric power consumption in the Norilsk Industrial District	53.5%	55%	52%	—	—
HPP share in total electric power consumption by the Company	44.5%	46%	47%	—	—
HPP share in total electric power and heat consumption by the Company	23.9%	25.5%	24%	—	—

Fuel and energy savings resulting from energy consumption reduction and energy efficiency improvement initiatives in 2021

● GRI 302-4

Indicator	Nornickel Group average	Polar Division	JSC NTEC	JSC Kola MMC	Including
					Medvezhy Ruchey LLC
Total savings, TJ	546.8	341.6	127.4	5.6	72.2
including					
Electricity	35.8	13.7	7.3	2.6	12.2
Heat in water and steam	454.7	327.9	63.8	3.0	60.0
Fuel	56.3	0	56.3	0	0

2021 saw a 7% increase in total fuel consumption y-o-y, driven by higher gas and diesel fuel consumption at NTEC's facilities due to the flaring of separated fuel collected as part of HPP-3 clean-up efforts.

Fuel oil consumption of the Murmansk Transport Division also increased in 2021 as four additional ice-class vessels were engaged to cover the spike in cargo deliveries to the Norilsk Industrial District from December to May.

The decrease in the overall energy intensity of Nornickel Group is explained by revenue growth leapfrogging the increase in energy consumption.

The 7% decrease in electricity consumption y-o-y was associated with the closure of Kola MMC's metallurgical shop in Monchegorsk and temporary operational restrictions at the Oktyabrsky and Taimyrsky mines and the Norilsk Concentrator.

The overall increase in the consumption of heat and steam (by 12% y-o-y) as well as natural gas consumption at NTEC's facilities was due to lower outdoor temperatures in 2021 vs 2020.

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

In 2021, the implementation of operational and technical energy efficiency measures to reduce energy consumption and improve energy efficiency resulted in actual savings of 546.8 TJ, with the operating and capital costs for those purposes totalling RUB 242.9 mln. The key measures were to install frequency-controlled drives, implement an automatic control system for energy-intensive heating equipment and an automated energy accounting system, switch from mercury and gas-discharge lamps to LED lighting, and restore thermal insulation in outdoor heating networks.

Air

● GRI 413-2

Reduction of emissions is one of the key objectives pursued by the Company's operational units as part of environmental management. The major part of air pollutants (over 60) are emitted by Polar Division's various operations, and sulphur dioxide accounts for around 98% of all emissions. Nornickel takes stringent measures to reduce sulphur dioxide emissions, in particular by implementing Sulphur Programme 2.0, the largest environmental initiative of the Company in terms of scope and financing.

Nornickel's air protection objectives:

- Reduce Polar Division's sulphur dioxide emissions by 90% by 2025 as compared to 2015
- Keep other air emissions (NO_x, solids, etc.) at one of the lowest levels in the industry
- Introduce an air monitoring system to assess and act on ambient air quality and dust associated with mining
- Comply with best practices and global standards on air-related disclosures

Nornickel participates in the Fresh Air initiative, a part of the Environment national project. The Company's objectives to reduce sulphur dioxide emissions and implementation of the automated monitoring system for pollutant emissions are in line with the national project.

Air quality monitoring and forecasting system

Nornickel takes care of people living close to its production facilities and complies with statutory emission levels. To that end, we are rolling out an advanced air quality monitoring and forecasting system in Norilsk and Monchegorsk. The system infrastructure will include automated air quality monitoring stations transmitting data for analysis under the atmospheric dispersion model. The air quality data will be available on a web platform and in special interfaces with various access levels.

The new system will make it possible to:

- provide data for prompt decision-making by a plant dispatcher to change the production process for preventing or minimising emissions;
- inform residents on air quality in the city in general and in each district;
- provide data on maps, charts, or widgets;
- view air quality measurements from each station;
- set up various notification scenarios in case of excessive emissions;
- visualise dispersion using a mathematical model with a 48-hour forecast.

In Norilsk, the first stage of system roll-out is completed, including equipment procurement and graphical interface set-up, installation and commissioning of a network comprising 16 stations, providing access for managers, employees, and ecologists, training and briefing of specialists, integration with City.Online portal. It is planned to purchase additional equipment, extend system functionality with a mathematical model, and pilot the system based on the model.

In Monchegorsk, a trajectory model for Kola MMC was successfully tested as at the end of 2021. The model is recommended for roll-out. In the coming years, it is planned to purchase a modelling system and 11 stations, perform FEED, install and set up a monitoring system, and train users. Streaming through the data portal for residents will commence after piloting of the system.

In addition to City.Online portal, which already provides real-time data on air quality, Polar Division runs an automatic toll-free enquiry service offering short-term environmental forecasts for the city area to communicate its environmental efforts to the people of Norilsk.

In addition, the Company used light unmanned aerial vehicles for monitoring environmental conditions on the Kola Peninsula and in the Norilsk Industrial District in 2021.

Air pollutant emissions

● GRI 305-7/ SASB EM-MM-120a.1

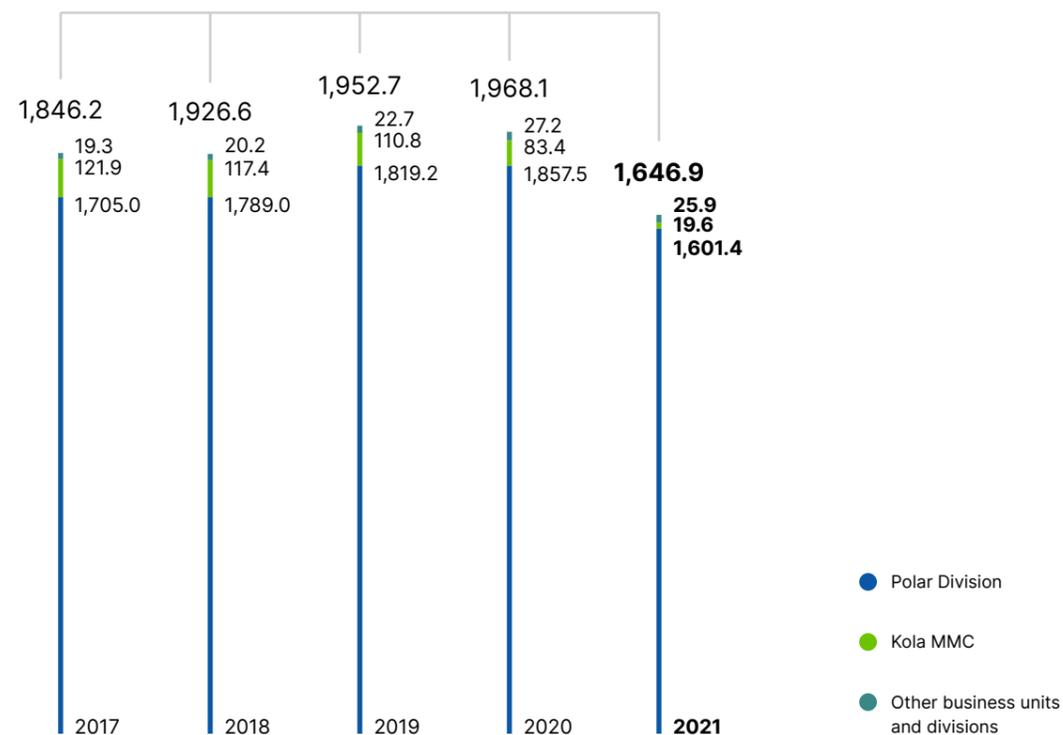
In 2021, total emissions of the Company's Russian assets amounted to 1,643.8 kt, down 16% year-on-year. As at 2021, Polar Division was the Group's largest pollutant emitter with emissions totalling 1,646.9 kt¹, down 11% year-on-year.

Improvement in air pollutant emissions was mainly due to lower sulphur dioxide emissions at Norilsk and Kola divisions. Norilsk Division's reduction was mainly triggered by temporary suspension of mining and processing operations, while Kola Division's sulphur dioxide emissions reduced by 78% year-on-year due to Sulphur Programme 2.0.

Since the Nickel Plant was shut down in 2016, SO₂ emissions within Norilsk city limits have decreased by 30–35%. According to Rospotrebnadzor, the total number of newly diagnosed diseases went down by 23% (in 2020 vs. 2016), including diseases of blood, haematopoietic organs, and other disorders, including those of the immune system, dropped by 48%, respiratory diseases by more than 11% and circulatory diseases by 23%.

¹ Taking into account conversion of NO into NO₂.

Air pollutant emissions, kt



Air emissions by pollutant, kt





Air protection efforts

Sulphur Programme 2.0

The Sulphur Programme is Nornickel's flagship environmental project on sulphur dioxide capture and recovery, which is one-of-a-kind globally. The technology makes it possible to capture up to 99% of SO₂, convert it into sulphuric acid and then into gypsum.

The total CAPEX for Sulphur Programme 2.0 is estimated at around USD 4.1–4.3 bn.

Sulphur Programme 2.0 provides for a gradual reduction in sulphur dioxide emissions in the Norilsk Industrial District and on the Kola Peninsula as our key geographies.

Norilsk Division

Delivering the Sulphur Programme at Norilsk Division requires cutting sulphur dioxide emissions by 45% in 2023 and 90% in 2025.

Nadezhda Metallurgical Plant is implementing a project to capture furnace gases and build facilities, including related infrastructure, to neutralise sulphuric acid with limestone and produce gypsum. Under the Sulphur Programme 2.0, Nadezhda Metallurgical Plant has already installed over 9.6 kt of steel structures and performed over 67,100 m³ of concrete works. Construction of future gypsum storage facility to place the product with properties close to those of rock gypsum, is underway.

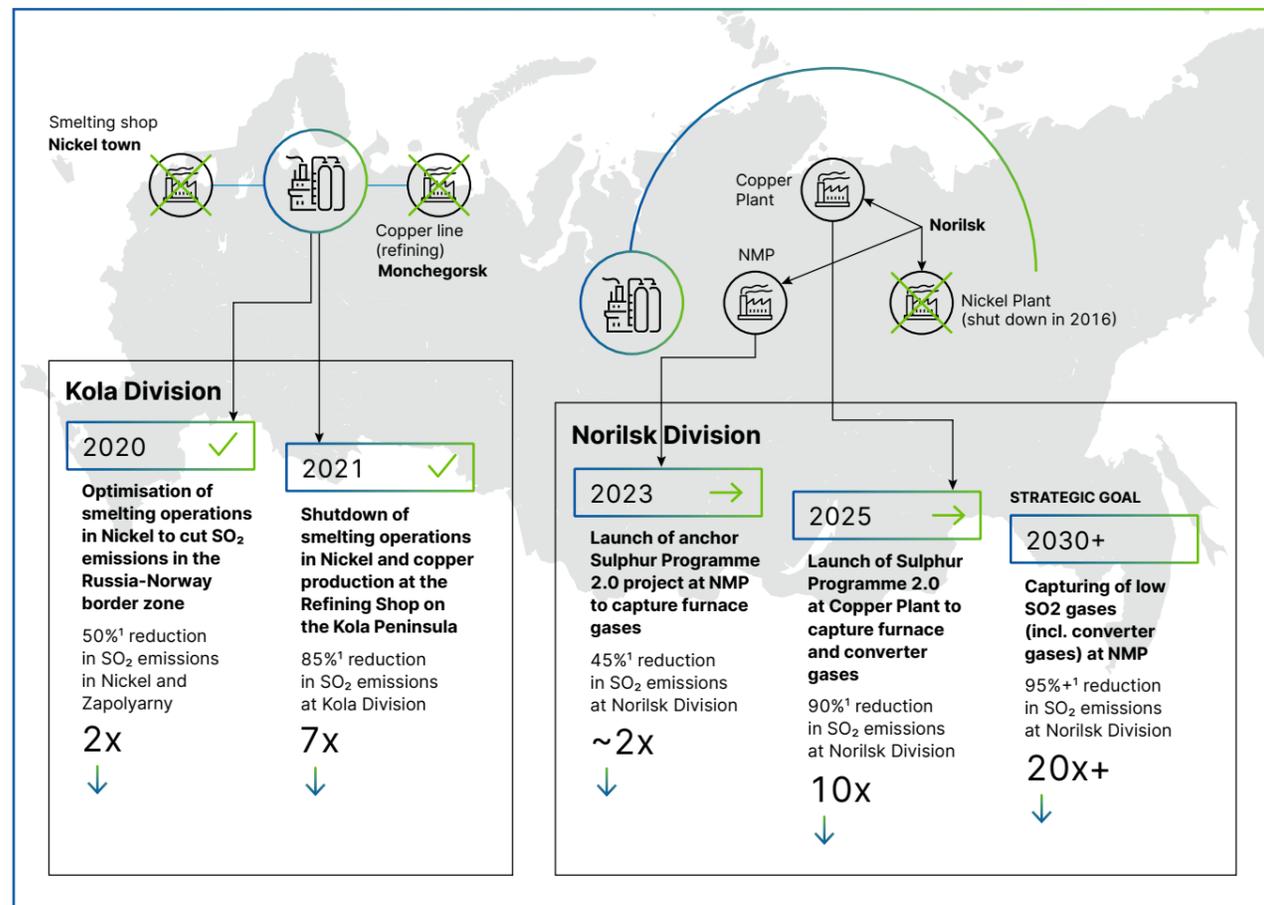
The construction of a continuous copper converting facility and sulphuric acid neutralisation lines is underway at the Copper Plant to capture 99–99.5% of SO₂ at the main smelting units. In 2021, gas cleaning unit reconstruction continued, while basic engineering/design of the facility was completed. The construction is to start in 2022.

Kola Division

Under the Sulphur Programme, Kola MMC discontinued pyrometallurgical production in its metallurgical shop in 2021.

The smelting shop in Nickel was shut down as far back as in December 2020, the refining stage copper chain in Monchegorsk was shut down in March 2021, which considerably improved air quality and cross-border emissions have been fully eliminated on the Norwegian border.

Sulphur Programme 2.0 roadmap



The shutdown of Kola MMC's smelting operations in the settlements of Nickel and the metallurgical shop in Monchegorsk resulted in 90% reduction in sulphur dioxide emissions at Kola Division compared to 2015.

Production flows of closed facilities are redirected to Norilsk Division. To replace obsolete facilities, a new copper refining line is being constructed using modern environmentally friendly technologies.

Use of ozone-depleting substances

GRI 305-6

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 2021.

Tailings dumps and waste

Sustainable waste and tailing dump management

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

Nornickel aims to minimise the environmental impact of waste from its operations. To this end, the Company ensures responsible management of tailings facilities, maximises tailings processing, and finds alternative uses for the remaining waste. Nornickel strives to ensure safe operation of tailing dumps, assesses and minimises risk of emergencies in tailings management.

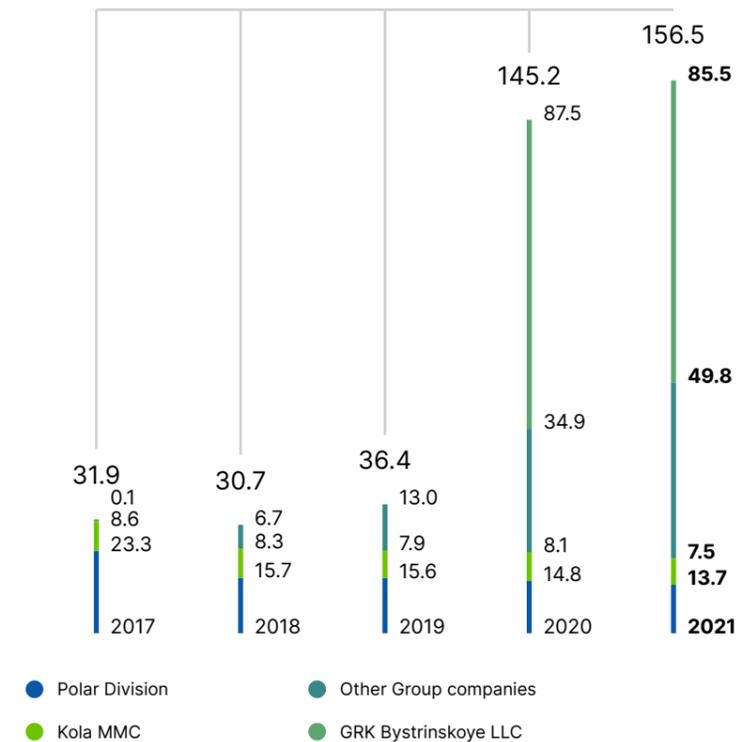
GRI 306-1, MM3

About 99% of waste generated by the Company is comprised of rock, overburden, tailings, and metallurgical slags, which are classified as hazard class 5 (non-hazardous waste).

In 2021, the Group generated 156.4 mt of waste. A significant increase starting from 2020 is attributable to including Bystrinsky GOK in the reporting scope following its ramp-up to design capacity in 2020, and more feedstock processed. In 2021, Bystrinsky GOK generated 85.5 mt of waste, including ca. 77.8 mt of overburden and 7.6 mt of tailings, which is a year-on-year reduction. The deposit development stage which involves large volumes of overburden generation is nearly completed.

Waste generation, mt

GRI 306-3



Contribution to combating contamination with waste

● GRI 306-2, 306-4

Nornickel strives to contribute to fostering non-waste production by developing and implementing waste recycling approaches, making efforts to clean up existing pollution. Waste generated by the Company is used by third parties and Nornickel itself for preparation of filling compounds, as flux for melting of metal in melting furnaces, for construction and strengthening of tailing dumps, railroad groundwork, road filling, etc. Such disposal of waste minimises its adverse environmental impact.

In 2021, Nornickel disposed of 23,7 mt of waste, including recycling of 13.5 mt of waste.

The Company launched the Clean Norilsk programme to clean up areas contaminated with industrial and construction waste.

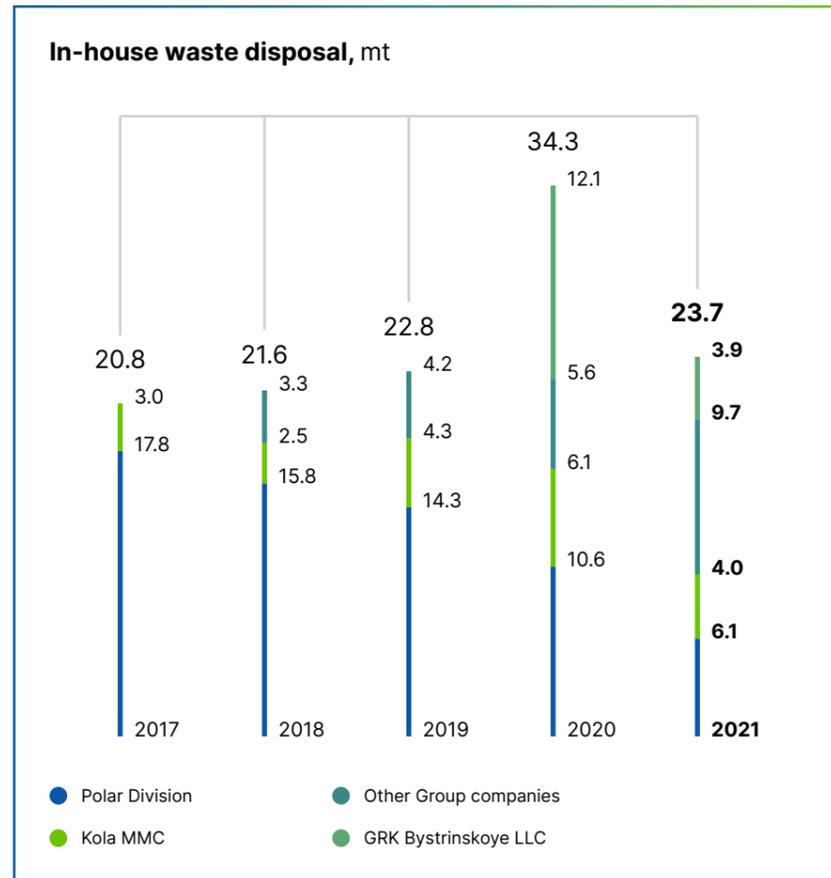
Over
40

RUB bn — was earmarked for the sanitary clean-up of industrial areas

In the coming decade, we expect to finish waste collection and land reclamation in the Norilsk area, with a view to cleaning up the land from unused and demolished objects, including 467 abandoned buildings and structures, over 1.3 mt of straits and traces of production activity, more than 2 mt of waste, and over 600,000 t of scrap metal. This project also promotes the goals of the Environment national project. A dedicated area improvement unit was established at Polar Division to implement this programme.

In 2021, the Company cleared over 750,000 m² of the Norilsk Industrial District from construction debris, scrap metal, and run-down buildings as part of the Big Clean-Up in Norilsk initiative. We dismantled 108 unused buildings and structures, removed 39 kt of scrap metal and 250 kt of construction waste.

We consider design and construction of local waste processing facilities to reduce the amount of waste disposed of at landfills and prepare waste for reusing.



Waste disposal

● GRI 306-5/ SASB EM-MM- 150a.10, EM-MM-540a.1

All of the Group's waste disposal sites are listed on the national disposal site register. The sites are regularly monitored in line with designated environmental programmes.

Tailing dumps

● SASB EM-MM-540a.2

We pay particular attention to tailings management, ensure tailing dump integrity and safety, carry out additional safety monitoring of hydraulic structures, and timely respond to changes during tailing dump life cycle.

In 2021, MMC Norilsk Nickel adopted the Tailings Management Policy, a foundational document that informs decision-making in this area.

Nornickel's tailings management objectives:

- **Dispose of all waste generated as part of new projects by leveraging technologies that help to minimise environmental impact, by 2031**
- **Eliminate all accumulated waste by 2030**
- **Increase the share of mineral waste recycling**
- **Implement the principles of the Global Industry Standard on Tailings Management**

The Company currently operates six tailing dumps.

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

The Company regularly monitors the condition of hydraulic structures of tailing dumps and conducts environmental monitoring on-site and within the impact area.

Nornickel complies with the Russian laws associated with tailings management, and our facilities have all the required permits. Additionally, we developed mandatory safety criteria to operate each tailing dump and had them approved by regulators.

Nornickel performs tailings risk management. To this end, we have organisational units and officers providing regular reports to the management. Such units engage qualified and experienced staff responsible for identifying and analysing tailings risks, developing relevant controls, and reviewing them for effectiveness.

The Company regularly performs internal and external review and assurance processes so that controls for tailings risks can be comprehensively assessed and continually improved. The hydraulic structures are constantly monitored by the operating personnel and a dedicated environmental team.

In addition, Rostekhnadzor provides external oversight of tailing dumps. The Company and Rostekhnadzor carry out annual inspections of hydraulic structures prior to freshets. Every five years, the hydraulic structures are subject to detailed inspections by a Rostekhnadzor-certified agency that issues an industrial safety declaration upon which Rostekhnadzor carries out a comprehensive audit.

Over the last five years, there have been no environmental incidents at our hydraulic structures and no instructions from supervisory bodies to fix either critical or pre-critical condition.

● SASB EM-MM-540a.2

All Nornickel's tailing dumps are located away from production facilities and residential areas. Potential damage estimates show minimum risks for local communities, ecosystems, and critical infrastructure in case of an emergency.

Nevertheless, the Company develops emergency preparedness and response plans taking into account the strongest potential impact 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 regular testing.

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 vehicles (as outlined in the ERPs). Employees operating the tailing dumps undergo regular dedicated training and knowledge tests mandated by Rostekhnadzor.

Water

Protection of water bodies

GRI 303-3, 303-4, 303-5

A big part of Nornickel's environmental efforts is devoted to water resources protection. As a party to the UN Global Compact, the Company is committed to advancing the sustainable development goals related to water resources, in particular SDG 6 Ensure availability and sustainable management of water and sanitation for all, SDG 12 Responsible consumption and production, and SDG 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development. In addition, we adhere to the requirements of prominent associations and best practices in sustainable development. Nornickel consistently ensures compliance with permissible wastewater discharge limits based on corporate environmental reporting of the Group's companies.

In 2021, MMC Norilsk Nickel adopted the Position Statement on Water Stewardship as a set of the key relevant principles, obligations, initiatives and targets. The Company works to reduce and, where possible, prevent negative impact on water resources caused by production and delivery operations. Our role and responsibilities regarding water use consist in informed corporate decision-making drawing on sustainable development principles and our commitment to maintaining the Company's market value without harming the environment.

GRI 303-1

Key principles of Nornickel's water stewardship:

- complying with applicable national laws and rules;
- ensuring adherence to international best practices and requirements of leading sustainability associations;
- no Company's or its branches' operations in water-scarce areas as they are defined in the World Resources Institute's Aqueduct Water Risk Atlas;
- 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;
- enabling information accessibility and transparency as regards water stewardship;
- working towards water consumption and discharge targets, efficient water use;
- proactively engaging stakeholders on matters of external water resource management to support predictable, consistent and effective regulation;
- liaising with government bodies to participate in drafting environmental responsible water protection regulations.

Nornickel's water stewardship goals:

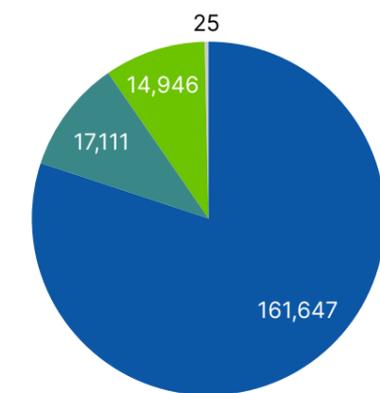
- reducing water impact down to the limits set out in Russia's sanitation and hygiene legislation (where necessary);
- efficiently using water, with the water recycling and reuse ratios maintained at a minimum of 80%;
- keeping absolute fresh water withdrawal (excluding mining water) for production needs below 120 mcm;
- determining the water balance for all production assets and implementing automated online monitoring of all water withdrawal and discharge (including effluent) in 2022.

SASB EM-MM-140a.2

Nornickel uses water from surface and underground sources for its drinking, production and process supply needs, as well as for community and shipping needs. Water is withdrawn in compliance with the pre-approved limits, without any major impacts on water bodies. All of the Company's facilities that withdraw water implement surveillance programmes for water bodies and water protection zones. No water is withdrawn from the bodies included in the Ramsar Convention on Wetlands of International Importance.

Effluents by destination in 2021, '000 m³

GRI 303-4



- Surface water bodies
- NTEC network
- Municipal and other water networks (excluding NTEC)
- Sea or ocean water

To decrease withdrawal volumes, the Company continues to improve its closed water circuit, which enables efficient use of water resources.

Nornickel's works to make sure its wastewater effluents do not exceed the approved limits, including admissible impact limits, or have any major impact on biodiversity of water bodies and related habitats.

In 2021, the Group withdrew 351.2 mcm of water, of which 320.3 mcm came down to Kola MMC, NTEC and Polar Division, and 30.9 mcm — to other Group operations. Water withdrawal was reduced mainly due to a decrease in non-freeze discharges, leaks (losses) as a result of repairs of water pipelines at NTEC.

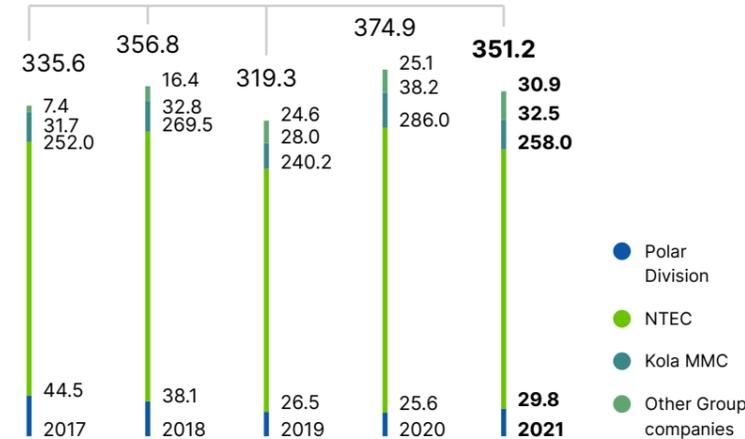
In 2021, reused and recycled water accounted for 84.6% of total water consumed by the Group. A 12% decline in the volume of water used by 2020 was driven by a reduction in the volume of recycled water NTEC uses to cool equipment.

Fresh water accounts for 7% of the Company's effluents, the rest being other wastewater.

In 2021, the Company spent RUB 105.4 mln on building and upgrading wastewater treatment facilities to improve the quality of water discharge. They, in particular, include the treatment facilities for drained water, tailing dumps and industrial effluents alongside local and additional facilities.

Total water withdrawal¹, mcm

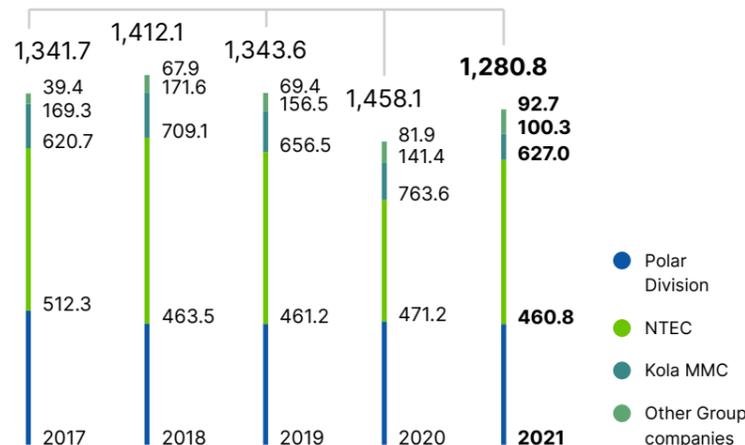
GRI 303-3



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.

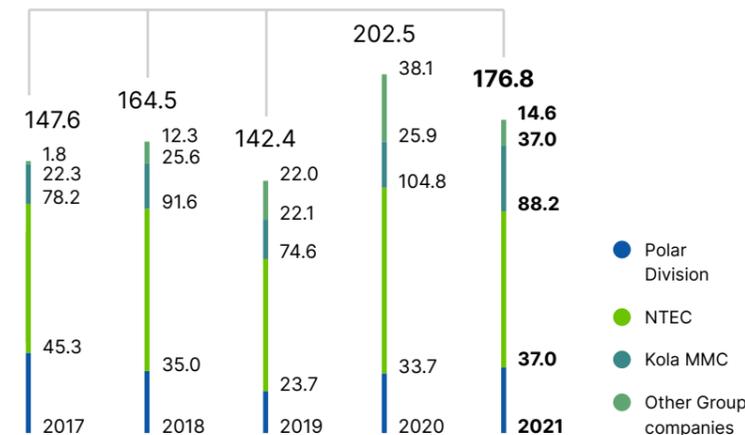
Total water consumption, mcm

GRI 303-5



Total effluents, mcm

GRI 303-4





Soil protection and responsible mining

Land protection

Nornickel's main priority is to reduce and, where possible, prevent negative impact on land resources caused by production and delivery operations. We are committed to progressive rehabilitation of land used in construction and mining or affected by emissions from our operations.

The Company plans to develop an approach to assessing the current and legacy effects of mining, construction, and incidents on land.

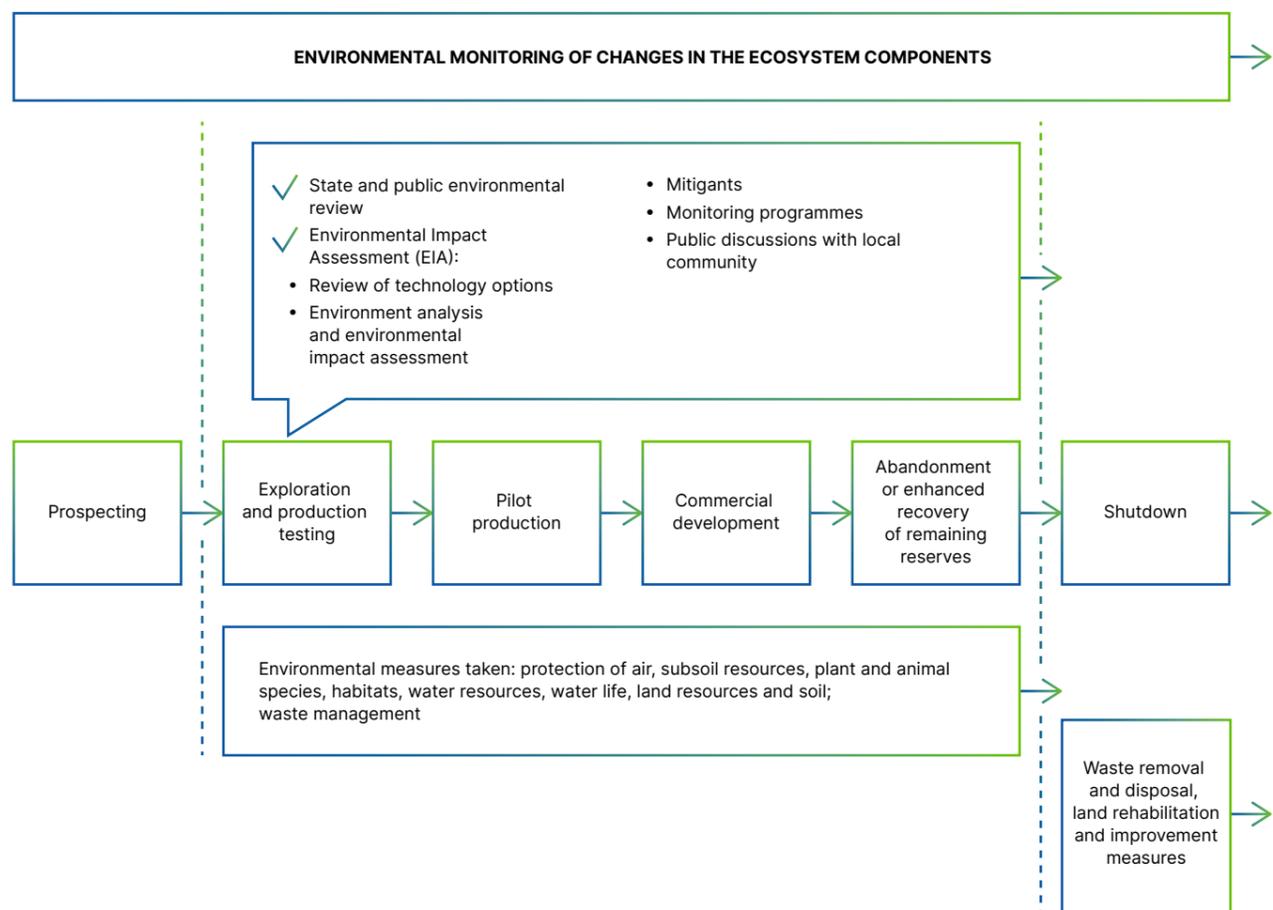
Nornickel is developing the Oktyabrskoye, Talnakhskoye and Norilsk-1 deposits on the Taimyr Peninsula, Zhdanovskoye, Zapolyaroye, Kotselvaara and Semiletka deposits on the Kola Peninsula, and the Bystrinskoye Deposit in the Trans-Baikal Territory.

The Company has field development, mine liquidation and land rehabilitation project documents in place for all of its deposits. It is at the project design stage

that we assess the environmental impact of deposit development and make a list of measures to prevent or mitigate potential negative effects on the environment while ensuring sustainable use of natural resources. The project design documents provide for layouts, slopes, hydraulic and irrigation structures, and other technical measures.

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.

Environmental protection and monitoring measures taken during the deposit life cycle



Disturbed and rehabilitated land area in 2021, ha

● 304-3, MM1

Indicator	Total	during mining	during construction	Including:	
				during disposal of solid domestic and industrial waste	during other activities
Total disturbed area, beginning of period ¹	16,375	13,871	1,047	741	716
Total rehabilitated area ²	0	0	0	0	0
Total disturbed area in the reporting period	207	146	19	41	0
Total disturbed area, end of period	16,581	14,018	1,066	782	716

¹ Changes in the area of disturbed land compared to data disclosed in 2020 Sustainability Report resulted from changes in property rights and in disturbed land management.

² The table does not include data on disturbed and rehabilitated land near HPP-3.

The Company complies with all applicable regulations for land rehabilitation and other environmental protection initiatives associated with field development, construction and other operations.

In 2021, Nornickel completed the first stage of the programme to rehabilitate the land contaminated by the fuel spill at HPP-3 in Norilsk, with the final second stage scheduled for 2022.

Nornickel traditionally takes part in urban greening projects in Norilsk, Dudinka, Monchegorsk, Zapolyarny, and Nickel. Together with local authorities and the Company's volunteers, we run a remediation programme to clean up and improve public spaces and areas around motorways, protect water bodies and water reserves, and revamp tourist camping sites.

Responsible exploration and field development

Nornickel focuses closely on the exploration and development of untapped resources to replenish its resource base. Exploration activities include geophysical and geochemical surveys and drilling at promising subsoil areas across the Company's current operations. Exploration is carried out both within and outside of Nornickel's footprint. The Company sees a significant potential for the discovery of new deposits and plans to continue exploration to unlock it.

The Group's exploration activities are subject to various regulations of the Russian Federation covering 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.

Nornickel seeks to keep ecosystem intact, avoid exploration at protected natural areas and world heritage sites, and ensure no negative impact on traditional trades, cultural heritage, interests and traditional lifestyles of indigenous peoples as part of its exploration activities.

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 land plots are brought to a condition suitable for further use according to their intended purpose.

Environmental impact of exploration activities

Activity	Source of impact	Type of impact	Object of impact	Environmental activities
Preparatory works: <ul style="list-style-type: none"> • Drilling site layout • Equipment transportation and storage • Construction of storage facilities for chemicals, fuel and lubricants 	<ul style="list-style-type: none"> • Road transport • Exhaust gases of motor vehicles, construction and road machinery • Excavated soil • Materials for site construction and preparation of drilling mud and cement slurries 	<ul style="list-style-type: none"> • Physical disturbance of the fertile soil layer, natural landscapes, thermal abuse, degradation of topsoil layers • Ecosystem disturbance, changes in the flora and fauna habitats 	<ul style="list-style-type: none"> • Fertile soil layer on drilling equipment sites, routes of linear facilities • Flora and fauna, atmospheric air, soil, ground, surface water, landscape 	<ul style="list-style-type: none"> • Compliance with land allotment standards • Land rehabilitation • Construction of trays and platforms at machinery parking lots • Soil protection measures • Fire safety measures
Well drilling	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Ecosystem disturbance and changes in habitats of certain plant and animal species • Machinery-generated noise 	<ul style="list-style-type: none"> • Flora and fauna, soils, subsoil, surface and underground water, air • Animal and human habitats • Snow and water 	<ul style="list-style-type: none"> • Compliance with 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 abandonment and mothballing	<ul style="list-style-type: none"> • Leaks in casing, casing pipes, wellhead equipment, mineralised water 	<ul style="list-style-type: none"> • Ecosystem disturbance and changes in habitats of certain plant and animal species 	<ul style="list-style-type: none"> • Flora and fauna, soils, surface and underground water, air, animal and human habitats 	<ul style="list-style-type: none"> • Plug and abandonment operations • Rehabilitation

Exploration areas of Nornickel Group in 2021

Area/deposit	Location	Types of minerals
Mikchangdinskaya area	Taimyrsky Dolgano-Nenetsky Municipal District, Krasnoyarsk Territory	Copper-nickel sulphide ores
Yuzhno-Norilskaya area	Taimyrsky Dolgano-Nenetsky Municipal District, Krasnoyarsk Territory	Copper-nickel sulphide ores
Arylakhsкая area	Taimyrsky Dolgano-Nenetsky Municipal District, Krasnoyarsk Territory	Copper-nickel sulphide ores
Oktyabrskoye Deposit	Norilsk, Krasnoyarsk Territory	Copper-nickel sulphide ores
Western flank of the Oktyabrskoye Deposit	Norilsk, Krasnoyarsk Territory	Copper-nickel ores
Mokulaevskoye Deposit	Taimyrsky Dolgano-Nenetsky Municipal District, Krasnoyarsk Territory	Limestone
Alenuyskaya area	Alexandrovo-Zavodsky District, Trans-Baikal Territory	Gold, silver, iron ore, copper ore, molybdenum ore
Mostovskaya area	Mogochinsky District, Trans-Baikal Territory	Gold, silver, copper ore, molybdenum ore
Dogyinskaya area	Gazimuro-Zavodsky District, Trans-Baikal Territory	Gold-copper ores, gold-silver ores

Biodiversity

Biodiversity conservation

● SASB EM-MM-160a.1

Biodiversity plays a critical role for the planet's health. Nornickel recognises the need to preserve it and seeks to minimise any potential negative impact of its operations on biological resources.

The Company's activities and operational culture are guided by the following commitments, as far as biodiversity conservation is concerned:

- protection and promotion of the sustainable use of terrestrial ecosystems;
- sustainable management of forests;
- protection and prevention of the extinction of threatened species;
- responsible management and protection of freshwater ecosystems;
- prohibition of exploration and mining activities at World Heritage sites and in all protected areas.

In addition to the Environmental and Climate Change Strategy helping reduce negative impact on biodiversity, Nornickel also has in place the Position Statement on Biodiversity, which lays down the key principles, obligations, and initiatives in this area.



Nornickel's biodiversity targets in the context of the UN Sustainable Development Goals

- Ensure preservation, recovery and sustainable use of terrestrial ecosystems;
- ensure sustainable management and protection of marine and coastal ecosystems;
- replenish aquatic biodiversity;
- protect, restore and promote sustainable use of terrestrial ecosystems, halt biodiversity loss;
- take measures to stem degradation of habitats, biodiversity loss, and extinction, protect endangered species;
- ensure that the value of ecosystem integrity and biodiversity is factored into the Company's planning and development.

In 2021, the Company kicked off large-scale research into biodiversity, which covers exploration, mining, production, transport, logistics, and energy assets of Norilsk, Kola, and Trans-Baikal divisions.

For that purpose, Nornickel signed an R&D agreement with the Siberian Branch of the Russian Academy of Sciences (SB RAS), which then engaged four institutions:

- Institute of Systematics and Ecology of Animals of the SB RAS;
- Federal Research Centre «Krasnoyarsk Science Centre of the SB RAS»;
- Institute of Biophysics of the Federal Research Centre «Krasnoyarsk Science Centre of the SB RAS»;
- Institute of Soil Science and Agrochemistry of the SB RAS.

The researchers are pursuing the following goals:

- delineating the Company's footprint in terms of ecosystem biodiversity and measuring ecosystem exposure to human impact;
- studying and evaluating the current biodiversity situation within and outside the negative impact zone;
- ascertaining biodiversity in disturbed areas, as well as in those outside the negative impact zone;
- identifying local indicator and endangered species;
- pinning down any potential biodiversity threats posed by the Company's production facilities;
- categorising habitats into natural, altered, and critical;
- identifying buffer zones of key biotopes that are important for the provision of ecosystem services.

The resulting data will lay the foundation for a system to manage biodiversity preservation and monitoring, as well as for evidence-based target-setting at the division level in service of the overarching goal of zero net biodiversity losses.

The specific stages of building the management system are as follows:

1. completing in 2022 the baseline biodiversity research as the jump-off point for the system;
2. setting biodiversity conservation targets and including them in corporate KPIs;
3. developing corporate biodiversity conservation guidelines based on international principles and approaches, and measures for preserving the biodiversity of Arctic ecosystems;
4. designing corporate programmes to preserve and monitor biodiversity;
5. devising a uniform approach to cooperation with specially protected natural areas and developing individual programmes for working with each of various specially protected natural areas (SPNAs).

Cooperation with nature reserves and tourism development

● GRI 304-1,304-2

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

Kola MMC is located 15 km from the Pasvik Nature Reserve and 10 km from the Lapland Biosphere Reserve, while Polar Division's sites are some 80–100 km away from the buffer zone of the Putoransky Nature Reserve. Bystrinsky GOK lies 160 km away from the Relict Oaks State Reserve (Trans-Baikal Territory).

Nornickel's operations do not produce any significant impact on areas that are in the relative vicinity of the nature reserves and areas of high biodiversity value outside protected areas.

Our cooperation with nature reserves primarily focuses on developing research and technology and supporting their social, volunteering and environmental awareness programmes. Nornickel has been providing various kinds of support to nature reserves for more than a decade.

Kola MMC helps develop and implement additional measures to protect rare animal species in the Murmansk Region. Specifically, in 2021 the Lapland Reserve launched the Save the Reindeer Together project, which the Company supports under its World of New Opportunities charitable programme. The project aims to preserve the population of wild reindeer, which have been included in Russia's Red Data Book due to poaching. The Lapland Nature Reserve is the only place in Northern Europe that is home to as many as a thousand or so reindeer.

In April 2021, Kola MMC aided the Lapland Biosphere Reserve in purchasing five BRP Ski-Doo Skandic snowmobiles for a total of RUB 7.5 mln. The reserve's employees will use the vehicles to patrol the specially protected territory.

Ever since 2006, Pasvik has been implementing a standing environmental monitoring programme on the Kola MMC territories and in adjacent areas. With the shutdown of the smelting facilities in Nickel, the monitoring has increased in scope: in the following decades, Pasvik's ecologists will extensively study the restoration of the Pechengsky District terrestrial and aquatic ecosystems. They will be focusing on the changes in ecosystems, such as vegetation growth on deforested land and new flora and fauna species appearing in the district and next to the former industrial site.

Another area of monitoring is the study of precipitation composition. This kind of work was done at Pasvik in 2009–2014 under the ICP Forests International Cooperative Programme on Assessment and Monitoring of Air Pollution Effects on Forests, and in 2021 it was resumed.

The monitoring will incorporate data captured using camera traps. Pasvik researchers already use this equipment, and now the plan is to install them around Nickel and Zapolyarny. Another subject of study will be new vegetation on deforested land. The team conducting this large-scale monitoring in the Pechengsky District includes experts from the Institute for Biology of Inland Waters, Karelia and Kola Science Centres of the Russian Academy of Sciences, Ryazan State University, Russian State Hydrometeorological University, Russian State University for Geological Prospecting, St Petersburg University, and other institutions.

Siberian Perspective eco-summit

In 2021, the traditional eco-rally held by Nornickel was reorganised into a partner event — the Siberian Perspective eco-summit, which serves as an expert platform for discussions on strategy and synergy in implementing environmental volunteering projects.

Red List species found in Pasvik, Lapland and Putoransky, pcs

● GRI 304-4

Indicator	Pasvik	Lapland	Putoransky
On the IUCN Red List, of which	82	23	5
Critically Endangered (CR)	1	0	1
Endangered (EN)	1	1	0
Vulnerable (VU)	5	0	3
Near Threatened (NT)	10	0	1
Least Concern (LC)	65	22	—
On Russia's Red Data Book, of which	23	25	11
Critically Endangered (CR)	1	0	1
Endangered (EN)	8	11	2
Vulnerable (VU)	11	13	7
Near Threatened (NT)	2	1	0
Least Concern (LC)	1	0	1
On the Murmansk Region's and Krasnoyarsk Territory's Red Data Books	119	165	28

2021 eco-summit was held in the Bobrov Log Fun Park in Krasnoyarsk. Participating companies were provided with a platform where they could share experiences and best practices on biodiversity conservation as part of the UN SDGs agenda, as well as discuss the role of corporate volunteering. The participants also visited a special exhibition and work sites of corporate

volunteers setting up an ornithological station and a separate waste collection site.

Day two of the eco-summit featured an eco-rally in the Krasnoyarsk Stolby National Park, where volunteers showcased their efforts to beautify the park.



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SOCIAL

Respect for human rights

● GRI 102-16/SASB EM-MM-210a.3

Human rights

Respect for human rights is a basic principle that underlies Nor Nickel's operations and is embedded into its corporate values, Human Rights Policy, and other corporate documents.

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.

Nor Nickel wholeheartedly respects and promotes human rights and freedoms in line with internationally recognised norms and practices. Also, the Company fully complies with the applicable laws of the Russian Federation and other countries of its operations and respects both international standards for human rights protection and labour standards set out in the International Bill of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work and the UN Guiding Principles on Business and Human Rights.

Nor Nickel regularly assesses the potential impact of its operations on human rights. On top of addressing human rights risks and ensuring full compliance with applicable requirements, the Company also implements best practices (signs employment contracts and collective bargaining agreements, creates favourable work and rest conditions for employees) and expects its suppliers and contractors to respect human rights throughout their operations.

All of the Company's new projects are vetted for compliance with national and international legislation and are subject to a comprehensive human rights review, including an impact assessment. These checks involve over ten of Nor Nickel's departments and functions.

Geography of operations — low risk of human rights violations

We operate in countries with a mature legal framework where the risk of human rights violations is very low. Hence, by observing applicable Russian laws, for instance, we automatically comply with most of the core ILO conventions on human rights ratified by our government.

If some of the above ILO conventions on human rights are not ratified by Russia and not directly enshrined in the national law, Nor Nickel seeks to voluntarily comply with them in its by-laws and operations.

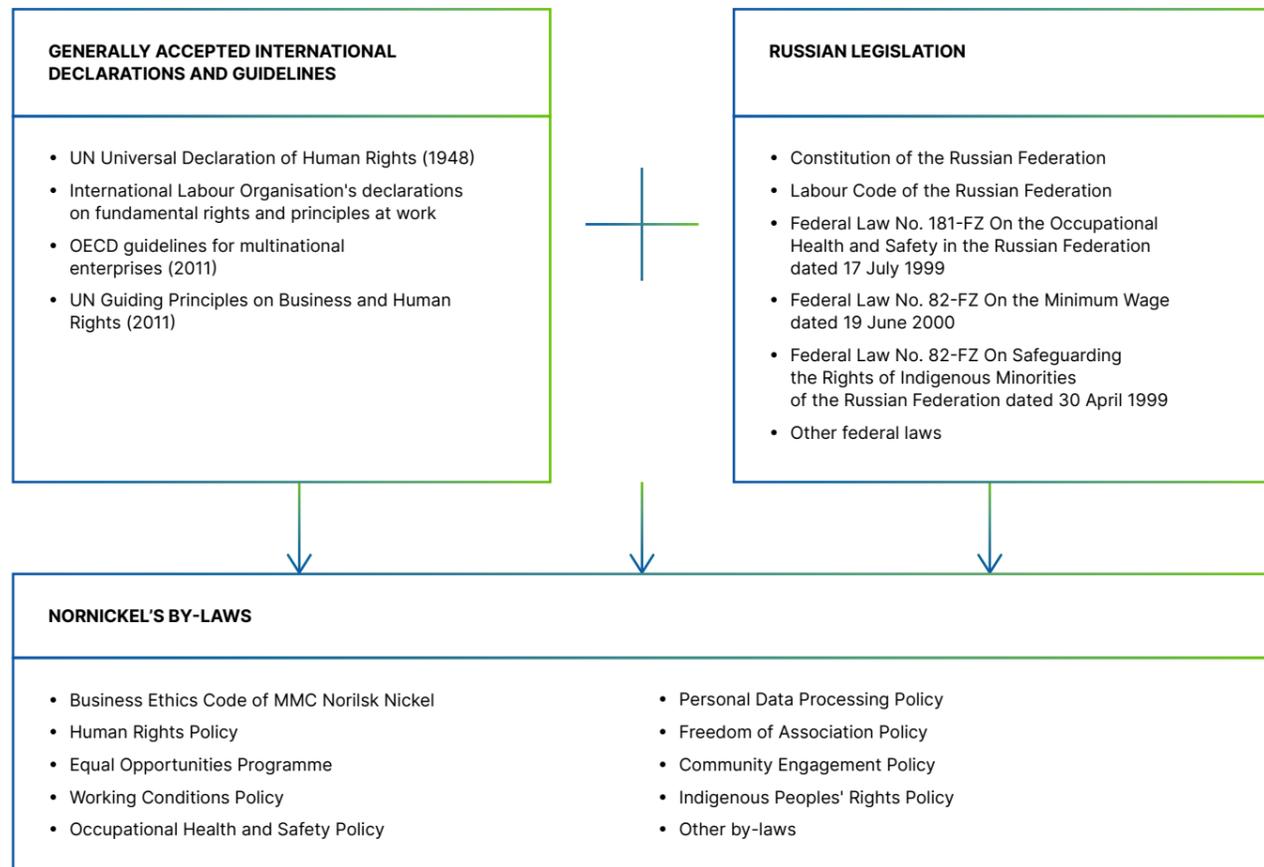
Core ILO conventions ratified by the Russian government

Human rights area	ILO convention	Ratified by Russia
Decent working conditions	Weekly Rest (Industry) Convention No. 14 (1921)	+
	Protection of Wages Convention No. 95 (1949)	+
	Weekly Rest (Commerce and Offices) Convention No. 106 (1957)	+
	Holidays with Pay Convention No. 132 (1970)	+
Safe working conditions	Occupational Safety and Health Convention No. 155 (1981)	+
No child or forced labour	Forced Labour Convention No. 29 (1930)	+
	Abolition of Forced Labour Convention No. 105 (1957)	+
	Minimum Age Convention No. 138 (1973)	+
Freedom of association and collective bargaining	Freedom of Association and Protection of the Right to Organise Convention No. 87 (1948)	+
	Right to Organise and Collective Bargaining Convention No. 98 (1949)	+
	Workers' Representatives Convention No. 135 (1971)	+
Rights of indigenous peoples	Indigenous and Tribal Peoples Convention No. 169 (1989)	-
Non-discrimination	Equal Remuneration Convention No. 100 (1951)	+
	Discrimination (Employment and Occupation) Convention No. 111 (1958)	+

In 2021, the Company updated all of its key by-laws on human rights to ensure alignment with global best practices and the Company's public commitments. Nornickel's Board of Directors considered and approved the updated policies in November 2021.

In early 2022, Nornickel launched the procedure for an external assessment of its human rights governance framework. Based on the results, the Company intends to develop and implement an action plan in this area for the period until 2025–2026.

Applicable regulatory framework¹



¹ All of the Company's by-laws on human rights are available on its official website at: <https://www.nornickel.com/investors/disclosure/corporate-documents/>

Human rights governance

Governance body	Responsibility
Board of Directors and Management Board	<ul style="list-style-type: none"> • Review information on human rights violations regarding both the Company's employees and other stakeholders.
Sustainable Development and Climate Change Committee of the Board of Directors	<ul style="list-style-type: none"> • Oversees the efficiency of introducing changes to the strategy, goals, projects, programmes and other major initiatives concerning respect for and protection of human rights.
President of the Company	<ul style="list-style-type: none"> • Ensures compliance with the Human Rights Policy.
Senior Vice President for Sustainable Development	<ul style="list-style-type: none"> • Supports implementation of the human rights agenda across all of the Company's functions and units.
Risk Management Service	<ul style="list-style-type: none"> • Monitors the efficiency of risk management initiatives, including risks identified in the process of stakeholder engagement related to human rights. • Provides methodology support and develops approaches to human rights risk management.

Procedure to report human rights violations

Information on alleged human rights violations is collected via Nornickel's Corporate Trust Line, regular employee questionnaires, and sentiment surveys among local population. The Company guarantees anonymity and confidentiality for whistle-blowers and respondents.

Statistics on reports to the Corporate Trust Line are maintained by the Internal Control Department team and submitted for review to the Board of Directors' Audit Committee.

In 2022, Nornickel plans to provide all stakeholders with a dedicated grievance mechanism to help ensure qualified support as a way to consider all reports in the most effective way, and also to guarantee legal protection.

Women in Mining Russia

2020 saw the establishment 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. Nornickel acts as the organisation's key partner.

In 2021, WIM Russia launched the Talented Woman in the Extractive Industry initiative, an unprecedented award in Russia to recognise female professionals. A total of 24 companies in the industry submitted 237 applications. The jury chose 63 finalists, with Nornickel employees winning three categories:

- In the Project of the Year category, the winner was Olga Merezhko, deputy chief mechanical engineer for buildings and structures of Komsomolsky Mine. Together with her team, Olga helped construct and commission a state-of-the-art planning centre, or the "heart of the mine", as the winner describes it.

- The winner of the Social Project of the Year category was Olga Alexandrova, process engineer at the technical department of Nadezhda Metallurgical Plant. Her project to save the birds of Taimyr is designed to raise public awareness about environmental work.
- In the Personal Achievement category, the winner was Darya Ermakova, chief expert for sustainable development at Kola MMC. During her five years with the company, she made a tremendous career after having started out as an electric technician of the second qualification category.

Respect for human rights across Nor Nickel's operations¹

Key human rights ¹	Nor Nickel's by-laws													Approaches and key achievements in 2021	
	Business Ethics Code	Human Rights Policy	Equal Opportunities Programme	Working Conditions Policy	Occupational Health and Safety Policy	Personal Data Processing Policy	Freedom of Association Policy	Policy Regarding Support for Small and Medium Enterprises	Community Engagement Policy	Environmental Policy	Environmental Impact Assessment Policy	MMC Norisk Nickel's Position Statement on Biodiversity	Renewable Energy Sources Policy	Indigenous Peoples' Rights Policy	
Right to life, freedom, and privacy, freedom from arbitrary arrest															Nor Nickel confirms its zero tolerance approach to work-related fatalities. Although the Company's LTIFR locally increased to 0.38 in 2021, Nor Nickel is consistently an above average performer in health and safety across mining peers. For more details, please see the Occupational Health and Safety section.
Right to health and medical assistance															
Right to protection from discrimination ● GRI 406-1															The Company does not tolerate discrimination on any grounds. In 2021, we had no reported cases of racial, gender, religious, political, social or other discrimination.
Right to freedom of association and collective bargaining															The Company maintains a well-developed social partnership framework, with collective agreements covering 94% of the workforce.
Right to work and to fair and adequate remuneration															The average salary paid to Nor Nickel's employees is well above Russia's average, standing at RUB 145,000 per month in 2021. The Company takes steps to secure jobs for vulnerable population groups and people with disabilities. Women have equal rights to men. For more details, please see the Human Capital section.

Key human rights ¹	Nor Nickel's by-laws													Approaches and key achievements in 2021	
	Business Ethics Code	Human Rights Policy	Equal Opportunities Programme	Working Conditions Policy	Occupational Health and Safety Policy	Personal Data Processing Policy	Freedom of Association Policy	Policy Regarding Support for Small and Medium Enterprises	Community Engagement Policy	Environmental Policy	Environmental Impact Assessment Policy	MMC Norisk Nickel's Position Statement on Biodiversity	Renewable Energy Sources Policy	Indigenous Peoples' Rights Policy	
Other labour rights (fair and favourable working conditions, social support, reasonable work schedule, ban on forced labour, regular paid vacations)															The Company operates in strict compliance with Russian Federation employment laws that are in line with the UN documents ratified by Russia. Forced labour is forbidden. In 2021, Nor Nickel's Board of Directors approved the Supplier Code of Conduct and Responsible Sourcing Policy, which disclose, among other things, the Company's human rights principles and requirements that are mandatory for its suppliers. The Company is committed to a zero tolerance approach to any violations of human rights across the supply chain, including: <ul style="list-style-type: none"> • cruel, inhuman or degrading treatment that includes any form of torture; • any form of forced labour or child labour; • sexually motivated crimes; • war crimes, crimes against humanity, genocide.

¹ According to the International Bill of Human Rights, the Indigenous and Tribal Peoples Convention of the International Labour Organisation, and the Constitution of Russia.

Key human rights ¹	Nornickel's by-laws												Approaches and key achievements in 2021		
	Business Ethics Code	Human Rights Policy	Equal Opportunities Programme	Working Conditions Policy	Occupational Health and Safety Policy	Personal Data Processing Policy	Freedom of Association Policy	Policy Regarding Support for Small and Medium Enterprises	Community Engagement Policy	Environmental Policy	Environmental Impact Assessment Policy	MMC Norisk Nickel's Position Statement on Biodiversity		Renewable Energy Sources Policy	Indigenous Peoples' Rights Policy
Right to education															<p>The Company runs a wide range of training courses for all of its personnel categories, providing career guidance and targeted support to educational institutions across its geographies.</p> <p>In 2021, we launched our first ever comprehensive employee training on human rights and plan to have this practice rolled out to suppliers and contractors.</p>
Protection of family, maternity and childhood															<p>The Company respects and protects the rights of mothers and pregnant women.</p> <p>Its social programmes in the fields of housing, healthcare and culture aim to support and provide leisure opportunities for families.</p> <p>For more details, please see the Human Capital section.</p>
Freedom of movement															<p>The Company does not restrict the freedom of movement of its employees. It reimburses round trip travel expenses and baggage fees as part of the benefits package.</p>
Right to shelter, right to own property															<p>The Company does not implement or plan to implement any business projects related to taking land from the population and forced relocation. No disputes with the local population over land use were recorded.</p>
Right to a healthy environment															<p>The Company continuously works to reduce its environmental footprint and implements a comprehensive environmental policy.</p>

Key human rights ¹	Nornickel's by-laws												Approaches and key achievements in 2021		
	Business Ethics Code	Human Rights Policy	Equal Opportunities Programme	Working Conditions Policy	Occupational Health and Safety Policy	Personal Data Processing Policy	Freedom of Association Policy	Policy Regarding Support for Small and Medium Enterprises	Community Engagement Policy	Environmental Policy	Environmental Impact Assessment Policy	MMC Norisk Nickel's Position Statement on Biodiversity		Renewable Energy Sources Policy	Indigenous Peoples' Rights Policy
Rights of indigenous peoples															<p>The Company respects the rights of indigenous peoples and is committed to improving their quality of life by supporting economic and cultural development across regions of operation.</p> <p>Nornickel supports projects aimed at preserving the traditional lifestyle and culture of indigenous peoples while fostering their social and economic development. This includes organising air transportation, supplying construction materials and diesel fuel, and staging festivals and cultural events.</p> <p>In 2021, Nornickel confirmed its commitment to the Free, Prior and Informed Consent (FPIC) process for indigenous peoples whenever this is applicable, and had this principle included into its updated Indigenous Peoples' Rights Policy.</p> <p>In 2021, as a way to improve the effectiveness of engagement with all stakeholders, including indigenous peoples, the Company also developed and approved the Stakeholder Engagement Policy and then the Stakeholder Engagement Plan. Any further stakeholder contacts will be in line with these documents and in accordance with key international standards and guidelines.</p> <p>For more details, please see the Interaction with Indigenous Northern Minorities section.</p>

Occupational health and safety

Human capital

Employee health and safety is one of Nor Nickel's strategic priorities. The Company has the Occupational Health and Safety Policy in place, which gives precedence to the life and health of employees over operational performance while also demonstrating the Company's commitment to creating a safe and healthy environment and fostering sustainable employee motivation for safe workplace behaviour.

Key goals in occupational health and safety:

- **No work-related fatalities** — zero tolerance to any work-related fatalities
- **Injury rate reduction** — bringing down the number of lost time injuries
- **Safe working conditions and mitigation of mining and processing risks.**

Health and safety management

Occupational health and safety (OHS) at Nor Nickel is governed by Russian laws, international regulations and standards, and internal policies and regulations.

● GRI 403-1

OHS regulations:

- Applicable Russian laws aligned with international laws, including conventions of the International Labour Organisation
- Occupational Health and Safety Policy
- Occupational Health and Safety Strategy
- Corporate OHS standards (19 in total)
- Regulation on the Health and 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 of the Company's facilities

Occupational health and safety responsibilities are allocated among Nor Nickel's various governance bodies and business units in line with their terms of reference.

The Group has in place the Corporate Standard on Management Commitment to Occupational Health and Safety.

In line with it, managers draw up personal commitments for the year, which include personal meetings with employees at production units, participation in audits of the health and safety management system, and holding of the Engineer's Day with line managers. As part of these initiatives, managers take part in a variety of activities ranging from attending pre-shift stand-up meetings and joint visits to workplaces, to one-on-one conversations and recommendations to line managers. Achievement of the personal targets is reflected in the management's KPIs.

Heads of operational units chair regular sessions with employees of the Group's divisions and subsidiaries to foster occupational safety culture.

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	ISO 45001:2018
Norilsknickelremont	GOST 12.0.230-2007 (interstate standard identical to ILO-OSH 2001)
Norilsk Nickel Harjavalta	ISO 45001:2018

In 2021, Nor Nickel's facilities passed surveillance audits to confirm compliance of occupational health and safety management systems at the key assets with ISO 45001:2018 Occupational Health and Safety Management System. Following the audits, Bureau Veritas Certification, the certification body, described the OHS management system as mature and well-established and deemed it to be compliant with the standard.

Contractor safety management

● GRI 403-1, 403-2, 403-7

Nor Nickel has developed and introduced a dedicated standard to improve control and safety of work performed by contractors at its facilities. The standard sets out relevant requirements applicable to contractors at the selection stage and onwards.

On the domestic market, Nor Nickel 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.

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.

● GRI 403-5

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 2021, the Group had 42 lost time injuries, with LTIFR standing at 0.38; while this is an increase from the 0.20 level seen in 2020, we are still below the average for the global mining industry and considerably below our corporate metrics for 2013–2015.

In 2021, the Group recorded eleven fatal accidents, compared to nine in 2020. The largest number of fatalities was seen in Norilsk Division and was related to underground work. As a response measure, an expert group comprising Polar Division's managers from different areas was established with a view to increasing the stability and safety of mining processes. Their contribution helped develop an action plan to improve industrial safety.

There was a tragic accident related to a walkway collapse at Norilsk Concentrator involving eight employees of Norilsknickelremont, three of whom died.

Nor Nickel offers its condolences to the families and friends of the deceased and is taking all possible measures to prevent similar incidents going forward.

All circumstances of the fatal accidents were reported on to the Board of Directors and thoroughly investigated to avoid them in the future. Nor Nickel's management views occupational safety and zero workplace fatalities as its key strategic objectives and keeps running dedicated programmes to prevent workplace accidents.

● GRI 102-26

Governance body	Responsibility
Board of Directors	<ul style="list-style-type: none"> • determining the Company's priorities and approving the OHS plans; • monitoring the Company's OHS performance.
Vice President, Ecology and Industrial Safety	<ul style="list-style-type: none"> • organising and coordinating OHS activities; • reporting to the Board of Directors.
HSE Committee	<ul style="list-style-type: none"> • improving the efficiency of OHS organisation and prevention initiatives; • strengthening managers' and experts' responsibility for creating a healthy and safe working environment; • assessing the efficiency of OHS initiatives; • improving the OHS management system.
HSE Department	<ul style="list-style-type: none"> • developing OHS initiatives and monitoring compliance with the applicable legislation.

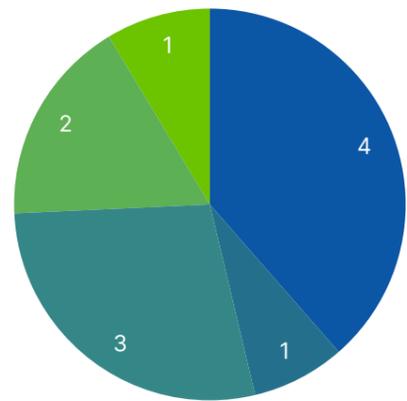
Key workplace injury indicators¹

● GRI 403-9, 403-10

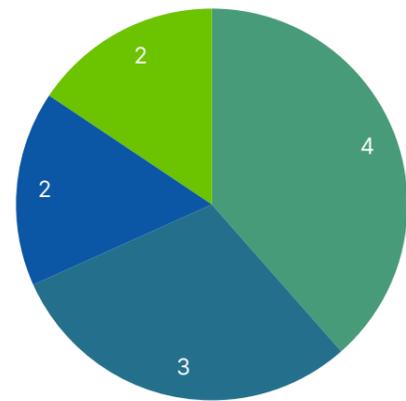
Indicator	UoM	2017	2018	2019	2020	2021	Change in 2021 y-o-y, %
FIFR		0.08	0.05	0.08	0.08	0.10	-
LTIFR		0.44	0.23	0.32	0.2	0.38	+90
Total workplace injuries as per Russian labour laws	No.	61	32	44	31	53	+71
Fatal workplace injuries	No.	9	6	9	9	11	+22.2
Minor injuries	No.	719	1,043	1,000	788	314	-60.2
Potentially dangerous incidents	No.	1,711	2,270	2,220	1,751	789	-57.4
Occupational diseases	No.	361	318	290	235	213	-9.4

¹ The 2020 data are adjusted vs the 2020 Sustainability Report due to a court ruling deeming another accident at a Nornickel Group company an occupational injury.

Fatalities by accident type in 2021



Fatalities by work type in 2021



- Falling from a height
- Rockfall
- Self-propelled equipment and employees
- Other

- Mining
- Repair and maintenance
- Other
- Mining and concentration

Reducing fatalities is the main priority for 2022–2025

Key measures to decrease workplace injury rates:

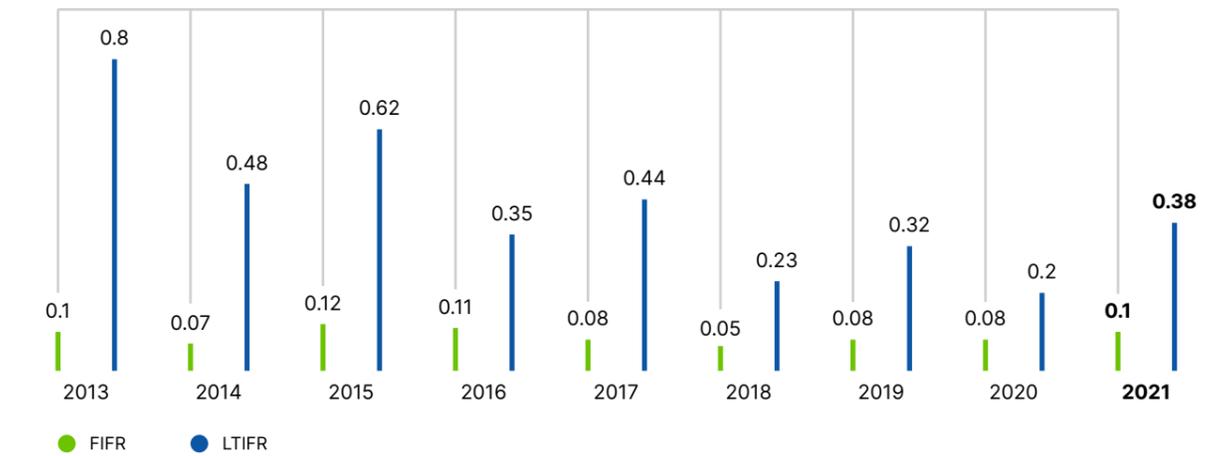
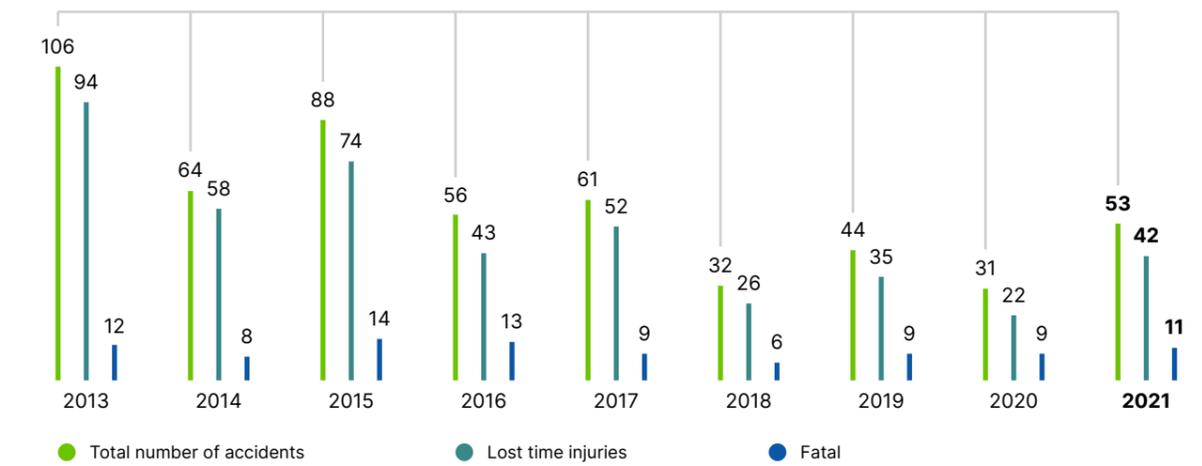
Mining

- assemble a group of experts to evaluate and improve safety standards in mining;
- enhance the safety culture, more actively engage the management and workforce in industrial safety initiatives;
- further promote the risk-oriented approach to work;
- fine-tune the system for preventing mine vehicle accidents;
- use modern training methods, including an underground base and simulators for operators of load-haul-dump machines / roof bolters and drillers;
- further develop control systems and digitalisation projects.

Maintenance and repair

- roll out the smart video analytics and positioning system;
- build state-of-the-art training sites allowing for learning practical skills of working at height safely;
- renovate staircases, platforms and shop racks.

Accidents and work-related injuries since 2013



OHS system development and mitigation of key risks

● GRI 403-1, 403-2

To achieve 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 2021, Nornickel continued to implement the Control, Management and Security Automated System (CMS AS) as part of the Occupational Health and Safety Process Management System Implementation Programme.

CMS AS is an information system based on the SAP EHSM software that collects, processes, registers and analyses occupational health and safety information. As a single centralised managerial tool, CMS AS delivers improvements in the quality and efficiency of health and safety processes and ensures a unified approach to procedures and reporting in this area.

In May 2021, CMS AS was put into commercial operation (with limited functionality) at 17 Group companies.

To improve planning efficiency, automated operational control, and industrial safety, Nornickel is implementing the Technological Breakthrough programme. As part of the programme, mines now run a dispatching and local positioning system at mines to transmit online data on the underground location of around 6,500 employees.

Nornickel has developed and implemented a standard for the identification and management of occupational health and safety risks. The risk management framework has undergone multiple audits. In 2021, the Company worked consistently to comply with the standard requirements and further improve its hazard identification procedures and assess and manage occupational health and safety risks.

In the reporting year, Nornickel verified risk registers, compiled and revised risk lists and implemented risk mitigation action plans. Also, the standard provides for a procedure where employees can refuse to work if they believe that the workplace conditions may cause injuries or damage to health. This procedure is formalised in collective bargaining agreements.

Health and safety expenses, RUB bn



Health and safety expenses per employee, RUB '000



Provision of personal protective equipment

● GRI 403-3

Due to the nature of its business, the Group's employees are often exposed to hazardous and harmful workplace factors (underground work, operation and maintenance of mining equipment and heavy self-propelled vehicles, extreme climate, etc.). In addition to implementing technical and organisational safety measures, we provide them with personal protective equipment (PPE).

In line with the corporate standard, the Company's production sites run preliminary tests on PPE, including the most advanced equipment from leading manufacturers. This is done to supply employees with best-in-class PPE.

Employees working in contaminated conditions also receive free-of-charge wash-off and decontaminating agents.

Approximately

3.2

RUB bn
approximate worth of personal protective equipment purchased by the Company in 2021

Special assessment of working conditions

In 2021, a special assessment of working conditions covered more than 10,000 workplaces and over 19,000 employees, which amounted to some RUB 12 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).

To effectively monitor safe working behaviour, the Company makes employees with a track record of up to three years wear red helmets with the word "Attention" and protective clothing with "Attention" badges.

OHS control and prevention

To improve safety culture and prevent workplace injuries, Nornickel regularly takes control and prevention measures, including:

- second-party OHS management audits (cross-company audits of the Group companies involving the OHS heads and experts from other Group companies);
- internal OHS management audits;
- OHS monitoring at each facility, including multi-phase production site control and ad hoc, targeted and comprehensive OHS inspections;
- safety behaviour audits;
- compliance and certification audits as part of the 45001:2018 management system.

Health and safety competitions

In 2021, we launched team and individual competitions in occupational health and safety in line with the internal HSE standard. 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 communications programme. In 2021, it focused on:

- media support of key OHS initiatives;
- demonstration of the management’s commitment to occupational safety (media publications, management meetings with employees);
- updating OHS information on the corporate portal;
- covering OHS competitions and announcing the best OHS manager, expert, and workplace;
- making employees aware of the existing OHS situation in the Company, accidents, investigations, and actions taken.

Engagement of employees in safety management

● GRI 403-4

To engage employees in safety management, most of the Group companies have in place joint health and safety committees (councils) made up of the management, employee and trade union representatives. The Group companies operating such joint committees employ over 69,000 people (around 92.4% 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). On top of that, Norilsk Nickel Corporate University (an educational institution not involved in production) and NordStar Airlines (no proposals from trade unions have been received) do 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 (949 employees) were elected to participate in preventive activities across the Group’s production units. In 2021, they took part in over 17,000 audits and submitted almost 5,000 health and safety improvement proposals.

Health and safety topics covered in formal agreements with trade unions

● SASB EM-MM-310a.1

Nornickel has collective bargaining agreements signed with employee representatives (including trade union organisations). The agreements contain occupational health and safety provisions and are entered into by the Group and most of its production companies. They cover more than 69,900 employees of the Group (approximately 95% of the Group’s average headcount).

OHS training

● GRI 403-5/ SASB EM-MM-320a.1

One of the key strategies to increasing occupational safety is improving OHS qualifications of staff. To this end, Nornickel organises regular briefing sessions and training courses on occupational health for its employees. We introduced dedicated software modules for specific mining jobs in order to provide health and safety briefings.

In 2021, OHS pre-certification briefing, basic training and certification covered more than 25,000 employees of the Group. The Group’s health and safety training expenses exceeded RUB 102 mln.

In addition to training, some of our divisions take steps to test and consolidate the knowledge of applicable safety requirements for different disciplines. An example is the comprehensive Pre-Shift Examiner system in Polar Division. Employees are required to pass a test before starting their work shift.

In 2021, Norilsktransgaz had the latest equipment installed at its health and safety classroom in Dudinka, deploying VR training simulators and implementing the VRPalliative hardware and software system to improve and stabilise the emotional and psychological condition of employees.

Prevention of occupational diseases

● GRI 403-3

Nornickel cares about the health of its employees and works to prevent occupational diseases.

In 2021, the Group’s costs related to medical examinations and maintenance of medical aid posts amounted to RUB 505 mln and RUB 276 mln, respectively.

The Company allocates funds and ensures regular health monitoring of personnel. 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 nutrition, milk, and other equivalent food products for therapeutic purposes in compliance with the applicable Russian 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

Employee health is a key resource to ensure sustainable and efficient development of the Company. The Group is running the Corporate Healthcare project across its core regions of operation.

Its key activity is to set up a chain of healthcare centres with the latest medical equipment and highly qualified professionals. In December 2021, the first corporate healthcare centre opened its doors in Norilsk, providing a wide range of services and focusing on Nornickel’s voluntary healthcare insurance programme. It is equipped in line with European standards and has a medical information system in place. The centre offers almost 250 healthcare services and brings together personnel from a variety of regions — Moscow, the Kaliningrad and Orenburg regions, Republics of Altai, Bashkortostan, Yakutia, the Far East, and other Russian regions. The Company provides modern housing arrangements to each non-resident healthcare professional. During the initial stage, doctors also helped state-run healthcare facilities, where they were employed on a part-time basis. The centre’s premises are renovated in line with corporate standards. The Group operates the facility under the Z-Clinic brand, established for Zapolyarye Health Resort and currently developed by the Corporate Health Centre. This supports succession and helps create single standards of healthcare for employees and their families.

Health and safety performance indicators for accident prevention

Indicator	2017	2018	2019	2020	2021
Audits conducted:					
by health and safety committees, '000	>30.8	>30.9	>29.8	>48.5	>50.3
Target audits conducted by managers, senior specialists and committees of the Group’s facilities and business units, '000	8.7	9.7	9.6	10.6	11.1
Ad hoc audits, '000	15.3	15.7	15.5	27	23
Comprehensive audits of health and safety and relevant management systems	221	149	126	164	182
Coupons removed from the books of employees violating health and safety requirements ¹ , '000	2.9	2.2	1.8	1.1	1.1
Employees subject to disciplinary action for the violation of health and safety requirements, '000	7.9	6.8	6.3	5	3.3
Employees with reduced bonus payments, '000	>13.6	>13	>11.9	>10	>8
Total, RUB mln	>74	>70	>69	>59	>66
Employees incentivised for health and safety involvement and lower workplace injury rate as per the audit results, '000	>5.6	>6.4	>6.5	>5	>5
Total, RUB mln	>41	>52	>57	>59	>69

¹ Removal of coupons is a preventive measure that enables the Company to register the number of gross health and safety violations which did not cause accidents, and subject the culprits to disciplinary actions and financial penalty.

We plan to develop a corporate chain of healthcare centres, with new clinics to be included. Each of them is established from scratch and is intended to increase healthcare capacities in the region without replacing existing ones. The key centres included into the approved programme of projects are:

- medical centre in the central part of Norilsk with in-house laboratory, dental department, and radiology centre, including MRI: to be commissioned in 2024–2025;
- medical centre in Talnakh: to be commissioned in 2023–2024;
- medical centre in Kayerkan: to be commissioned in 2023–2024;
- medical centre in Dudinka: to be commissioned in 2022;
- medical centre in Monchegorsk: to be commissioned in 2023–2024;
- MRI centre in Monchegorsk, with preliminary inclusion into the government guarantee programme: to be commissioned in 2022.

The Company is also planning to develop small-scale healthcare departments in remote locations (Snezhnogorsk, etc.).

Going forward, the Company aims to set up Nornickel's Competence Centre for Corporate Healthcare, which will be responsible for coordinating training and upskilling programmes, telemedicine, etc.

In addition, together with the government the Company is running partnership projects to establish healthcare centres across its regions of presence to serve all local residents under the compulsory health insurance programme.

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 addition, a programme is in place to upgrade the Company's healthcare facilities and medical examination rooms to perform pre-trip and pre-shift check-ups. The first upgraded and re-equipped facilities will be made available in 2022. Efforts are ongoing to use them for the establishment of the Workshop Healthcare Service as a preventive healthcare unit.

The Company runs comprehensive inspections of healthcare systems and areas in cities and towns where its employees reside.

Work is actively underway to promote a healthy lifestyle. As part of the programme, Nornickel relies on a comprehensive approach to automate healthcare services and apply the latest IT solutions in healthcare. In 2021, the medical information system was up and running at Zapolyarye Health Resort and the medical centre in Norilsk. In 2022, we expect it to be rolled out to the Company's medical aid posts and the Kola Peninsula. A digital laboratory of healthcare services was put in place, already coming up with three initiatives, including the development of a modern self-test kiosk. Nornickel is also looking into potentially integrating with state-run healthcare providers and setting up shared medical records.

Emergency preparedness

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 («Federal Law No. 116-FZ»).

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.

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 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

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

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.

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

HR management and social partnership

HR management

Our human capital is the basis of our success. With this in mind, Nor Nickel 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 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, make effective HR decisions and assess management effectiveness.

HR management responsibilities are allocated among Nor Nickel's various governance bodies and business units in line with their terms of reference.

Key HR management priorities:

- Building a skilled and balanced team;
- Staff training and development;
- Improving productivity and efficiency;
- Creating a talent pool;
- Enhancing our incentive system;
- Implementing our social policy.

Nor Nickel's key HR management regulations¹:

- 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.

Staff composition

● GRI 102-8/ SASB EM-MM-000.B

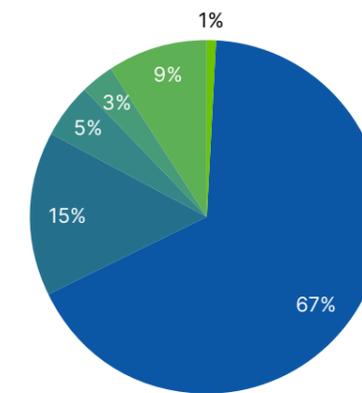
In 2021, the Group's average headcount was 73,557 employees, of which 99% were employed at its Russian companies. A 1.7% growth in the average headcount across the Russian operations in 2021 was driven by the investment programme, as well organisational and technical changes.

The headcount² of the Group's Russian operations as at the year-end stood at 76,626 employees, with most of them working full time (>99%) and on permanent contracts (>95%). As at the end of 2021, there were 1,129 employees working under civil contracts.

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

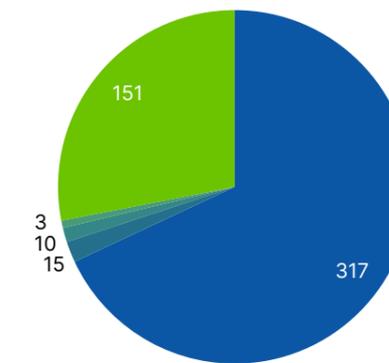
² Including salaried employees and external part-timers.

Group personnel structure by territory³, %



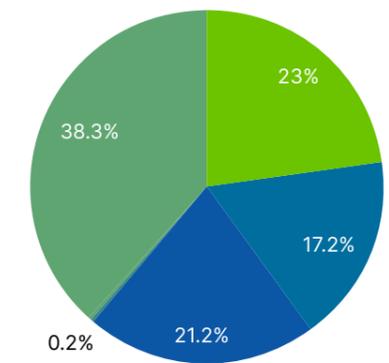
- Norilsk Industrial District (NID)
- Kola Peninsula Industrial District (Murmansk Region)
- Krasnoyarsk Territory (excluding NID)
- Trans-Baikal Territory
- Moscow and other regions of Russia
- Outside Russia

Headcount of the Group's foreign operations, individuals



- Europe
- Asia
- North America
- Australia
- Africa (SAR)

Personnel structure by education, %



- General secondary education
- Basic vocational education
- Secondary vocational education
- Undergraduate higher education
- Higher education

³ Structure of salaried staff as at 31 December 2021.

● GRI 102-26

Governance body	Responsibilities
Board of Directors	<ul style="list-style-type: none"> • Approving key HR policies
Corporate Governance, Nomination and Remuneration Committee of the Board of Directors	<ul style="list-style-type: none"> • Considering HR management priorities and key internal regulations • Reviewing matters related to human capital development
Senior Vice President for HR, Social Policy and Public Relations	<ul style="list-style-type: none"> • Overseeing and coordinating the development and implementation of the HR strategy
HR Department	<ul style="list-style-type: none"> • Developing and implementing the HR strategy • Taking part in the development and implementation of the Company's social policy
Social Policy Department	<ul style="list-style-type: none"> • Developing and implementing the social policy, social and charitable programmes
HR functions of the Group companies	<ul style="list-style-type: none"> • Implementing HR and social policies at Group companies
Corporate Trust Line, offices for operational, social and labour relations	<ul style="list-style-type: none"> • Registering complaints and queries related to employee rights

Personnel structure by gender and category in 2017–2021⁴

Category	Managers		White-collar employees		Blue-collar employees	
	Male	Female	Male	Female	Male	Female
2017	8,200	2,559	5,846	7,024	42,562	11,799
2018	8,017	2,639	6,047	6,911	40,502	10,810
2019	7,979	2,518	6,189	6,940	38,842	10,314
2020	8,117	2,575	6,436	7,043	37,352	9,925
2021	8,489	2,708	6,839	7,794	37,327	9,904

⁴ Unless otherwise specified, the indicators included in this report represent the Group's Russian operations.

Personnel structure by gender and age, %

Age	Under 30		30–50		Over 50	
	Male	Female	Male	Female	Male	Female
% of headcount	11.3	3.9	46.0	20.0	13.0	5.7

Key personnel turnover indicators¹

● GRI 401-1

Indicator	2017	2018	2019	2020	2021
Employments	11,262	14,901	13,805	10,481	17,642
Employee inflow ratio ² , %	14.6	19.9	18.8	14.2	23.1
Resignations and dismissals	15,232	16,918	13,832	10,247	14,811
Employee turnover ³ , %	10.3	10.2	10.5	9.7	12.2
Voluntary turnover ⁴ , %	7.7	7.5	8.2	7.8	10.5
Employee outflow ratio ⁵ , %	20.0	22.6	18.8	13.9	19.4

¹ Russian companies of the Group.² The ratio of new employments to total headcount as at the end of the period.³ The ratio of resignations, dismissals for breach of labour discipline, and negotiated terminations, to the average headcount for the year.⁴ The ratio of all resignations to the average headcount for the year.⁵ The ratio of all resignations and dismissals to total headcount as at the end of the period.

The Company as a major employer in the Norilsk Industrial District and the Kola Peninsula realises that it is responsible for its impact on these regions' labour markets. In hiring personnel, we assess all candidates based on their work experience, qualifications, and education.

As the Company is currently going through an active phase of its investment projects and organisational transformations, the number of new hires and dismissals in 2021 increased, both as a result of additional recruitment for full-time and part-time positions and due to staff transfers within the Group.

● GRI 202-2

The share of top executives from among local communities was 99.4% across the Group's Russian companies in 2021.

The share of employees from among local communities⁶ was 99.8% across the Group's companies in 2021.

⁶ Employees from among local communities refer to the workers who are residents of the country where the relevant Group company is incorporated.

Strong employer brand

In 2021, we retained leadership in key Russian and international rankings of the best employers:

- best employer in the metals and mining industry among students, graduates and international rating experts according to Universum and Randstad Award;
- best employer in the metals and mining industry among students of leading universities, according to Best Company Award, and 2nd place in the Power of Growth category for the steady increase in business students' interest in the Company;
- Best Metals Industry Employer, and 14th position in the Best Employers among Their Target Audience category in Future Today's ranking, which takes into account the «opinions of Russian university students»;
- 16th place among the largest companies in the national employer rating by HeadHunter and RBC out of more than 600 participating companies;
- silver prize by Forbes in its best employers rating (Top 50 out of 104 participating companies), gold prize in the Employees and Society category, and platinum prize in the Corporate Governance category.

Commitment to employee rights

Nornickel respects employee rights and takes them into account in its operations.

At the same time, we provide our employees with equal opportunities to develop their professional potential. Employee performance is evaluated on a fair and impartial basis, and recruitment and promotion decisions are tied exclusively to professional abilities, knowledge, and skills.

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

Employment of people with disabilities

The Company has created workplaces tailored for people with disabilities. According to the employment quotas that vary depending on the region and company size, the share of such employees starts from 2% of the average headcount, excluding employees involved in harsh, hazardous and/or dangerous work.

We provide necessary working conditions, including work and rest schedule, annual and additional paid leaves, and additional financial assistance for this category of employees.

The Company has adopted internal labour regulations, which are approved in consultation with the trade union organisation and which establish working hours of employees. The Company has a standard working week of 40 hours as determined by the applicable Russian laws and regulations. Employees involved in hazardous and/or dangerous work 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 strictly complies with the applicable regulations prohibiting women's exposure to harsh and dangerous work in the mining industry. Zero tolerance towards child labour in any form, including the involvement of minors below 18 in hazardous and/or dangerous work is of equal importance.

The Company seeks to maintain an open dialogue with employees and to offer everyone an opportunity to be heard. In 2021, in addition to the Corporate Trust Line, the Company had offices for operating, social and labour relations in place. They are primarily tasked with response to employee queries, control of their processing, prompt resolution of conflicts and preventing violations of employee rights. The offices regularly monitor the climate within the teams, enabling the Company to address any arising issues in a timely manner.

In 2021, the Group companies operating in the Norilsk Industrial District ran 25 offices that received over 64,000 queries from employees (81%), former employees (18%), and local communities (1%). They focused on social and working matters (82%), legal matters (15%) and other topics (3%).

Social partnership framework

In order to develop interregional social partnerships, 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. The agreement regulates social and labour relations between the employers who are members of the association 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. In December 2021, the parties to the Agreement entered into an addendum to extend it to 2022–2025 and to amend it.

As at the end of 2021, the agreement applied to 22 Group companies, including MMC Norilsk Nickel, covering 89% of the Group 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 performs its obligations in compliance 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 2019–2022, and joint resolutions. We also follow the Freedom of Association Policy approved by the Board of Directors.

The interests of the Group's employees may be represented through various mechanisms, depending on the level:

- in labour relations, employee interests are represented by social and labour councils and trade unions;
- social and labour councils represent the interests of employees at all of the Group's major operations in the Norilsk Industrial District and Murmansk Region. Chairs of the local councils make up the Social and Labour Council of MMC Norilsk Nickel and the Social and Labour Council of Kola MMC;
- the Group companies have collective decision-making bodies representing the employer, employees and trade unions, including collective bargaining commissions, labour dispute commissions, social benefits commissions, social insurance commissions, health and safety commissions, social and labour relations commissions, etc.;
- the Trade Union of MMC Norilsk Nickel Employees, an interregional public organisation that includes territorial trade unions and trade unions of the Group companies, represents the Group's employee interests on the interregional level. The trade unions of transport and logistics divisions are members of the Yenisey Basin Trade Union of Water Transport Workers (Krasnoyarsk, Russia).

● GRI 102-41

The Group companies are parties to 23 collective bargaining agreements covering 94% of the Group's headcount. As at the end of 2021, 7.61% of all the Group's employees were members of trade unions, while 77.19% were represented by social and labour councils.

● 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 — at least two months prior to the start of such changes or three months prior to the start of such changes in case the redundancy decision may lead to large-scale dismissals. These standards are formalised in collective bargaining agreements.

● GRI MM4/ SASB EM-MM-310a.2

The absence of strikes and lockouts involving the Company's personnel in the reporting year 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's grading system is designed to maximise its return on investment in human capital and to attract, engage and retain top talent. 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.

Remuneration policy goals	Remuneration policy principles
<ul style="list-style-type: none"> • Attract and engage talent • Retain talent • Promote a productivity mindset 	<ul style="list-style-type: none"> • 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.

In 2021, we continued our efforts to transform the bonus system for PMO staff. The updated incentive system based on key project indicators is aimed to motivate and retain key talent until the project is completed.

Also, in 2021 we introduced a unified policy on annual bonus rates. In line with the policy, the annual bonus depends on the employee's grade. This approach enabled us to improve the transparency of our remuneration framework.

Key compensation indicators in 2021, by region

● GRI 202-1

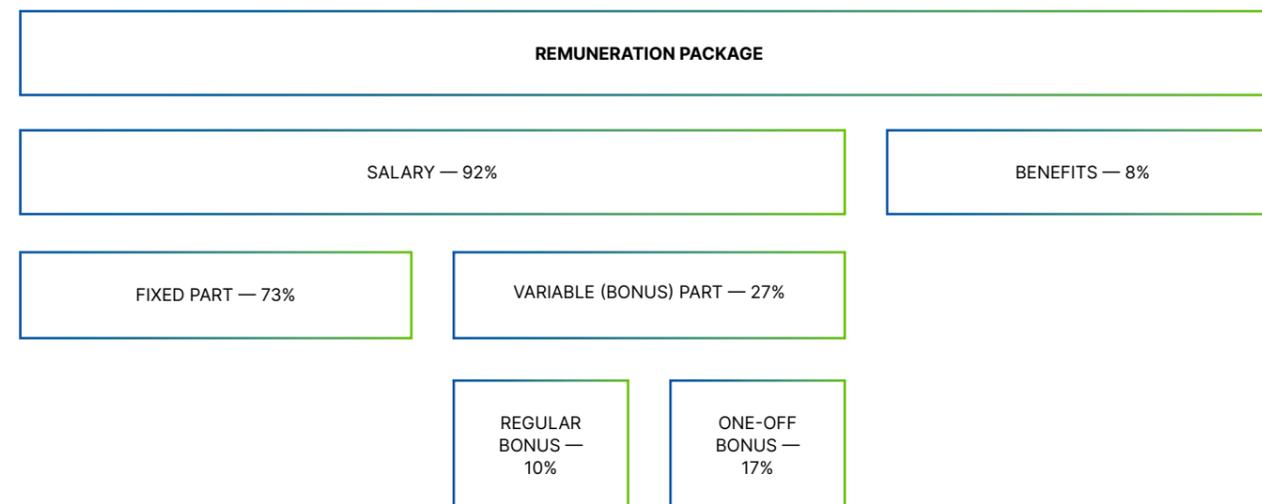
Region	Remuneration package, RUB '000	Average monthly salary, RUB '000	Share of regional payroll in total payroll, %	Minimum monthly compensation to statutory minimum monthly wage ¹	Statutory minimum wage, RUB
Group average	158.0	145.1	100.0	—	—
Norilsk Industrial District (NID)	156.1	142.8	65.6	1.0	33,259
Kola Peninsula Industrial District (Murmansk Region)	117.2	103.7	11.4	1.0	29,422
Krasnoyarsk Territory (excluding NID)	93.9	90.3	3.5	1.0	20,468
Trans-Baikal Territory ²	137.0	130.0	3.3	2.11	19,188
Moscow and other regions ³	310.2	291.9	16.2	2.55	20,589

¹ Minimum wages paid by the Company are gender neutral.

² Calculated based on Bystrinsky GOK.

³ Data provided for Moscow only.

Remuneration package across the Group's Russian operations in 2021, %



Corporate culture development

To create a more positive environment for employees, as part of its human resource strategy, Nornickel seeks to develop its corporate culture with a focus on improving efficiency, accountability and employee engagement.

Training for management teams in corporate culture

In 2021, we focused on two management development programmes: Engagement Workshops (10 workshops, more than 40 training sessions) and Corporate Culture Workshop (33 workshops at 25 sites). This improved engagement and involvement of management teams in the corporate culture development programmes.

Engagement

As part of its efforts to boost employee integration, Nornickel annually runs a series of activities, which comprises three major 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.

Following the 2021 survey, the engagement index increased by 2 p.p. y-o-y to 56%, including in the following areas:

- conditions for effective work (+4 p.p.);
- improved workplace amenities, equipment upgrades and repairs had a positive impact on this factor;
- remuneration and recognition (+2 p.p.);
- salary satisfaction (+5 p.p. over the year);
- career opportunities (+4 p.p.)

Besides, perceptions of senior management are not under risk any more for the first time in four years, and environmental perceptions are gradually improving despite incidents.

The study includes surveys and focus groups. In 2021, 46,800 employees took part in the survey, a 10% 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.

Adoption of the Business Ethics Code

On 18 December 2020, the Board of Directors approved the new version of MMC Norilsk Nickel's Business Ethics Code.

To ensure that employees understand and accept the principles and fundamentals of the Business Ethics Code, the Company held a series of training programmes for employees explaining the Code (a training module on the Code was integrated into Our Values programme, Nornikel Live, and Corporate Dialogues). In 2021, the programmes covered 45,000 employees.

Nickelisation

In 2021, Nornickel-SSC launched Nickelisation, its own gamification system. The platform is designed to bring employees together in a remote working environment, help create a single big 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.

Since the launch of the platform, employees have said thank you to colleagues for their interaction and assistance more than 28,000 times, earned over 65,000 nickels (in-game currency) and purchased over 700 gifts with them. Thanks to the launch of the Good Deeds section, employees can now send nickels to charities, while also sharing their volunteering experience and inspiring their colleagues for charitable activities.

Personnel training and development

To deliver on ambitious goals, meet new technology requirements, and upgrade production, we pay special attention to developing expertise and competencies of our employees. The Company helps people become top professionals in their field.

Our training programmes cover all functional areas and all employee categories.

Personnel training

● GRI 404-2

We provide extensive professional training opportunities to our employees emphasising the use of modern technology. Digital competencies have become a key focus of training.

More than 24,000 employees are active users of the Nornickel Academy corporate educational platform, taking advantage of new online learning opportunities.

The Nornickel Academy platform offers free access to more than 150 courses. The catalogue includes courses in the following areas:

- The Company and Myself;
- Professional Development;
- Personal Development;
- Management of People and Processes.

The most popular courses in 2021 were those developing managerial and digital competencies, specialisation courses, mandatory courses, and coaching. In 2021, we developed an educational course named Fundamentals of Non-Ferrous Metallurgy for non-core staff of the Company, which attracted more than 700 employees.

The Company pays special attention to developing the digital skills and literacy of employees. The objective of Digital Nornickel, a multi-level educational programme focusing on digitalisation, is to offer all employees an opportunity to learn the technology and skills required to work in a modern digital production environment and live in a digital environment.

The Digital Literacy course developed as part of the Digital Nornickel training programme yielded impressive results. The educational project seeks to explain what digital solutions, technologies, and tools are available on the market today, what Nornickel has in place, and what everyone can leverage in their work.

As at the end of 2021, 46,700 people completed the training course.

Key personnel training indicators

● GRI 404-1

Indicator	2017	2018	2019	2020	2021
Total training man-sessions, including training, retraining and skill improvement, thousand	95.0	87.5	90.8	70.9	115
incl. blue-collar employees	54	43.3	40.5	30.6	50
incl. managers	26	27.4	30.9	23.2	36
incl. white-collar employees	15	16.8	19.4	17.1	29
Employees trained, thousand	46.3	44.0	40.4	36.7	51
Total training man-hours, thousand	6,630	4,508.7	4,655.9	3,462.2	5,000
Average annual training hours per employee trained	70	51.6	51.3	48.8	43.7
Average annual training hours per employee (based on average headcount)	85	60.2	64.0	48.5	69.2
incl. blue-collar employees	95	62.2	69.2	48.3	69.5
incl. managers	83	76.7	72.5	64.0	96.9
incl. white-collar employees	44	38.7	37.5	36.8	47.3
Training costs, RUB mln	896	1,022.2	1,101.9	740.2	952
Costs per employee trained, RUB	9,459	11,687	12,133	10,440	18,272

Management development

We continue to lay special stress on developing management competencies and enhancing management skills. Corporate training programmes focus on the following categories of employees:

- Top 100;
- middle management;
- managers at all levels;
- line managers.

Top 100

In 2021, we implemented the corporate development programme for the Top 100 and high-potential managers identified by HR committees in a mixed format. The training was completed by 22 managers. The programme relies on the project methodology, whereby participants get involved in designing real growth projects in certain areas of the Company's operations.

Middle management

Pursuing Efficiency

The Pursuing Efficiency programme is a bright example of introducing a e-learning culture. Traditionally, it comprises five modules that develop the management competencies of middle managers:

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

In 2021, the programme was adapted to the online format based on the Learning Journey principles. This is a mixed multi-format workplace learning concept that moves the learner along a trajectory of acquiring skill to the point of conscious competence. 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.

Managers at all levels

360-Degree Management

In 2021, the managers who had undergone a 360-degree competency review continued the 360-Degree Management online programme which focuses on enhancing corporate and management competencies. Participants selected their topics on their own, taking into account the review results and targets set out in their individual development plans. Training covered six topics:

- team interaction;
- execution management;
- development of corporate competencies;
- communications;
- systems thinking;
- partnerships.

A total of 139 managers from divisions, subsidiaries and the Head Office completed the training.

In 2021, the Company launched School of Foreman, a new learning programme for line managers in production (foremen), which saw 72 foremen trained. According to feedback, the participants rated the programme with a high score of 9.6 out of 10.

Vocational training for production personnel

The Company places strong emphasis on establishing a modern learning environment by creating technological learning spaces. For example, a new innovative training centre in Talnakh will be completed by the end of 2024. The new building will meet all modern requirements for training the Company's employees using digital technologies. The centre will feature a fleet of simulators to develop hands-on skills. To raise the competencies of our employees, the Company has an underground training base at Kayerkansky Mine for developing practical skills of operators of long-haul-dump vehicles (LHD), underground self-propelled machines and self-propelled drilling rigs.

A building in Monchegorsk, Kola Division's home turf, is being renovated and in spring 2022 will accommodate a branch of Norilsk Nickel Corporate University launched in early 2021. The new building will boast comfortable modern classrooms, computer rooms, a VR classroom, a lean manufacturing laboratory and a modern conference room to host corporate events for 90 people.

Talent pool

We continuously plan staff professional development and build a talent pool for leadership positions while also training and promoting pool members. This way we supply the Group companies with highly qualified managerial personnel.

In 2021, the Company continued to grow and train a pool of junior and mid-level managers at 11 sites of Norilsk and Kola Divisions.

We also kept expanding a pool of top managers. The reporting year saw 44 meetings of HR committees for key functional areas and Top 100 managers. The key focus was on hedging against the shortage of top managers, building a senior talent pool, assessing if the candidates are ready for promotion and identifying areas for development. Managers and members of the relevant talent pool can take part in training under special corporate programmes — Nornickel's Leaders, Pursuing Efficiency, and I am HR.

In 2022, the Company plans to integrate talent pool creation and development projects at all levels into Nornickel's talent management framework.

Career guidance and recruitment of young talent

Nornickel realises the importance of nurturing a new generation of employees and actively connects with young graduates, students and schoolchildren as part of its leadership, internship, and career guidance programmes designed to assist the Company in attracting the best talent.

We closely cooperate with 25 higher educational institutions across Russia.

Despite the remote work arrangement in 2021, our Head Office carried on with the internship programme. Top Moscow-based students were invited to take part in paid internships at the Company's Moscow office. The programme enjoyed strong demand, with over 2,000 students applying for enrolment.

Nornickel places a strong emphasis on promoting engineering education in Russia, helping to boost interest in engineering careers among young people. In 2021, we supported CUP Technical and Metal CUP, Russian and international case competitions among students of technical universities. They challenged students to develop solutions to business cases dealing with Nornickel's operations, giving them valuable insights into the Company's business.

In 2021, we carried on with the Conquerors of the North programme now running online. Out of more than 2,000 applicants from Russia's leading engineering universities, we selected 590 participants. An effective talent pool building instrument, the new programme became our maiden course to help young engineers develop skills necessary

to work in production. By dealing with cases using applied problem solving methods, they gained an insight into real engineering challenges, while soft skill training was useful for those aiming for a successful career and outstanding results. After completing the programme, 168 trainees were recommended for internship and further employment at Nornickel.

Also, we run a number of career guidance initiatives for schoolchildren. They include Arctic.PRO R&D Winter School, Arctic Wave festival of R&D discoveries, IMake engineering marathon, a National Science Festival, School of Urban Competencies and the School Break educational project — all attended by over 29,500 schoolchildren annually.

Early career guidance for children

At the beginning of every school year, the Company provides all first graders (over 5,000 kids) within Nornickel's footprint with a book that features exciting insights into jobs and professions relevant for the Company. "The Tale of How Metals Forged Cities" is the ultimate ABC of metals and mining. Capturing children's attention with a vivid and eye-catching imagery, it 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.

To complement the book, we have also created a cartoon series titled "Professor Nichrome's Lessons".

Combined, these educational materials will be used in career guidance work with young pupils by both primary school teachers and career guidance counsellors.

Social policy

● GRI 403-6

Nornickel regularly offers its employees — many of whom work beyond the Arctic Circle — 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;**
- **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;**
- **voluntary health insurance;**
- **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.**

Programme to improve social and working conditions at production sites

Nornickel believes it is essential to create a comfortable and safe working environment. Working conditions play a fundamental role in reducing workplace stress and injuries, fostering culture and employee engagement, and improving their health. By creating comfortable social and living conditions for its people, the Company ensures an appropriate level of production environment and demonstrates a strong social responsibility.

Our sites operate more than 3,200 sanitary, amenity, sports, catering, healthcare, and recreational facilities with a total area of over 350,000 m².

Since 2003, Nor Nickel has been running the programme to improve social and working conditions at production sites. Since its launch, we have overhauled 416 social facilities and purchased 434 relocatable buildings, investing a total of RUB 6.5 bn.

In 2021, nine divisions and Russian entities of the Group based in Norilsk, Taimyrsky Dolgano-Nenetsky Municipal District, and the Murmansk Region took part in the programme. Comprehensive overhauls of 123 social facilities, including those of social importance, were completed. The total area of renovated premises amounted to 19,389 m². In the reporting year, 15 relocatable buildings were purchased to meet the needs of our employees. In total, the Group improved social and living conditions for 5,351 people in 2021.

In the reporting year, the Group spent RUB 1.9 bn to improve social and living conditions, including RUB 1.58 bn used to finance design and comprehensive overhaul, as well as RUB 323 bn for equipment procurement.

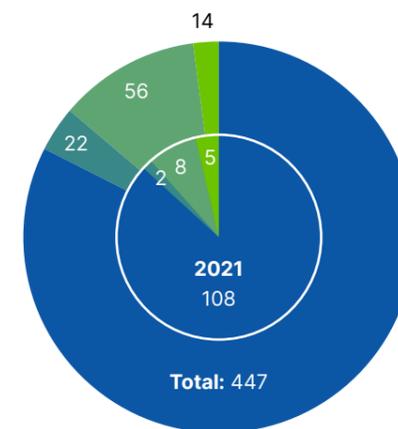
In 2022–2024, the programme's budget will total RUB 8.8 bn. The Company plans to renovate more than 400 social facilities implementing new corporate design solutions.

Social expenses and benefits, RUB mln

Indicator	2017	2018	2019	2020	2021	2022	
	Actual				Plan	Actual	Plan
Health resort treatment and vacations of employees and their families	1,953	1,947	1,907	791	2,145	2,076	2,438
Reimbursement of round trip travel expenses and baggage fees to employees and their families	2,960	3,355	3,150	2,706	3,633	3,295	4,238
Pension plans	1,004	961	953	998	1,200	1,020	1,439
Housing programmes	5,476	6,252	329	825	3,184	1,042	1,167
Relocation assistance to new employees	299	209	150	113	308	211	740
Social projects for employees (development of target categories, sporting events and holiday celebrations)	667	630	898	649	1,455	1,072	1,285
Voluntary health insurance	204	347	753	939	1,130	2,073	2,346
Financial aid and additional benefits to retired and former employees and their families	215	201	178	199	294	609	647
Other payments and social expenses (healthcare services, severance pay, etc.)	1,626	1,791	1,259	2,084	125	431	808
Total expenses related to social programmes and benefits for employees	14,404	15,693	9,577	9,304	13,474	11,929	15,108

¹ Including personal accident insurance. Information was provided by MMC Norilsk Nickel.

Social facilities overhauled in 2003–2021



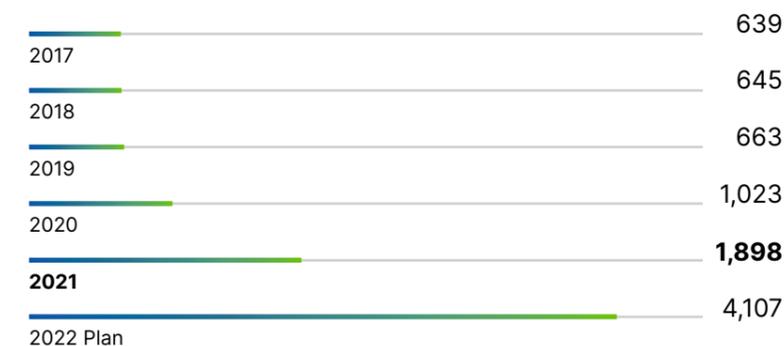
- Sanitary and amenity facilities
- Sports and healthcare
- Catering
- Other

Health improvement programmes

● GRI 403-6

Health improvement programmes are an important element of our social policy, as many of our employees live in the harsh climate of the Far North, and the nature of operations at the Group's facilities requires special care. For many years now, the Company has been implementing programmes of rehabilitation and health resort treatment for employees and their families.

Costs of the programme to improve social and working conditions, RUB mln



Key health improvement programmes	Participants	
	2020	2021
Zapolyarye Health Resort (Sochi), including:	10,779	16,592
joint programme with Rosa Springs Health Resort (seven days)	2,241	3,650
Kolsky Health and Spa Centre (Monchegorsk)	1,038	1,564
Non-corporate health resorts, including:	1,240	1,988
Russia and Belokurikha health resorts (Altai Territory)	696	837
Primorie Holiday Centre (Gelendzhik)	500	800
Rosa Springs Health Resort (18 days)	0	324
other non-corporate health resorts	44	27
Vacations for children (Anapa)	0	1,330
International vacation programme (Bulgaria)	0	3,041
Total participants	13,057	24,515

Like in the previous year, in 2021, in order to organise recreation for children without leaving the region, the Company arranged local summer activities by launching virtual camps for kids in the Murmansk Region, Norilsk, and Dudinka.

Nornickel welcomes regular fitness sessions of its employees and organises and holds annual corporate mass sports events within the Company's footprint, as well as corporate sports festivals and competitions, attended by over 18,000 employees, their families, and local residents.

Co-Funded Pension Plan Programme

● GRI 201-3

To support employees after they retire, Nornickel has the Co-Funded Pension Plan, a corporate private pension programme, in place. As at the end of 2021, it covered 10,776 employees across 21 Group companies, with 5,019 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 par (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.

In 2021, an average participant contribution amounted to 3.38% of the employee's salary, or the Company's monthly average of RUB 4,560.

Participants of the Co-Funded Pension Plan, by region

Indicator	2019	2020	2021		2022
	Actual	Actual	Plan	Actual	Plan
Total participants	12,304	11,519	12,900	10,776	12,593
Norilsk Industrial District	9,972	9,288	10,573	8,737	10,483
Kola Peninsula Industrial District (Murmansk Region)	2,313	2,215	2,302	2,013	2,062
Moscow and other regions of Russia	19	16	25	26	48

Co-Funded Pension Plan highlights

Indicator	2021
Total Company costs, RUB thousand	542,043.8
Participant's contribution	
Average contribution per participant, % of wages	3.40
Average monthly contribution per participant, RUB thousand	4.61
Company's contribution under the Parity Plan	
Average contribution per participant, % of wages	3.38
Average monthly contribution per participant, RUB thousand	4.56

Programmes supporting former employees and their families

The ongoing support of its former employees is part of the Company's corporate social policy. Nornickel's Veterans programme has been designed to support 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.

The Company also provides targeted assistance to its former employees and their families to pay for health improvement and medications, funeral services, and helping in financial distress.

Housing programmes

In the reporting year, the Company continued the combined Our Home / My Home programme, with its participants able to acquire ready-for-living apartments on special terms across Russia. Our Home / My Home programme covers employees of Polar Division, Polar and Murmansk Transport Divisions, Kola MMC and 18 more Group companies operating in Norilsk, the Taimyrsky Dolgano-Nenetsky Municipal District, and the Murmansk Region.

3,826

apartments provided to the Company's employees since the start of the programme

To do so, Nornickel purchases ready-for-living apartments in various Russian regions at its own expense and provides them to eligible employees under co-financing agreements. 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 cost of housing remains unchanged for the entire period of the employee's participation in the programme. 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. In 2014–2018, apartments were purchased in the Moscow and Tver regions, as well as in the Krasnodar Territory, with the Company buying properties located in close proximity to enhance the employees' living standards by developing additional infrastructure and optimising the scope of maintenance tasks assigned to the property management company.

In 2021, Nornickel also carried on with Your Home initiative based on similar arrangement as Our Home / My Home programme. The title to Your Home properties is registered right after the purchase 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 programme, the Company has purchased 2,103 apartments with Yaroslavl joining the ranks this time.

Nornickel also runs the 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. About 1,000 employees have already taken part. The programme covers employees of Polar Division, Polar and Murmansk Transport Divisions, Kola MMC and 20 more Group companies operating in Norilsk, the Taimyrsky Dolgano-Nenetsky Municipal District, and the Murmansk Region.

Those Who Care change management programme

Those Who Care is a change management programme for people of action who have ideas and want to be involved in bringing them to life. The programme is running in Kola and Norilsk Divisions.

It is designed to bring together proactive employees of various professions and from different sites. All participants have one trait in common — they are the ones who aspire to develop and implement the change projects the Company needs, even beyond their functional duties and KPIs.

Any employee of the Company volunteering to take part can join the Those Who Care programme.

Its business product is practical change projects. This is done by establishing change support teams and creating a corporate community — Those Who Care.

Focus areas of Those Who Care projects of changes:

- Occupational safety and promotion of safe workplace behaviour
- Digitalisation (Digital Nornickel)
- Labour productivity and efficiency improvements
- Development of the corporate culture, staff motivation and engagement, internal communications
- Employer brand promotion
- Cross-functional cooperation
- Ecology and environmental protection (Green Nornickel)

In 2021, 576 participants from Monchegorsk, Pechenga District, Murmansk, and Norilsk joined the Those Who Care corporate community; 11 business customers (Deputy CEOs, heads of shops, and heads of business lines) were engaged; interviews with business customers were conducted resulting in 31 new business objectives.

Following the review exercise, all project solutions were accepted by business customers. The expected economic effect of the proposed solutions totals RUB 2.6 bn.

The programme was highly commended by the expert community at the MINEX Russia 2021 mining forum and won gold in the mineHR category.

Sporting and mass public events programme

Healthy lifestyle is one of the focus areas in the personal growth of the Company's employees facing the harsh climate of the Far North. Corporate sports programmes seek to promote healthy lifestyles, improve interpersonal communication and develop corporate culture.

We have teamed up with various federations to support sports in our regions of operation. Our partners provide training support to coaches, give master classes, and promote healthy lifestyles.

The Company pays special attention to corporate competitions, with hockey, futsal, volleyball, basketball, alpine skiing, snowboarding, swimming and family sporting events being particularly popular with employees. One of Nornickel's social policy highlights is the support of amateur sports.

Since 2018, Norilsk has been hosting the Night Time Hockey League to promote amateur hockey, with the Company's employees taking part in the games. In 2019, the Night Time Hockey League was joined by the Moscow head office team.

To ensure the sustainable development of its geographies, Nornickel annually hosts spartakiads and mass sporting events involving not only the Company's employees and their family members, but also local residents. In 2021, some of the events were cancelled and instead held online due to pandemic-related restrictions.

Our sporting and fitness events drew a total of 20,000 participants in the reporting year. In 2021, all our corporate competitions were streamed online, garnering over 38,000 views.

New Year presents for children of Norilsk Nickel Group employees

Each year, the Company purchases about 63,000 New Year presents for its employees' children aged 0 through 15. For the past four years, the New Year gifts have included books that introduce children to the key elements: earth, water, fire and air. Insightful and easy-to-read, the books explore various physical phenomena, foster a caring attitude towards nature and cover the basics of environmental behaviour and safety rules.

Support to new employees

Many Nornickel employees come to Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District from other regions. The Company supports newly employed staff, including young specialists, workers, engineering staff, and managers relocating to the Company.

It also offers them financial assistance and reimburses 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 onboard and support new employees of Polar Division, the Company stages Point of Support onboarding events on a monthly basis. The event is held in an interactive format, giving new employees a chance to learn about the Company, its values, priorities and opportunities, basic safety rules, the Business Ethics Code, compensations and benefits, as well as about corporate projects which welcome newcomers, all in the course of a single day. In 2021, the Point of Support onboarding event was held 13 times and involved some 600 employees.

Furthermore, Nornickel organises onboarding and teambuilding events for the participants of the First Arctic leadership programme, helping them to get to know each other, learn about the Company and the city, and immerse themselves in the new production, social and cultural environment.

With 758 employees joining the relocation support programme in 2021, it now has a total of 1,370 participants.

Social support to employees facing redundancies due to closure of production facilities

Following the decision to shut down the smelting facility in Nickel in November 2019, Nornickel developed a programme of social support for the people facing redundancies. This programme was agreed with the Social and Labour Council and trade union organisations of Kola MMC and Pechengastroy. The social support programme developed for personnel of the smelting operations in Nickel was also extended to employees of the metallurgical shop in Monchegorsk.

We provided a full package of social benefits to the people facing redundancies, including comfortable relocation to other sites, retraining, and pension plans.

Between 2019 and 2021, the programme comprised 1,388 people. 698 of them signed employment contracts with the Company and had the same level of pay during the first year. In addition, the Company rendered support to employees wishing to continue their employment with Nornickel. In line with the support programme, the Company reimbursed accommodation and rental costs for employees of the Company's business units located outside their home region, provided financial assistance for the purchase of housing, and covered relocation expenses on moving luggage and personal belongings. A total of 309 employees attended training, re-training and upskilling programmes.

690 employees covered by the programme decided to leave the Company and were dismissed with additional payments.



Map of key social and environmental projects



Development of local communities

Key regions of operation

Krasnoyarsk Territory

Area 2,366,800 sq km

Population 2,366,800 people

Mineral resources	Industry	Nornickel's performance in the Krasnoyarsk Territory
<ul style="list-style-type: none"> Oil, gas, coal, platinum and PGMs, copper, nickel, cobalt, lead, zinc, bauxite, gold, silver, iron 	<ul style="list-style-type: none"> Non-ferrous metallurgy Mining Solid fuel-based power and hydropower generation 	<ul style="list-style-type: none"> Taxes and other payments: RUB 131.4 bn¹ Headcount: 52,800 employees² Average monthly salary: RUB 138,700 Employee-related social expenses: RUB 4.1 bn

Key areas of cooperation with the Krasnoyarsk Territory

Economic	Social	Environmental
<ul style="list-style-type: none"> Cooperation on major investment projects in the Krasnoyarsk Territory Heat and power supply to the communities and companies of the Norilsk Industrial District Implementation of the Northern Supply Haul programme in the Arctic Development of the tourism cluster as one of the drivers of the economy Promotion of commercial activity of indigenous communities of the North — launching new processing enterprises that support the traditional use of natural resources, and other activities as part of the Comprehensive Support Programme for Indigenous Peoples of the North until 2024 Improvement of the existing sports infrastructure and construction of new state-of-the-art facilities in the Krasnoyarsk Territory Development of transport and the telecommunication infrastructure 	<ul style="list-style-type: none"> Assistance in containing the spread of COVID-19 Improvement of the existing sports infrastructure and construction of new state-of-the-art facilities in the Krasnoyarsk Territory Support for vocational and supplementary education Implementation of the World of New Opportunities programme, supporting and promoting regional public initiatives Construction of modern housing and utilities, city and village improvement initiatives 	<ul style="list-style-type: none"> Implementation of the Sulphur Programme 2.0 and other initiatives to improve the environmental performance of production capacities Restoration and landscaping of urban territories Rehabilitation of areas affected by environmental incidents Development of Taimyr's specially protected natural areas Organisation and backing of environmental campaigns

¹ Including those paid to the consolidated budget of the Krasnoyarsk Territory and the budget of Norilsk.

² Krasnoyarsk Territory and Norilsk Industrial District.

Murmansk Region

Area 144,900 sq km

Population 724,179 people

Mineral resources	Industry	Nornickel's performance in the Murmansk Region
<ul style="list-style-type: none"> Apatite, nickel, iron, copper, cobalt, palladium, platinum and PGMs, peat 	<ul style="list-style-type: none"> Mining Metallurgy Fishing 	<ul style="list-style-type: none"> Taxes and other payments: RUB 27.8 bn Headcount: 11,700 employees Average monthly salary: RUB 103,700 Employee-related social expenses: RUB 724.8 mln

Key areas of cooperation with the Murmansk Region

Economic	Social	Environmental
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Assistance in containing the spread of COVID-19 Implementation of the World of New Opportunities programme, supporting and promoting regional public initiatives Development of social entrepreneurship 	<ul style="list-style-type: none"> Implementation of the Sulphur Programme 2.0 and other initiatives to improve the environmental performance of production capacities Cooperation on environmental protection, preservation of the Kola Peninsula's natural ecology and landscapes Organisation and backing of environmental campaigns

Trans-Baikal Territory

Area 431,900 sq km

Population 1,042,993 people

Mineral resources	Industry	Nornickel's performance in the Trans-Baikal Territory
<ul style="list-style-type: none"> Copper, uranium, molybdenum, titanium, gold, tungsten, iron, zinc, silver, lead, coal 	<ul style="list-style-type: none"> Mining Production and distribution of electricity, gas and water Non-ferrous metallurgy Machinery and equipment manufacturing Food production 	<ul style="list-style-type: none"> Taxes and other payments: RUB 3.9 bn Headcount: 2,700 employees Average monthly salary: RUB 130,000 Employee-related social expenses: RUB 59.3 mln

Key areas of cooperation with the Trans-Baikal Territory

Economic	Social	Environmental
<ul style="list-style-type: none"> Bystrinskoye Deposit development Social infrastructure development 	<ul style="list-style-type: none"> Assistance in containing the spread of COVID-19 Training of mining industry employees Improvement of urban areas World of New Opportunities charitable programme 	<ul style="list-style-type: none"> Cooperation on environmental protection, preservation of natural ecology and landscapes Organisation and backing of environmental campaigns

The Company's contribution to the development of local communities

Nornickel is one of the major employers and largest taxpayers in Russia as well as a mainstay of local economies¹. On top of that, the Company makes a significant contribution to the social and economic development of local communities by implementing a range of social programmes and initiatives aimed at facilitating their economic growth and infrastructural advancement.

Nornickel has in place an assessment system for social projects that helps set out its social priorities and short-list the most relevant social initiatives and projects that the Company is willing to support.²

The Group's key areas of operation in Russia include the cities of Norilsk and Monchegorsk, the Taymyrsky Dolgano-Nenetsky Municipal District of the Krasnoyarsk Territory, the Pechengsky Municipal District of the Murmansk Region, the Tazovsky District of the Yamal-Nenets Autonomous Area, and the Gazimuro-Zavodsky District

of the Trans-Baikal Territory. Saratov hosts Nornickel's Shared Services Centre. In the Tver Region, the Company is engaged in the construction of housing for its employees under the dedicated programmes (Our Home and My Home).

¹ The information presented in this section refers to the Group's Russian operations.

² For more details, please see the Assessment of Social Programmes section of Nornickel's 2020 Sustainability Report at <https://csr2020.nornickel.ru/en/>

● GRI 203-2

THE GROUP'S OPERATIONS AS A BACKBONE OF LOCAL ECONOMIES		
<p>CONTRIBUTION TO ECONOMIC DEVELOPMENT</p> <ul style="list-style-type: none"> Budget payments Employment of local population Cooperation development Development of social infrastructure as part of the Group operations (power, transport, food retail) 	<p>INFRASTRUCTURE DEVELOPMENT</p> <ul style="list-style-type: none"> Bridge and road reconstruction Land improvement Housing construction Construction and reconstruction of 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) 	<p>IMPROVING THE LIVING STANDARDS FOR LOCAL COMMUNITIES</p> <ul style="list-style-type: none"> Regular charitable programmes Promotion of sports and culture Corporate volunteering Vocational training sponsorship Activities of territorial development agencies

Budget payments

Tax and non-tax payments to local, regional and federal budgets, RUB bn ³					
Budget	2017	2018	2019	2020	2021
Total tax and non-tax payments,	102.0	120.3	198.3	176.0	287.4
including to					
Federal budget	15.8	23.0	37.7	34.2	82.0
Krasnoyarsk Territory consolidated budget	47.8	55.9	104.2	85.1	131.4
Norilsk budget	5.0	5.2	8.0	9.8	14.5
Murmansk Region budget	8.2	10.6	19.9	18.2	27.8
Trans-Baikal Territory budget	0.9	1.2	3.2	2.6	3.9

³ Tax and non-tax payments include all taxes paid, net of VAT, as well as insurance payments and customs duties.

Employment of local population

● GRI 203-2

The Company provides ample job opportunities for local communities across its key regions of operation. To boost employment in Norilsk, MMC Norilsk Nickel and Norilsk Employment Centre signed an agreement aimed at retraining those out of work for the most needed blue-collar jobs.

The target audience of career guidance events are more than 31,000 children and young people under 35 years old. The Company builds partnerships with educational organisations and engages young workers, while also providing robust support for teachers, engineering training and whipping up interest in engineering and blue-collar jobs.

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 primarily focuses on the training of specialists for the most in-demand jobs.

Unemployment in key communities⁴

Unemployment rates	2017	2018	2019	2020	2021
Norilsk	0.8%	0.7%	0.6%	1.4%	0.3%
Taymyrsky Dolgano-Nenetsky Municipal District	1.0%	0.9%	0.8%	1.2%	0.7%
Krasnoyarsk Territory	1.0%	0.8%	0.8%	3.5%	0.8%
Monchegorsk	2.2%	2.2%	2.2%	2.2%	1.7%
Zapolyarny	1.7%	2.1%	2.0%	1.9%	1.6%
Nickel	1.9%	2.5%	3.3%	3.0%	2.2%
Murmansk Region	1.6%	1.5%	1.7%	2.7%	1.4%

⁴ As at the end of the reporting year.

Cooperation development

As part of its social and economic partnership agreements, Nor Nickel has been cultivating cooperation with the companies across the regions of its operation. Integration of local businesses into the Group's production chain (mainly through long-term contracts) contributes to the economic development of the regions, particularly by supporting small and medium-sized businesses.

Developing local social infrastructure

● GRI 203-1

Amid increasing pressure from governments and communities globally, today's businesses tend to elevate their contribution to supporting single-industry towns.

In 2021, the Company scaled up its commitment to the development of local communities by implementing a range of social programmes and projects that address current and potential future issues.

The key programmes and projects are implemented jointly with government authorities and are enshrined in relevant agreements.

“At Nor Nickel, we have long-standing traditions of corporate social responsibility and engaging in social support. So we focus on reinstating and honouring our existing commitments rather than making new ones. Still, our social efforts, their scope and content face rapid changes, and we need to proactively adapt them to today's challenges. This means our traditions are a solid springboard to build upon.»

Vladimir Potanin,
President
of MMC Norilsk Nickel

Cooperation development in figures

Indicator	2019		2020		2021	
	Krasnoyarsk Territory	Murmansk Region	Krasnoyarsk Territory	Murmansk Region	Krasnoyarsk Territory	Murmansk Region
Procurement tenders for goods and services held by the Company	1,863	501	1,905	460	1,985	732
Locally awarded procurements as a share of tenders held by the Company, %	59.8	41.7	50	39	35	33
The Group's spending on local procurements, RUB bn	15.6	1.7	22.3	1.6	29	3.3
including						
services	13.1	0.3	18.6	0.2	23.4	0.3
materials	1.6	1.4	3.0	1.4	4.8	3.0
food supplies	0.9	—	0.7	—	0.8	—

Krasnoyarsk Territory (Norilsk)

In February 2021, the Company signed a four-party Agreement on Cooperation for Comprehensive Social and Economic Development of Norilsk for the period through 2024 and further through 2035. Apart from Nor Nickel, the parties to the agreement are the Ministry for the Development of the Russian Far East and Arctic, the Krasnoyarsk Territory, and Norilsk. The document provides for housing renovation, construction and reconstruction of social facilities, modernisation and overhaul of the utilities, transport and engineering infrastructure, creating a comfortable

and safe urban environment, and relocation of Norilsk and Dudinka residents to areas with favourable climate conditions.

In pursuance of the agreement, the Russian government approved the Comprehensive Plan of Social and Economic Development of Norilsk, which envisages the drafting and subsequent updating of Norilsk's development strategy, designing the concept of regional tourism development, as well as the implementation of programmes to support small and medium-sized businesses in Norilsk.

The total investment in Norilsk's social and economic development through 2035 under the agreement is estimated at **RUB 120 bn**, with **RUB 81.3** to be contributed by Nor Nickel.

The Company's funding for the additional measures to spur Norilsk's social and economic development will be provided on top of its existing regional programmes and commitments. Additional measures that have already started include:

Initiative	Progress in 2021
Construction of an innovative children's education centre for up to 1,100 students in the Central District of Norilsk (estimated project cost: RUB 4 bn)	The project concept was developed and approved by the City Planning Council of Norilsk; the terms of reference were agreed with municipal authorities; the contractor bidding process is underway.
Construction of the Arctic Museum of Modern Art in the Central District of Norilsk	The development of extended terms of reference for a reconstruction project is underway. Design and surveying is in progress. Project cost is estimated at RUB 3 bn.
Overhaul of the Polar State University (estimated project cost: RUB 4 bn)	Terms of reference for the overhaul were developed and agreed upon; the contractor bidding process was launched for surveying and design work.
Construction of the Ice Arena in the Central District of Norilsk (estimated project cost: RUB 6 bn)	The concept was developed; terms of reference for the design were prepared; bidding process for selecting the design contractor was launched.
Overhaul of buildings, reconstruction of utilities or dismantling of dilapidated buildings	Works worth a total of RUB 259.45 mln were completed.
Demolition (dismantling) of dilapidated housing stock and the housing stock qualifying as dilapidated in Norilsk	The Company and the Norilsk city administration entered into agreements for the demolition of three residential buildings free of charge. Nor Nickel carried out a competitive bidding process and selected a contractor for the project. The total project cost to be paid by Nor Nickel will exceed RUB 60 mln.
Construction (reconstruction) of two multi-storey residential buildings located in 50th October Anniversary St. in Norilsk.	The Company and the Norilsk city administration entered into agreements for the demolition of three residential buildings free of charge. Nor Nickel will allocate nearly RUB 2 bn to finance the project.
Construction (reconstruction) of low- and mid-rise residential buildings in the Central District and the Talnakh District of Norilsk	Terms of reference for the project design were developed and agreed upon with the Norilsk city administration, with development site locations approved.

Initiative	Progress in 2021
Overhaul of the building at 20 Bohdan Khmelnytsky St. in Norilsk with a view to hosting the Norilsky Social Services Centre	A donation of funds agreement for a total amount of RUB 270 mln was signed in line with the Company's commitment to finance the overhaul of the Norilsky Social Service Centre.
Construction of a polyclinic in Norilsk for 1,000 visits per shift	A letter of intent to donate real estate was signed between the local government and the Company. Nornickel is expected to invest over RUB 2 bn in the project.
Reconstruction of the municipal sewage system	The Company and the Norilsk city administration entered into an agreement for the overhaul of three sewers in Norilsk free of charge. Nornickel is expected to invest over RUB 1.2 bn in the project.
Construction of a water intake on the Norilskaya River	A contract was signed for a total amount of over RUB 456 mln to develop design and cost estimate documents for the construction of a new water intake on the Norilskaya River.
Construction of a prefabricated fire station in the Oganer municipal area of Norilsk	The construction was completed; the Company's investment in the project totalled RUB 306 mln.

In 2021, the Company allocated RUB 1,236.7 mln for programmes and projects implemented in partnership with the local authorities, regional and federal government bodies, and public institutions of Norilsk, among other things as part of certain projects run by the Company's Polar Division, including:

- landscaping of the Dolgoye Lake area;
- expanding the existing regular passenger and luggage bus service;
- provision of free hot meals for the low-income population of Norilsk;
- renovation of the Arktika Sports Arena with sports equipment procurement;
- financing summer work teams of school students;
- organising the preparation and holding of an interagency experimental and research drill for the emergency protection of the Russian Arctic territories;
- renovating the sports and fitness centre of the Norilsk Production Association for Passenger Transport;
- refurbishing a non-residential building to accommodate a multifunctional public and municipal service centre and Norilsk City Archives;
- repairing the fire alarm and warning systems in the buildings of the Norilsk Industrial Engineering and Service College.

In 2021, the Company allocated RUB 245.6 mln towards the projects and programmes implemented jointly with non-profit, public and religious organisations of Norilsk¹, and as part of the Secure City initiative. Another RUB 45.6 mln was used to finance the projects and programmes run in partnership with local administrations, regional and federal public institutions operating in Taimyr, and non-profit organisations, as well as to support the development of Tazovsky and Turukhansky districts.

Murmansk Region

In 2021, Nornickel continued the implementation of its cooperation agreement with the government of the Murmansk Region.

As part of the agreement, the Company started the construction of unique sports facility in Monchegorsk — a universal 110.0 × 65.0 m ice arena designed in line with international standards. The ice arena will be used for training and holding competitions at various levels (from municipal to international) in six sports, including bandy, ice hockey, speed skating, short-track speed skating, figure skating, and curling. It will also host large-scale cultural events and exhibitions. The facility construction is expected to be completed by the end of 2024.

In Monchegorsk and the Pechengsky Municipal District, work continued to ensure comprehensive safety and energy savings at kindergartens and schools, an initiative that is critical in the harsh climate conditions of the north. In 2021, the Company committed RUB 15 mln to those efforts.

In addition, Nornickel drafted, agreed upon and embarked on the Social and Economic Development Programme for the Pechengsky Municipal District of the Murmansk Region for 2021–2025. The programme was created on the basis of a concept developed jointly by Nornickel, Kola MMC, the local government and the municipal authorities to facilitate the district's sustainable development following the closure of Kola MMC's smelting facilities in the town of Nickel.

It envisages some 50 initiatives across four main focus areas: new economy, social sector, housing and infrastructure upgrades, and comfortable urban environment.

Kola MMC also closely cooperates with the municipalities where its facilities operate, which includes providing support to social and cultural institutions. For example, Library Branch No. 1 in Zapolyarny was named one of the best model libraries in a country-wide contest run as part of the Culture national project. The competition provided for co-financing of the winning projects by Kola MMC, which allocated nearly RUB 1.5 mln towards updating the library's book collection.

Tula Region

In October 2021, Tula welcomed the opening of a sports complex built with the support of Nornickel. Named Tula Arena, it features venues for martial arts and game sports tournaments, as well as training space for ca. 800 athletes, and can accommodate 2,000 spectators. The infrastructure of the sports complex is suitable for holding regional, interregional, all-Russian and international tournaments.

Supporting regions of operation during the COVID-19 pandemic

The COVID-19 pandemic has brought unprecedented global challenges for the global community. However, in the face of this adversity, we were able to protect the health and safety of our employees and effectively adapt the Company's business processes to the new reality.

In 2021, Nornickel continued to implement comprehensive measures to counter the COVID-19. The Company keeps in place a business continuity task force, which involves Nornickel's senior executives. The team is charged with ensuring continuity of the Company's production, procurement and sales processes while taking all necessary measures to protect the Company's people. Local quick response task forces are also maintained across our sites. To ensure greater effectiveness of its response action, Nornickel continues active interactions with federal and regional government authorities.

As the pandemic continues, the Company offers its employees an additional payment on top of the temporary disability allowance for those feeling unwell after vaccination, as well as additional payments for employees required to self-isolate and therefore unable to perform their job duties. In some of the regions across our footprint, employees are reimbursed for the cost of taking a taxi to and/or from their place of work.

Vaccination promotion campaigns, including webinars with scholars and medical experts, were held across all the Group companies. A Q&A section was added to the corporate portal and the virtual assistant Nika, and coronavirus hotlines were set up. A series of master classes for executives on employee protection during the pandemic were held, with relevant guidelines published. Efforts to raise vaccination awareness among employees included a series of corporate dialogues, video conferences and live streams with Nornickel's vice presidents.

The Company average vaccination rate is 69%. At many of the Group companies, including such large enterprises as NTEC and Kola MMC, the share of vaccinated employees exceeded 80%. Overall, the Company has adapted to running its business safely during COVID-19.

In 2021, Nornickel continued to support the authorities, healthcare facilities, small and medium-sized businesses, educational institutions, and non-profit organisations across its footprint in fighting against the coronavirus. Joint efforts of the Company and local administrations in the regions where Nornickel operates helped prevent a massive spread of COVID-19 cases.

To this end, the Company allocated over RUB 2.5 bn to support the Krasnoyarsk Territory, including over RUB 1.5 bn provided to healthcare facilities in Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District. Direct donations of funds were made to healthcare facilities in the Norilsk Industrial District and the Krasnoyarsk Territory. Norilsk and Dudinka received consumables, personal protective equipment and advanced medical devices (e. g. a CT scanner, analysers, ultrasound scanners, an ECG machine and more). At COVID-19 hospitals in Norilsk and Dudinka, the Company helped install a centralised oxygen system, set up a state-of-the-art PCR testing laboratory, procured in-demand reagents used in tests, and upgraded the healthcare facilities' bed capacity. To run on-site vaccination campaigns for employees in Norilsk, healthcare professionals were engaged from other cities, with the Company paying for their accommodation. The pandemic and the pressure of self-isolation took a heavy toll on small and medium-sized businesses. The Company looked for ways to support entrepreneurs during the restrictions by arranging a grace period for them, which led to the shortfall in income of approximately RUB 5.15 mln. In addition, we also supplied various companies of Norilsk and Dudinka with UV germicidal irradiation devices, dispensers, etc.

In 2021, Kola MMC donated 31 ventilators to healthcare facilities in the Murmansk Region, including the Murmansk Region's Bayandin Clinical Hospital and the Severomorsk, Kola, and Monchegorsk central district hospitals.

¹ Excluding the World of New Opportunities corporate charity programme



Interaction with indigenous northern minorities

● GRI MM5/SASB EM-MM-210a.3, EM-MM-210b.1

Nornickel respects the rights, lands, economic activities, traditional culture, historical heritage and interests of indigenous peoples inhabiting the Company's regions of operation, and directs its efforts towards strengthening and developing neighbourly relations. In the Taimyrsky Dolgano-Nenetsky Municipal District, the Company interacts with representatives of the Nenets, Dolgans, Nganasans, Enets, Evenks, Association of Indigenous Minorities of Taimyr (Krasnoyarsk Territory), associations of indigenous northern minorities of Dudinka, Hatanga and Karaul, as well as with local indigenous communities. On the Kola Peninsula, Nornickel has been working together with the Kola Sámi Association since 2021.

Nornickel complies with international regulations as well as the World Bank and International Finance Corporation standards concerning indigenous peoples of the North, recognising their right to preserve the traditional lifestyle and livelihoods

● GRI 411-1

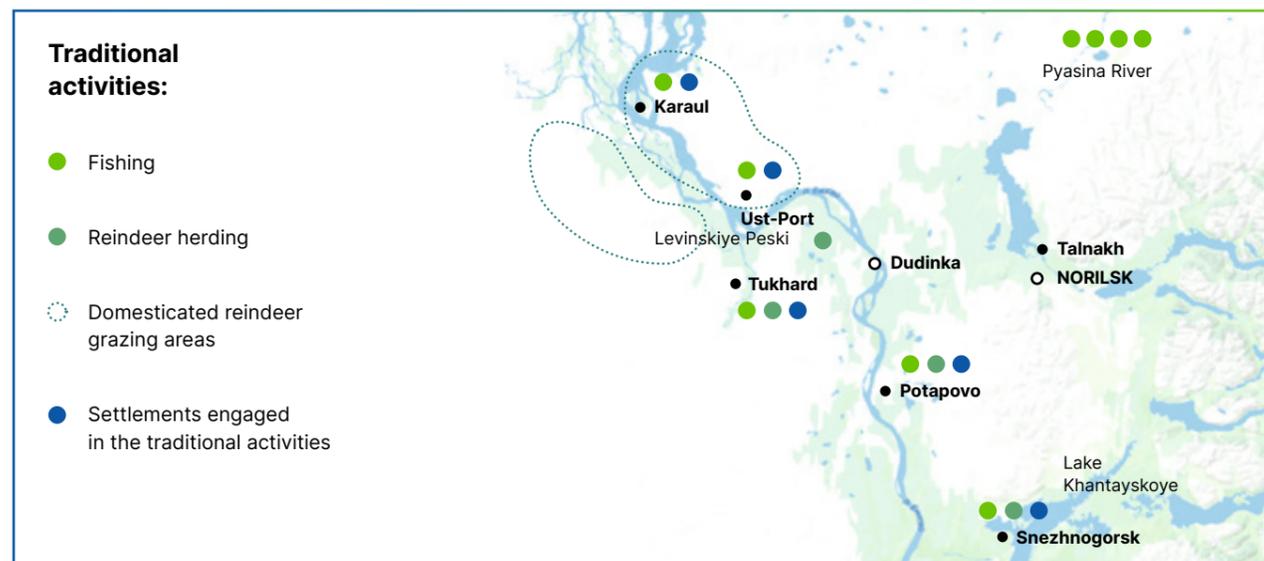
Key results for 2021:

- No violations of the indigenous peoples' rights were recorded pertaining to their settlement, traditional activities, and preservation of holy sites and culture
- Compensation payments to family (tribal) communities of indigenous northern minorities as a result of a diesel fuel spill at HHP-3 were fully completed
- Programmes were initiated to assist and develop indigenous peoples with a view to supporting their trades and products and enhancing housing, social and medical infrastructure in their settlements

- The Company's first ever free, prior, and informed consent (FPIC) procedure for representatives of indigenous northern minorities in the settlement of Tukhard was launched

In the Taimyrsky Dolgano-Nenetsky Municipal District, the Company cooperates with the Association of Indigenous Minorities of the Taimyr (Krasnoyarsk Territory), associations of indigenous northern minorities of Dudinka, Hatanga and Karaul, as well as with local indigenous communities.

Indigenous settlement near the Norilsk Industrial District



KEY REGULATIONS

- United Nations Declaration on the Rights of Indigenous Peoples
- ILO's Indigenous and Tribal Peoples Convention
- Russian Arctic Resident Responsibility Standard of the Ministry for the Development of the Far East and the Arctic Regions
- PJSC MMC Norilsk Nickel's Indigenous Rights Policy
- World Bank and International Finance Corporation performance standards concerning indigenous peoples
- ICMM and IRMA industry requirements

NORNICKEL'S PRINCIPLES IN INTERACTING WITH INDIGENOUS NORTHERN MINORITIES

- Inclusive participation of indigenous peoples in making decisions on support programmes and respect for their FPIC right.
- Respecting indigenous lands
- Supporting indigenous practices of using natural resources
- Engaging in renewable biological resources restoration programmes
- Helping to preserve indigenous traditions
- Promoting indigenous trades
- Providing social support to indigenous peoples with a view to achieving modern living standards
- Protecting the sanctity of indigenous places of worship and holy places

Responsibilities in interacting with indigenous northern minorities

● GRI 102-26

Governance body	Responsibilities
Board of Directors	<ul style="list-style-type: none"> • Approving the Company's Indigenous Peoples' Rights Policy (on interaction and cooperation with indigenous peoples of the North) • Approving the Company'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	<ul style="list-style-type: none"> • Providing 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 • Monitoring 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 • Drafting 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	<ul style="list-style-type: none"> • Analysis of whether it is expedient to enter into partnership agreements and direct interaction with the indigenous northern minorities, their representatives, opinion leaders, and businesses • Study of the social and economic landscape of indigenous peoples and the impact of economic, environmental and biodiversity factors on their sustainable development. • Assessment of international practices for engagement with indigenous peoples. • Analysis of issues considered at events, participation in consideration and resolution of the indigenous northern minorities' complaints and petitions • Coordination of interaction with the indigenous northern minorities during development, collection of proposals and implementation of programmes and projects for sustainable development purposes • Due diligence procedures and inclusive participation of indigenous peoples in making decisions on drafting and implementing support programmes. Engagement with indigenous peoples to establish procedures for indigenous participation and representation in interactions with Nornickel.
Sustainable Development Department	<ul style="list-style-type: none"> • Monitoring and analysis of changes in legislation and recognised international standards in the field of sustainable development, methodological support, stakeholder analysis for inclusion in the Stakeholder Engagement Plan, and development of that plan
Internal Control Department	<ul style="list-style-type: none"> • Handling complaints and petitions of the indigenous northern minorities through the Corporate Trust Service, monitoring the status of control activities
Coordinating Council for Indigenous Minorities of the North at Polar Division	<ul style="list-style-type: none"> • Review of the implementation of the Taimyr social and economic development programme; • Participation in the development of social design proposals in Taimyr as part of Nornickel's projects; • Development of practices and standards for engagement between an industrial company and local communities.

In order to ensure sustainable development of indigenous residents of Taimyr and improve the quality of interaction and promote the interests of indigenous peoples, the Coordinating Council of Indigenous Communities was established under the head of Nor Nickel Norilsk Division. Representatives of 58 indigenous economic entities (families, peasant farms, entrepreneurs) were invited to form part of the council. An additional RUB 100 mln was allocated through the Coordinating Council in 2021 for the development of communities, strengthening the infrastructure, and preparation for the autumn-winter hunting and fishing season. By that time, the communities had already upgraded their resource base, purchased snowmobiles, boat motors, satellite phones, with quad bikes and motor boats to be delivered during the summer navigation period. To ensure ongoing interaction, Polar Division has an IMT office which is staffed by representatives of Taimyr's indigenous peoples.

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 programme¹.

This procedure helps guarantee the protection of rights of indigenous minorities to independently define their political, social, economic, and cultural priorities. Tukhard residents agreed to join the FPIC procedure subject to certain conditions, including the decision whether they will relocate or not, 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 participation in all stages of the relocation programme through the elected Council of Representatives of the settlement residents.

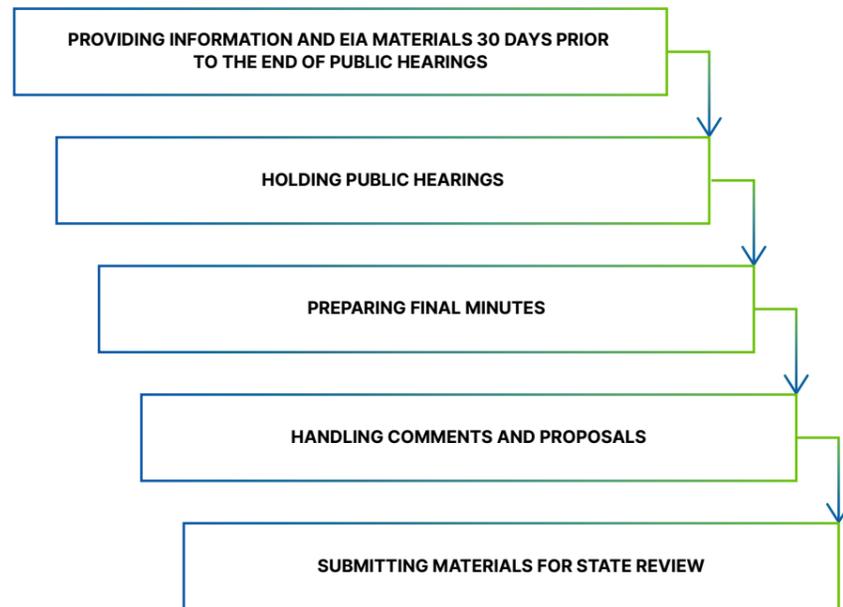
Although the FPIC procedure is not directly integrated into the national laws of the Russian Federation, Nornickel voluntarily recognises international standards and, in accordance with the UN Declaration on the Rights of Indigenous Peoples, World Bank and International Finance Corporation standards, is conducting the FPIC.

The approach to interaction with indigenous northern minorities enables timely identification of, and response to, their needs, particularly by implementing projects that are in line with the current international, Russian and local agendas in this field.

Interaction with the Sámi people

In June 2021, a Cooperation Agreement was signed with the Sámi Association representing the interests of indigenous northern minorities in the Murmansk region. The Company helps Sámi people develop culture and preserve their traditional lifestyle relying on the best practice that proved effective on the Taimyr Peninsula.

Procedure for public discussions



In particular, Nornickel will provide funding to develop a single Sámi alphabet and publish pre-school Sámi language textbooks. The agreement contemplates developing an open-air Sámi museum in Murmansk. The Company committed RUB 5 mln to those efforts in 2021–2022.

Public discussions of projects with representatives of indigenous northern minorities

Public discussions with stakeholders, including indigenous northern minorities whose interests can be potentially affected, are obligatory by virtue of the Russian laws and make part of environmental impact assessments (EIA) for each new investment project. The purpose of the EIA is to prevent or mitigate the impact of project activities on the environment and resulting social, economic, and other repercussions.

EIA materials, including incoming comments and proposals, are included in 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.

Interaction between Nornickel and the Federal Agency for Ethnic Affairs (FAEA)

Nornickel and the FAEA signed a cooperation agreement whereby the parties agreed to promote sustainable development, better quality of life, preserve and foster the traditional way of life of indigenous peoples living across the Company's geographies. Nornickel and the FAEA also intend to cooperate to improve the social and economic environment in the territories where indigenous northern minorities live. Additionally, the parties agreed to take into account the positions of all stakeholders and consider any enquiries and suggestions of their representatives when making decisions and implementing joint projects that address matters relating to interests of indigenous peoples.

Key projects in support of indigenous northern minorities in 2021

In 2021, support for Taimyr's indigenous peoples soared to new heights. This was facilitated by a quadripartite Cooperation Agreement signed in September 2020 with the associations of indigenous minorities of the Russian Federation, Krasnoyarsk Territory, and Taimyr Dolgano-Nenetsky Municipal District. A five-year programme of arrangements to promote the social and economic development of Taimyr was developed under the Agreement to continue through 2024, with funding totalling about RUB 2 bln².

The Programme stipulates over 40 events to be held until 2024 and includes focus areas such as promoting the traditional use of natural resources — increasing local conversion depth and adding value to their products through the construction of reindeer venison, fish, and wild-growing herbs processing facilities, providing settlements with refrigeration chambers, buying local products, building an ethnic visitor centre with a mini hotel in Ust-Avam, research of reindeer pastures' carrying capacity in the Avam tundra to restore domestic reindeer herding, research of the fishing capacity in the lateral lakes of the Pyasina River to issue quotas to the tribal communities, and securing decent living standards in the settlements: construction of residential buildings, first aid and obstetric posts, community centres, provision of schools with furniture and equipment, and building of sports grounds.

Public organisations and family (tribal) communities of indigenous northern minorities took part in the development of the Programme. The programme implementation is monitored by the Coordination Council for Indigenous Communities at Polar Division and Association of Indigenous Minorities of the Taimyr.

Following on from the Agreement, the Company signed an addendum in September 2021 to hold events under the International Decade of Indigenous Languages to be held in 2022–2024 in the Taimyr Dolgano-Nenetsky Municipal District.

In addition to fulfilling its obligations under the Agreement and implementing the Programme events, the Company continued to provide traditional charity support to the IMT in 2021. Thus, for example, to preserve the national traditions and culture of indigenous northern minorities, the Company helps

stage annual socially important events — the Reindeer Herder's Day and the Fisherman's Day. In 2021, the Company provided a charity support of RUB 12.7 mln to hold those events as well as to make helicopter flights to transport passengers and cargoes.

In 2021, the Company allocated RUB 5 mln to support urban and rural settlements in Taimyr at the request of the Dudinka Administration: to provide technical and audio-visual equipment to cultural institutions in settlements, to purchase furniture for a youth centre in Khatanga, and to purchase a modular washhouse in Vorontsovo.

One-time requests from organisations for charity support to be provided to the indigenous northern minorities were also financed to an amount of RUB 2.8 mln.

The Company has historically provided the indigenous northern minorities with transport and communication services, materials and equipment (such as snowmobiles, motor boats, outboard motors, chainsaws, building materials, etc.), fuels, lubricants, and fishing supplies. Educational facilities are being modernised and refurbished. Hospitals and clinics are getting high-tech medical equipment. In case of an emergency, affected indigenous families get free-of-charge aid.

As part of its cultural charity activities in 2021, the Company organised a new grant competition, The World of Taimyr, which specifically features the implementation of projects only in the areas of compact residence of indigenous minorities. The competition welcomes community and non-profit organisations run by local indigenous minorities, tribal communities, and government and municipal agencies registered and operating on the Taimyr Peninsula. According to the competition regulations, grants for the winning projects can amount up to RUB 6.5 mln.

¹ Tukhard is located 76 kilometres from the Arctic port of Dudinka at the base of the Taimyr Peninsula. Tukhard was founded back in the 1970s for construction workers of the Norilskgazprom project and, consequently, happens to be located within the sanitary protection zone of a production facility where permanent settlement is prohibited by the Russian laws.

² For more details on the list of the key initiatives under the programme of arrangements to promote social and economic development of Taimyr through 2024, please see Nornickel's 2020 Sustainability Report at: https://www.nornickel.com/files/en/investors/disclosure/NN_CSO2020_ENG_23.06.pdf



The competition covers different areas of life of Taimyr's indigenous peoples:

- preserving traditional activities;
- preserving and reviving cultural heritage;
- identifying and supporting gifted children;
- improving and refurbishing public spaces;
- introducing alternative energy sources and fuels;
- exchanging positive experience and promoting the best cultural practices to empower the communities of indigenous peoples living in the Arctic.

In 2021, funding of RUB 43 mln was provided to 28 social projects as a result of the competition. The Competition winners were six projects proposed by family (tribal) communities, two projects proposed by non-profit organisations, and 20 projects proposed by municipal and public institutions.

Notwithstanding the fact that the World of Taimyr Competition for Social Projects is a pilot competition for the Company, it has already won an all-Russian award. The awarding ceremony for the winners of the GPM Awards Russia 2021, a national competition for professional project management in the field of sustainable development, took place on 14 December. The World of Taimyr Competition for Projects ranked No. 2 in the Social Projects category.

421.5

RUB mln
spent by the Company on projects to support the indigenous northern minorities in 2021

Transport accessibility in remote regions

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 Dudinka, Murmansk, Arkhangelsk, Rotterdam, and Hamburg sea ports. For seven months a year, we transport the bulk of socially important cargoes for the Norilsk Industrial District. In 2021, dry cargoes transported by the Company's fleet amounted to 1.4 mt (flat y-o-y).

The Yenisey tanker is used to carry gas condensate, a by-product of gas extraction at the Pelyatkinskoye Field developed by Nornickel, to European ports and other destinations. This way we help reduce pollution from these by-products and improve local environment.

The Company and other companies of the Group handle cargo in the ports of Dudinka, Murmansk, Lesosibirsk and Krasnoyarsk.

Dudinka Port is the world's only port flooded every year during spring high water and accessible by both sea and river vessels. In 2021, its cargo turnover totalled 3.2 mt.

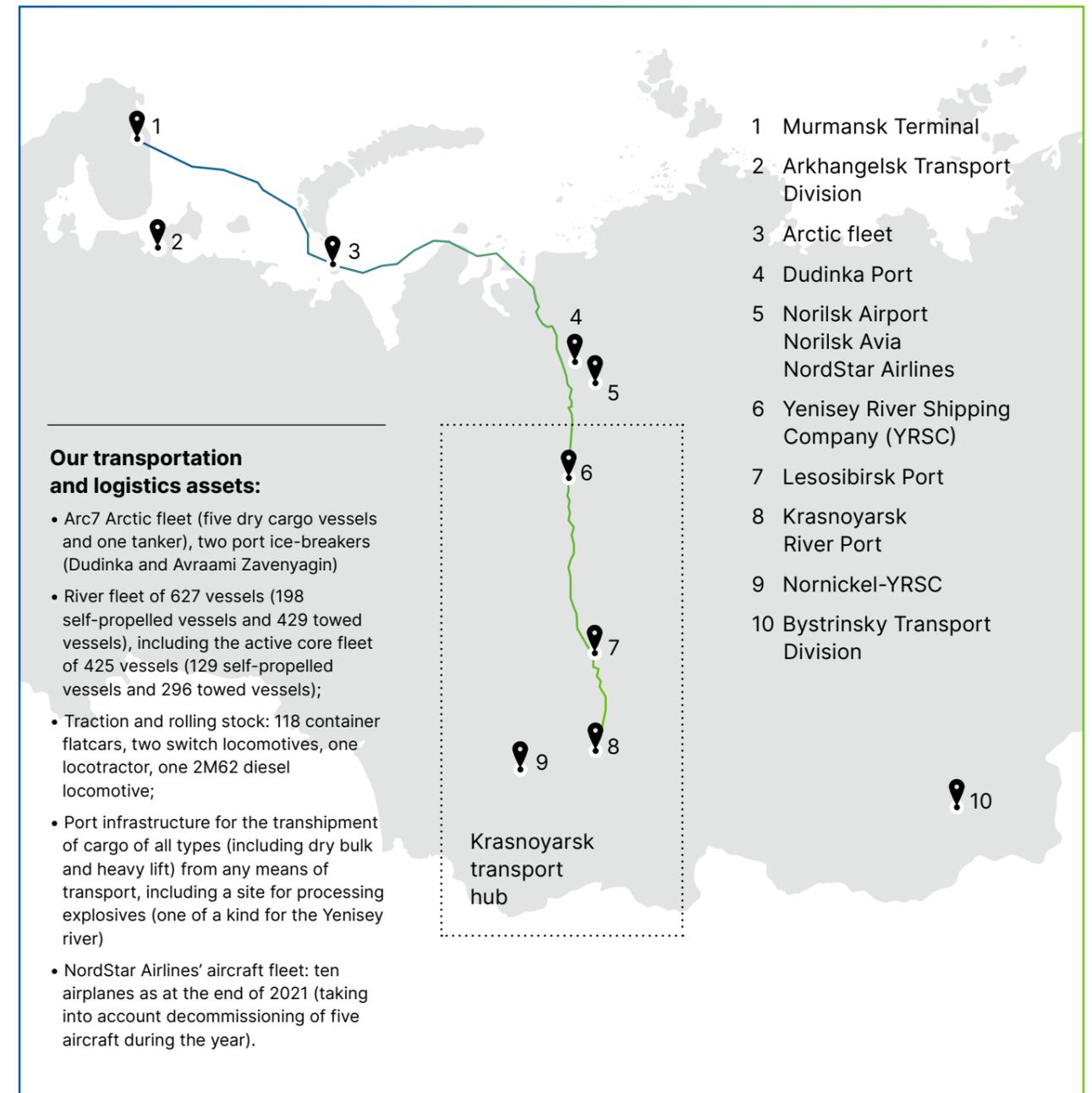
Bystrinsky Transport Division is responsible for the operation and maintenance of the 227 km Naryn (Borzya) — Gazimursky Zavod railway line (Trans-Baikal Territory).

Yenisey River Shipping Company transports socially important cargoes to destinations across the Krasnoyarsk Territory. 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 and Nizhnyaya Tunguska rivers and in other areas, including Dikson, Russia's northernmost settlement. The shipping company 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 foods 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.

In 2021, the Norilsk Airport ("Alykel") was busy resolving the punch-list items identified during the operation of the equipment and facilities installed during the reconstruction of the airport before 2020. Failed lamps of the light-signalling equipment were replaced, and a number of equipment items were tested and commissioned.

Destinations covered by NordStar Airlines include more than 30 Russian and CIS cities. With passenger traffic in excess of 1 million people a year, NordStar is a backbone Alykel airport carrier operating year-round direct flights from Norilsk to over ten destinations in Russia and annually reaffirming its status of a major domestic air carrier. In 2021, the airline carried 1.16 mln passengers (up 32% vs 2020) amidst ongoing restrictions due to epidemiological conditions. It offers regular and charter flights and transports passengers from Norilsk to budget-subsidised destinations, with tickets sold at reduced tariffs.



Improving the well-being of local communities

One of Nornickel’s objectives is to maintain favourable social climate and a comfortable living environment across its footprint providing the Company’s employees and their family members with broader opportunities for their creative pursuits and self-fulfilment.

In 2021, Nornickel’s key programmes and initiatives aimed at improving the well-being of local communities included:

- **World of New Opportunities charitable programme;**
- **Plant of Goodness corporate volunteering programme;**
- **programmes to support sports and fitness.**

We run World of New Opportunities, a charitable programme to encourage and promote sustainable development of local communities. The programme is designed to develop soft skills in local communities, demonstrate and introduce new social technologies, support and promote public initiatives, and encourage cross-sector partnerships.

In 2021, approximately 27,000 people from across the Company’s regions of operation took part in the World of New Opportunities events, and the investment in the programme totalled RUB 88.5 mln.

Due to the ongoing pandemic and the need to comply with epidemiological requirements, a number of charity events and projects in 2021 were held either online, offline, or in a combined format. The Company and its stakeholders leveraged online tools and services, including the World of New Opportunities mobile app and an online platform for placing Socially Responsible Initiatives Competition bids. We updated the charitable programme’s website, adding the “apply for the event” option, a dynamic event calendar, and more. These tools allow users to navigate through the programme, receive timely notifications about future events and register for them, meet other participants, download speaker and expert presentations, and take part in interactive surveys and quizzes.

Thanks to flexible decision-making and regular monitoring of progress and feedback from the stakeholders, we were able to stay focused on the values and priorities of the World of New Opportunities programme and achieve our performance targets.

DEVELOP!

In 2021, we made great progress by integrating a number of projects and educational initiatives of the World of New Opportunities programme into a related projects ecosystem: education — expert community — support for initiatives.

Socially Responsible Initiatives Competition

To support public initiatives seeking to lay fertile ground for sustainable development of local communities, the Company stages annual Socially Responsible Initiatives Competition for non-profit organisations. In 2021, Nornickel announced its support for 114 public benefit initiatives from Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District (Krasnoyarsk Territory), 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 initiatives will be implemented in 2022–2023.

Key dimensions of the World of New Opportunities programme in 2021

Dimension	Programmes and projects
DEVELOP!	<ul style="list-style-type: none"> • We Are the City! social technologies forum • Socially Responsible Initiatives Competition • World of Taimyr project competition • School Break educational project • SVET ON online youth forum
INVENT!	<ul style="list-style-type: none"> • IMAKE engineering marathon
ACT!	<ul style="list-style-type: none"> • Educational course and investment session • Convention of the Arctic’s entrepreneurs • Norilsk business forum
CREATE!	<ul style="list-style-type: none"> • Projects of regional development institutions: <ul style="list-style-type: none"> • Norilsk Development Agency • Second School Centre for Community Initiatives of the Pechengsky District • Monchegorsk Development Agency

The initiatives of the winners cover various facets of community life in the regions:

- establishment of art centres;
- career guidance projects for schoolchildren;
- organisation of environmental campaigns;
- launching of new tourist trails;
- an inclusive musical with the participation of city residents;
- VR-powered museum programmes.

Additionally, 2021 saw the very first World of Taimyr social projects competition to support indigenous peoples.¹

School Break educational project

In 2021, the Company continued to implement the School Break: Starts with You educational project aimed at facilitating communication among children, their parents, and teachers in a joint effort to improve the education process. The project’s borders expanded in 2021, and it now covers Dudinka, Khatanga, and Karaul. February 2021 saw a research trip around the Taimyr Peninsula, and in September, the first in-person module for remote territories took place. In addition to that, the project’s experts hosted a series of educational modules for teachers in Potapovo, Ust-Port, Khatanga, and Dudinka. The main topics were “Gamification in Education” and “Motivation Tools”.

In 2021, the project got an important addition — career guidance and information for graduates. The project helps make school a fully-fledged element of the School-University-Business educational cluster. With that in mind, we hosted the My Trajectory talk show, where graduates and their parents were informed on university enrolment opportunities in the Company’s regions of operation, namely Polar State University and the Monchegorsk branch of Murmansk Arctic State University. The show was viewed by around 3,000 people.

The project also included the traditional (Un)usual Schools Forum for teachers, schoolchildren and their parents, which saw experts from Moscow, the Krasnoyarsk Territory, the Kaliningrad Region, Norilsk, and Yekaterinburg gather to share their professional methods.

In 2021, the School Break project won the Graduate Award for the Best Schoolchildren Engagement Programme. It also received international recognition and, along with Nornickel’s other educational programmes, was included in the good practices compilation following the UN’s open call.

We Are the City! social technologies forum

A city event bringing together representatives of local communities, government authorities, business and mass media to discuss technologies and mechanisms of addressing social issues of the local communities, analyse trends and best practices in charity and volunteer initiatives, and demonstrate successful resolution of social issues. Due to pandemic-related restrictions still being in effect in 2021, the 7th We Are the City! social technologies forum took place on 27 March 2021 in a digital format (online and offline combined). This made it possible to hold the forum across all of Nornickel’s regions of operation: Norilsk, Nickel, Monchegorsk, and Chita. The turnout exceeded 220 participants. The experts and other participants discussed today’s very topical issue of the social fabric being transformed by the pandemic, its impact on communities, recent trends, and partnership in the current conditions.

INVENT!

IMAKE engineering marathon

In 2021, the IMAKE marathon, aimed at motivating school students to get into project work and pursue inventions, was held in a mixed format. The marathon is conducted in stages, whose purpose is to grow the IMAKE Inventors League — a community of inquisitive school students ready to generate ideas and turn them into prototypes. In 2021, it drew more than 1,000 young inventors. Held annually, the marathon fosters a system that helps teenagers and their parents fall in love with research and innovation. The 2021 marathon for the first time included the IMAKE May weekend family session, where the Fablab outfits in Norilsk and Monchegorsk hosted engineering creativity master classes for over 150 people. There was another first in 2021 a series of open meet-ups for Norilsk and Monchegorsk residents, where the participants (non-profits, teachers, corporate volunteers, parents, and young “makers”) discussed and compiled a roadmap of projects and ideas to foster engineering creativity in the cities.

The initiative received expert recognition, winning the first place at the national GRADUATE AWARDS competition in the Investing in the Future category for the LIGA IMAKE: Building the Future project.

IN’HUB: International forum of innovators

November 2021 saw the kick-off of the international event for innovators — IN’HUB. The forum brings together inventors, facilitators and optimisers from among industrial company employees, students, postgraduates, schoolchildren, and teenage “makers.” In January–February 2022, a competition of inventors will take place, with the results to be announced at the IN’HUB International Forum in Novosibirsk on 6–8 October 2022.

¹ For more details, please see the Interaction with Indigenous Northern Minorities section.

ACT!

Development of social entrepreneurship is among the focus areas of Norinickel's World of New Opportunities charitable programme. Since 2014, Norinickel has funded 34 business projects for a total of over RUB 110 mln. As a result, more than 146 jobs were created. Over 30 business projects were launched independently by Social Entrepreneurship course graduates. There are social entrepreneurship clubs up and running on a permanent basis in Norilsk and Monchegorsk.

Training in Social Entrepreneurship

The training course included 70 participants studying the theoretical pillars of entrepreneurship, as well as the tools of strategic and tactical business process planning. The trainees received support from prominent business leaders and experienced social entrepreneurs. The course culminated in an investment session that saw presentations of eight business projects seeking Norinickel funding. The budding entrepreneurs presented a variety of social mechanisms and practices to improve life in the regions: family spaces and cafés, healthy lifestyles promotion with the support of sports clubs, a ready-to-eat food chain, hotel reconstruction, and more.

In 2021, the Company funded and supported two social business projects aimed at raising the living standards in Norilsk and Monchegorsk.

Two-year interest-free loans in the amount of RUB 2.24 mln went towards the development of the DANCE PLACE children's and youth dance hall in Norilsk and the creation of the Gift Happiness artisanal art space and gift shop in Monchegorsk.

Convention of the Arctic's entrepreneurs

The convention took place in Monchegorsk in December 2021, bringing together 70 participants offline and 50 online. This year, its topic was Tourism and Creative Industries as the Driver of the Territory's Development. Over the convention's nine-hour runtime, the participants and attending experts discussed tools to attract investors for business projects and presented case studies on successful practices of territorial development through tourist and other projects. The event yielded 15 collaborations and 50 business ideas (of which five were picked for buildout by project teams). The convention was arranged and held in line with environmental awareness and sustainable consumption principles: gift sets and handouts for the participants (bags, pens, notepads, etc.) were made from recycled materials. A recyclable collection rally was held alongside the convention, where a total of 80 kg of recyclables was gathered (20 kg of plastics, 15 kg of glass, and 45 kg of paper).

CREATE!

Norinickel contributes to creating infrastructure that would enable accelerated development of regions across its footprint through cooperation with regional development institutions, including Norilsk Development Agency, Second School Centre for community initiatives in the Pechengsky District, and Monchegorsk Development Agency established in September 2020. Their mission is to lay the foundation for accelerated development of the local service-based economy as a way of improving living standards and promoting local products and services on external markets.

Norilsk Development Agency

Norilsk Development Agency is a territorial development institution established in 2017 to improve Norilsk's living standards and the social environment. The Agency's key objectives include transforming urban environment, improving the quality and accessibility of services, supporting business, promoting domestic and international tourism, creating a favourable investment climate, and establishing a breakthrough event agenda.

Currently, the Agency has five focus areas:

- promoting investment;
- developing the business environment;
- fostering tourism;
- developing the urban environment;
- drafting and implementing social, cultural, and educational projects.

City residents actively contribute to the Agency's projects, which engage the best Russian and international experts.

390.6

RUB mln spent on the activities specified in the Articles of Association in 2021

Promoting investment

During 2021, the Agency stepped forward and signed nine agreements with entrepreneurs on supporting investment projects. In addition, it helped ten entrepreneurs from Norilsk and Dudinka to get the Russian Arctic residency status. Total private investment (excluding the Agency's funds) in projects stands at RUB 1,938 mln, which is planned to generate 245 jobs. Entrepreneurs will save an estimated RUB 499 mln by virtue of becoming residents of the Arctic zone.

Developing the business environment

In 2021, work continued on fostering an environment that would enable SMEs to grow and flourish, with a particular focus on promoting entrepreneurship. The reporting year saw the first Norilsk business forum that brought together over 300 entrepreneurs, officials, and people from the city's biggest company, as well as 15 invited experts. Investors watched presentations of promising business projects umbrellaed under "High-tech entrepreneurship: industrial park", "Fostering tourism", and "Creative industries". Following the forum, a resolution was drafted and sent to the Ministry for the Development of the Russian Far East and Arctic, the Krasnoyarsk Territory government, the Norilsk Administration, and MMC Norilsk Nickel containing proposals on the improvement of the business environment in Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District.

Furthermore, a number of working meetings were held between entrepreneurs and authorities during the year. Held in the round table format, they were attended by over 70 participants and 9 experts.

To launch new products and develop services in Norilsk, acceleration initiatives were organised during the year to help entrepreneurs across three industry groups. The Agency also helped implement the Business Holidays pilot project at the Start personal development centre to promote entrepreneurship and instil financial literacy in the younger generation.

The Agency also sponsored the establishment of the Business-North community of Norilsk-based investors that is going to help create business ties, exchange experience in growing a business, and attract investment. As at December 2021, the community already had 45 registered members.

Norilsk Development Agency's projects in 2021

Focus area	Projects
Promoting investment	<ul style="list-style-type: none"> • Industrial park with a construction cluster • Eco-industrial park • Urban economy projects
Developing the business environment	<ul style="list-style-type: none"> • Business Adaptation project • Business Online project • Business in the Arctic project
Fostering tourism	<ul style="list-style-type: none"> • Creating the Arctic tourist and recreation cluster • Cape Chelyuskin expedition, including Taimyr's settlements • A stage of an open water swimming international championship • International tourist exhibitions • Save Taimyr's Birds environmental project
Developing the urban environment	<ul style="list-style-type: none"> • Modernisation of the public transportation system • 1 Leninsky Avenue • City lights • Yard space • Attraction of Taimyr festival • Legends of the Tundra ethnic theme park
Drafting and implementing social, cultural, and educational projects	<ul style="list-style-type: none"> • Strategy for creative economy development in Norilsk • Launch of a creative space in Norilsk • Modern Art course for artists and photographers • Decorative Art and Design course • Event Competencies practical course • Cultural Management Strategy and Practice educational programme • PMO

Fostering tourism

In 2021, the Norilsk Development Agency continued to take active part in the work on the following federal, regional and municipal documents:

- Russian industrial tourism development strategy until 2035;
- Amendments to the Law On Russian Tourism;
- Norilsk tourism development strategy.

Compared to 2020, the number of tourists increased by 48%.

December 2021 saw the completion of the master plan for the Arctic tourist and recreation cluster, which includes the territories of Norilsk and the Taimyrsky Dolgano-Nenetsky Municipal District. It is slated to be approved by the Krasnoyarsk Region's Tourism Agency in March 2022, and subsequently by the Krasnoyarsk Territory government. The work that went into drafting the master plan for the Arctic tourist and recreation cluster was acclaimed as one of the best regional practices at the Agency for Strategic Initiatives conference in March 2021.

Developing the urban environment

In 2021, the Norilsk Development Agency carried on with the projects envisaged in the city's master plan developed in 2019.

In the summer of 2021, the Agency and the Norilsk Administration continued implementing the approved yard master plan. The project draw active support from residents of apartment buildings No. 8, 10 and 10A in Talnakhskaya St. and No. 13 and 15 in Veterans St. (about 50 people), who helped create lawns and flowerbeds by sewing perennial grass and planting birch and lilac seedlings. The first-ever bicycle lane spanning Norilsk's yards was built and a gazebo with swings for adults was installed.

In 2021, the Agency partnered with the Norilsk Administration and Polar Division as part of a research to look into areas for the public transport system improvement in Norilsk, which included:

- measurements of local passenger traffic in winter and summer;
- a survey among 1,500 respondents;
- the route network review and identification of gaps in the public transport system;

- a pilot project to install validators and information screens on two regular municipal routes;
- development of a transport model to improve the quality of public transport services.

In 2021, the Agency continued work to set up the Legends of the Tundra ethnic theme park in Dudinka. It assisted the Dudinka Administration in preparing a bid (text, videos, presentations, and additional materials) for the National Competition for the Best Urban Environment Projects. The federal government financing for creating this modern urban recreation space amounted to RUB 70 mln.

Drafting and implementing social, cultural, and educational projects

For the second year running, the Agency's team focused closely on the city's creative industries agenda. As part of these efforts, work commenced to draft a strategy for creative economy development in Norilsk until 2024. The workshop on co-designing creative spaces in Norilsk held in 2021 saw the participants team up with the Universal University experts to develop the city's new creative space concept.

The creative space under development has already become venue for various events, including festival film screenings, vocal studio concerts, an online game of the Arctic E-Sports Federation, a master class in being a DJ, two new city festivals, and more.

2021 also saw the launch of the City Managers educational project designed to help the Norilsk change management team upgrade their expertise. The first group of students completed 14 programme modules at Moscow School of Management SKOLKOVO, while the second group completed 4 modules of an offsite training programme developed by SKOLKOVO experts. The project participants acquired skills in designing changes and managing a city as a complex system.

In 2021, the Company decided to finance the construction of a new 1,100-student school in the Central District of Norilsk. A dedicated working group was set up consisting of the city's leading teachers, heads of educational institutions, representatives of the Norilsk Development Agency's project office and other experts. An offsite internship was arranged for the High Latitudes School working group to study educational institutions' successful models and design a new school concept. The internship was based in Moscow and the Moscow Region and included meetings with prominent educators and visits to the region's best educational institutions, including Primakov Gymnasium, the Higher School of Economics Lyceum, School No. 29 in Podolsk, and others.

Second School Centre

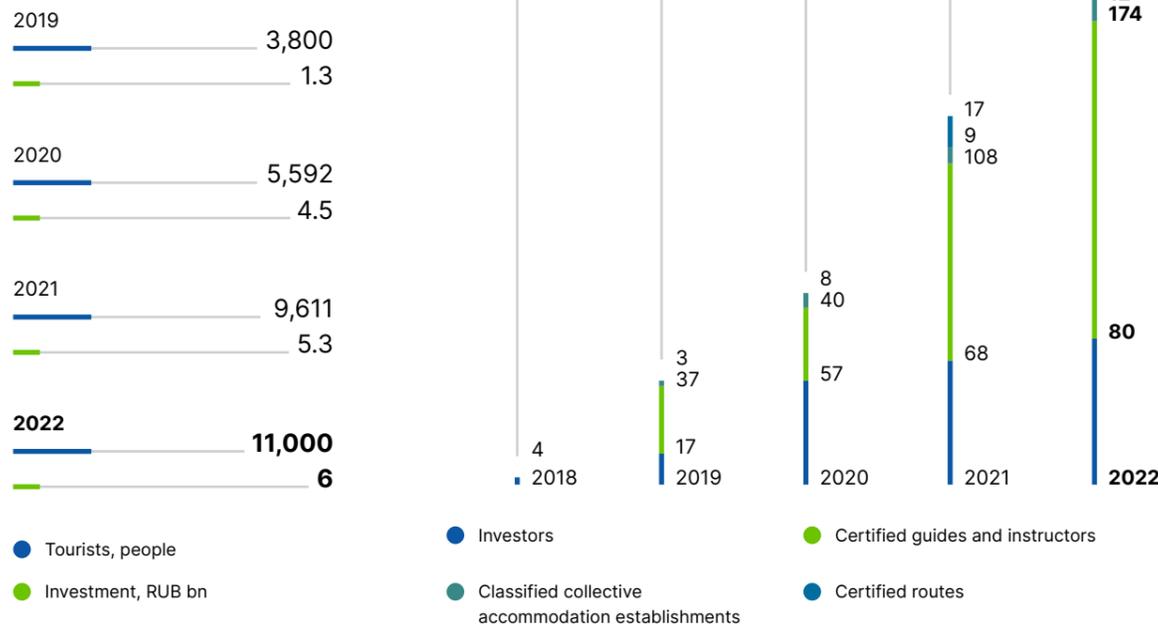
In November 2019, to ensure environmental compliance and address ecological issues in the Pechengsky District of the Murmansk Region, the Company decided to shut down its smelting facilities in the town of Nickel, which was done in December 2020. Together with the authorities, members of the local community, and Russia's Monotowns Development Fund,

Nornickel identified the key priorities of a strategy to support continued social and economic development in the Pechengsky District. The new development strategy includes the establishment of new enterprises based on traditional business models, the launch of a diverse industrial park, the development of a service economy and tourism, and the transformation of the social and cultural environment.

Second School Centre's projects in 2021

Focus area	Key projects
Tourism	<ul style="list-style-type: none"> • Establishment of the Tourist Information Centre in Nickel • Development of the Nickel brand and identity • Tourist trails of the Pechengsky Municipal District • First Bridge • Plastic Souvenir
Investment	<ul style="list-style-type: none"> • Management of Territorial Development Projects • Adventure Resort • Drafting a development strategy for the Pechenga Polytechnic College • Project to set up a Facility for Blending, Sorting and Packaging Synthetic Resins and Two-Component Polyester in Capsules for Mechanised Bolting in Nickel
Business	<ul style="list-style-type: none"> • Business Residence • Competition for Interest-free Funding of Business Projects (funding totalled RUB 212 mln) • Development of Entrepreneurship and Service Economy in the Pechengsky Municipal District • Business Goes to School • Masters Fair 2021
Society	<ul style="list-style-type: none"> • Gastro Industry Fest • Convention of Tour Operators • Nickel-Tourism-2025 • Camp World Tree volunteer programme • Volunteer 2021 • Art Residence • Development of partner social and cultural links in the border region, joint projects • Social Cinema — Pechengafilm • Northern People video project
Urban environment	<ul style="list-style-type: none"> • Festival Square in Nickel • Nickel and Zapolyarny master plans • Demolition of buildings 1, 3, 5, and 6 on Sportivnaya Street • Shopping walk in Nickel • Oktyabr Community Centre reconstruction in Zapolyarny

Arctic tourism and recreation cluster in figures



In December 2019, the Second School Centre for community initiatives in the Pechengsky District was established. In 2020, Nornickel designed the Conceptual Framework for the Social and Economic Development of the Pechengsky District, and in 2021 — the Programme for Social and Economic Development of the Pechengsky Municipal District for 2021–2025. Both documents define the following key areas: investment, development of the urban and business environment, tourism, and social, cultural and educational agendas — coinciding with the Second School Centre's core verticals.

In 2020, to support business projects in the Pechengsky District, Nornickel carried out:

- a contest for special-purpose interest-free loans (aimed at boosting local SME development, encouraging investment and creating new jobs);
- a competition of long-term business projects (aimed at unlocking the region's investment potential and attracting new business players to spur local economic growth by launching green production capacities and creating new jobs).

Eleven projects became finalists of the contest for interest-free loans, with a total of RUB 212 mln granted in loans and 145 new local jobs to be created.

Monchegorsk development agency

In September 2020, the successful experience of implementing integrated social and economic development projects in Norilsk and Nickel was rolled out to Monchegorsk, where Nornickel and the city's administration partnered to launch Monchegorsk Development Agency (MDA). Its main goal is to create favourable conditions and opportunities for sustainable social and economic development of Monchegorsk in three key areas:

- business and investment;
- social and cultural projects;
- tourism.

Business and investment

In 2021, the agency co-hosted a strategic session with the Monchegorsk authorities and project initiator teams in order to select three pilot investment projects. In the run-up to the event,

eleven applications were reviewed, with a report prepared for each featuring recommendations on funding sources. In the course of the session, the participants were trained on preparing applications, algorithms of submission and review of funding applications at development institutions, and the calculation of KPIs for investment projects. The Strategic Session selected the following three projects for investment and support:

- construction of land fishing infrastructure, such as warehouses and a fish processing facility (Polar Fish project);
- recycling plastic waste to produce construction materials and landscaping items, fully and autonomously powered by recycled waste (Smart Environment project);
- farm for growing seedlings to restore forests (Seedlings project).

In addition, the region is home to the Youth Startup project, which provides for a business idea contest among the city's young people, as well as participant selection and development and tracking of applications for support from development institutions. In 2021, 30 people signed up, submitting applications for a total funding amount of RUB 7.4 mln, of which RUB 1.5 mln was raised.

We also helped set up a Monchegorsk-based venue for local entrepreneurs, which provides an informal space for discussing current issues, sharing experience, finding help, learning, and meeting like-minded peers. The Monchegorsk business community is currently over 50 people strong.

Tourism and culture

Monchegorsk's tourism segment is being driven forward by two key projects — tourist cluster and city brand. In 2021, the brand strategy and strategy for the development of the Monchegorsk tourist and recreation cluster for 2021–2024 were drafted and approved. These documents incorporate concepts for large-scale tourist projects for a total of over RUB 300 mln, a brand book, a tourist map, and the city's design code.

In August 2021, Monchegorsk played host to the international IMANDRA VIKING FEST — a gathering of Scandinavian mythology aficionados, lovers of ethnic culture and rock, and any other people curious to see history come to life in the last days of summer.

The event featured interactive zones, ethnic master classes, several kinds of Scandinavian contests, and a special Scandinavian Immersion show. There was even a water location that let visitors set sail on a real Viking ship.

The headliner was the Kipelov band, and the total turnout amounted to 12,000 people. The festival won the first place in the Best Culture and Arts Tourism Event (population — up to 100,000) category at the 10th Russian Event Awards.

MDA Academy

In 2021, the Monchegorsk Development Agency established and launched an educational platform called MDA Academy. It hosts training programmes aimed at boosting business, tourism, social, cultural and municipality management competencies. These programmes are conducted both online and offline and feature foreign internship, prominent guest experts, mentors and practitioners. In 2021, more than 30 speakers from Russia and Germany took part in the project, 870 people attended, and 20 video lessons were recorded, which got 25,000 views.

Other projects

City of Infinite Inspiration urban festival

In 2021, Norilsk hosted Russia's first northernmost public art festival called The City of Infinite Inspiration. Guided by renowned artists, festival participants created art objects and presented them to the city. The festival's key goal was to show that the urban environment can and should be transformed for the better, and that public art is a great tool for doing that. The festival welcomed all interested participants, with the most active of them awarded prizes.

The City of Infinite Inspiration brought together three visual arts: mural, sculpture and installation. For five days in a row, public art masters conducted master classes and worked together with the participants to create new art objects for the city's urban environment. The festival drew more than 250 participants and 54 volunteers. The core audience included young people aged 25 to 35.

Zelenaya Kistochka (Green Brush) virtual camp

Nornickel supported a virtual camp organised as part of the Green Brush national long-term early career guidance programme for children from Norilsk, Dudinka, Monchegorsk, Zapolyarny and Nickel with a focus on nurturing environmental awareness and safety conscious culture, and promoting engineering jobs among school students. Over 500 children aged 8 to 14 took part in webinars, creative master classes and online quizzes conducted by practising environmental engineers, geologists, H&S professionals and educational experts. Projects developed by the students under the guidance of professional consultants helped them practise the newly acquired knowledge and skills. The best projects were awarded at the awards ceremony which took place in November 2021. More than 40 projects were highly praised by the jury, and the winners received valuable prizes and gifts.

The Green Brush project seeks to nurture environmental awareness and safety culture among the younger generation and to develop early career guidance for children. It lays a foundation for training future environmental engineers and H&S professionals, while also promoting environmental responsibility and personal and third-party safety awareness among school students.

Project	Implementation status
Polaria hotel	In progress
Eco campsite in the Pechengsky District	In progress
Trout farm in Ala-Akkajärvi Lake	Active phase, construction (fish stocking planned up until 1 June 2022)
BROD bakery and confectionery	Active phase, preparation for launch (scheduled for February 2022)
Food trucks for Nickel, Zapolyarny and Pechenga	Implemented
Food trucks for military settlements	Implemented
Construction of Murmansk Abrasive Plant for producing abrasive materials	Active phase, construction
Plastics recycling facility (under SMART ENVIRONMENT franchise)	Implemented
Petsamo multifunctional complex (renamed Atlas)	Active phase, construction

Monchegorsk Development Agency's projects in 2021	
Dimension	Key projects
Business and investment	<ul style="list-style-type: none"> • Youth Startup • Attracting investment to Monchegorsk • Business club • Franchise fair
Tourism	<ul style="list-style-type: none"> • Development of the Monchegorsk tourist and recreation cluster • Development of a brand strategy, visual style, unique map and design code for Monchegorsk
Social and cultural	<ul style="list-style-type: none"> • ArtArctica residence • IMANDRA VIKING FEST
Urban environment	<ul style="list-style-type: none"> • Monchegorsk master plan • concept for Sergey Brovtsev city park in Monchegorsk • Design code for Monchegorsk • Competition to develop an architectural and urban planning concept for a residential area in Monchegorsk
MDA Academy	<ul style="list-style-type: none"> • MDA Academy. Business • MDA Academy. City management • MDA Academy. Tourism • MDA Academy. Creative industries

Corporate volunteering

Nornickel's corporate volunteering programme aims to:

- shape a culture of charitable giving and volunteering across the Company's footprint;
- support employee volunteering initiatives contributing to the social development of local communities and improving the well-being of local residents;
- enhance employee engagement in achieving the Company's strategic objectives and promote employee participation in the corporate and social activities of our facilities;
- boost commitment to corporate values, proactivity and responsibility among employees, foster communication and emotional skills, and offer each and every employee opportunities to fulfill their personal potential;
- enhance the efficiency of business processes through creating horizontal links among employees and among business units;
- introduce non-financial incentives for corporate volunteers.

Plant of Goodness

The shining example of successful cooperation among the business and local communities, Nornickel, and its employees has been the Plant of Goodness project, which helps harness and streamline the Company's expertise and its vast track record of social and environmental initiatives in a structured and efficient manner. Today, this programme is implemented across all the regions of Nornickel's operation, including Norilsk, Monchegorsk, Zapolyarny, Chita and Moscow. Each year, around 2,500 employees, 40,000 local residents, and members of non-profit organisations volunteer as part of the Company's Plant of Goodness project. 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 career pursuits.

Employees can launch initiatives of their own by proposing a project idea, developing an action plan, drafting a budget, defending their project, and receiving funding from the Company.

Employees are also welcome to take part in a corporate programme of personal donations to support those in need (as a result of a grave disease or a natural, environmental, industrial or other disaster), as well as organisations involved in socially important activities.

One of the largest and most important projects of the programme is the Let's Do It! annual 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 urban improvement activities.

The programme also includes Volunteers as SDG Enablers regional environmental drives for the Let's Do It! marathon's team leaders. The goal here is to build partner relations among the teams, as well as incentivise the participants and promote the environmental agenda.

In the course of the 2021 programme activities, over 1,000 corporate volunteers took part in local community events; 126 regional volunteer teams got formed; and over 370 events were organised by corporate volunteers in the regions covered by the programme. The Plant of Goodness corporate community numbers over 3,500 volunteers. Nornickel's team took part in the #WeTogether international forum, where the volunteers shared their expertise and hosted master classes.

Plant of Goodness ranked first in community-based employee development in the 8th All-Russian Creating the Future competition that promotes best socio-humanistic practices. Additionally, Monchegorsk was named the corporate volunteering capital at the Champions of Goodness national contest.

In 2021, we introduced a new vertical: corporate volunteering as part of the SDG and ESG agendas. The annual eco-rally took a new format of a partner event — Siberian Perspective eco-summit. The eco-summit is an expert platform for discussions on strategy and synergy in implementing environmental volunteering projects and partner events. It brings together 50 international experts and over 70 most active corporate volunteers from Nornickel and other companies.

Supporting professional sports

CSKA professional basketball club

Successfully competing in various leagues, CSKA is Russia's most award-winning basketball club and one of the country's leading sports brands.

Nornickel is the club's owner and general sponsor. Starting from the 2002/2003 season, the club made it to the EuroLeague's Final Four 17 times out of the 18 and won this most prestigious club competition on the continent four times (in 2005/2006, 2007/2008, 2015/2016, and 2018/2019). CSKA is one of Europe's leading basketball teams.

In August 2021, world stars from CSKA's main roster took part in a special game held in Norilsk to mark the start of the new season. It was an exciting event for Norilsk, where the players also toured Nornickel's production facilities and held a series of master classes and challenges for young athletes.

Russian Ice Hockey Federation

In December 2018, Nornickel and the Russian Ice Hockey Federation signed a four-year cooperation agreement whereby the Company became the general partner of the federation and the men's and women's national ice hockey teams.

The agreement was focused on providing comprehensive support to prepare the national teams for the Olympic Games in Beijing and developing the Red Machine national hockey programme.

Another important dimension is promoting social and sports programmes and projects across the Company's footprint. They are 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 signing the agreement, including children's training and academic camps, workshops, master classes and youth tournaments, etc.

Football Union Of Russia

Nornickel and the Russian Football Union (RFU) have signed a cooperation agreement for 2021–2023, with the Company becoming a partner to the RFU's development programmes.

A major element of the partnership is the Succession ("Nasha Smena") talent pool programme, primarily aimed at sourcing, training and supporting young football players aspiring to a professional career.

The agreement provides for the implementation of joint projects to develop children's and youth football, including a programme for sourcing regional talent, and the Succession talent contest and festival for young athletes from the regions with the participation of the national youth team coaches.

Supporting the best children's coaches, the RFU and Nornickel have introduced a national annual grant to fund a special training programme on this job.

In December 2021, a football festival was held in Norilsk together with the RFU to mark one year since the opening of the Aika sports and recreation centre. Football legends acting as RFU ambassadors held a series of master classes for young footballers, had a public talk with fans, and took part in a football marathon involving about 100 athletes.

Rosgonki Autonomous Non-Profit Organisation

Since 2018, Nornickel, in line with the Russian Government's instructions, has partnered with Rosgonki and Sochi Autodrom to support and promote motor racing in Russia.

In 2021, as part of a sponsorship agreement for 2020–2021, the Company's advertising was expanded to make it a partner of the Formula 1 VTB Russian Grand Prix 2021.

Twenty tickets to the grand prix were raffled among the Company's employees who were at the Zapolyarye Health Resort. Some tickets were provided to Kola MMC to award employees for successful performance in corporate sporting events.

Chess Support (FIDE / Chess Federation of Russia)

In 2021, the International Chess Federation (FIDE) and Nornickel agreed to cooperate, with the Company becoming FIDE's general partner in the global development of children's and youth chess.

As part of the cooperation, Nornickel became a partner of annual FIDE Junior World Championships, FIDE Under-20 Junior Chess Championships (both open and women's), as well as some other major competitions, including the FIDE World Cup 2021 and Women's World Cup 2021.

In the autumn of 2021, Nornickel also announced a partnership with Russian grandmaster Ian Nepomniachtchi, helping him prepare for the match against the reigning world champion Magnus Carlsen.

The Company views this partnership as a great opportunity to promote chess, and hopes that Ian Nepomniachtchi will help develop the sport across Nornickel's geography through a programme to attract and nurture young talent.

Norilsk Nickel futsal club

Nornickel is the owner and general sponsor of Norilsk Nickel Futsal Club, which takes part in the Russian Super League Championship.

In the 2001/2002 season, Norilsk Nickel won the Russian championship and became the first ever Arctic team to win a national title in Russia. In the 2020/2021 season, it took the bronze.

The Russian Futsal Association and Nornickel work closely to ensure the success of the Futsal to Polar Schools project, with the club's footballers conducting master classes for schoolchildren and special workshops for coaches and referees.

Support for the development of curling in the Arctic

Nornickel actively supports the development of curling in Taimyr. The Arctic Curling Cup is the northernmost international curling tournament held as part of the Curling Champions Tour. Five events sponsored by the Company have already taken place in Dudinka, the most recent one in 2021. As a host of major tournaments, Dudinka can be rightfully called the curling capital of the North. By supporting these tournaments, Nornickel helps promote the sport in the region and makes a significant contribution to the development of curling in Russia.

The Company has partnered with the Russian Curling Federation to open a curling school in Dudinka.

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GOVERNANCE

Corporate governance

Corporate governance principles

Nornickel's corporate governance framework is designed to take into account and balance the interests of shareholders, the Board of Directors, managers and employees, as well as other stakeholders.

Our approaches to an effective governance framework draw on the applicable Russian laws, including the Corporate Governance Code recommended by the Bank of Russia. Its key principles are reflected in Nornickel's Articles of Association, Regulations on the Board of Directors, Anti-Corruption Policy and other by-laws¹.

¹ The documents are available on the corporate website at <https://www.nornickel.com/investors/disclosure/corporate-documents>

Our key corporate governance principles:

- equitable and fair treatment of every shareholder;
- support for the shareholders to let them exercise their rights and lawful interests in the most reasonable and convenient manner;
- professionalism and leadership of the Board of Directors, and involvement of independent directors in governance;
- strategic management by the Board of Directors, its efficient control over executive bodies, and oversight of the risk management and internal control framework;
- 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;
- compliance with the Russian laws and the national laws of the countries of operation;
- corporate social responsibility;
- strong business ethics;
- zero tolerance to corruption, and effective anti-corruption measures;
- full, transparent, reliable and timely disclosure;
- robust internal controls, internal and external audits;
- active collaboration with investors, creditors, and other stakeholders in order to increase the Company's assets and market capitalisation.

Share capital structure

In 2021, the Board of Directors resolved to repurchase 5,382,865 of Nornickel's own outstanding shares (representing 3.4% of its authorised capital).

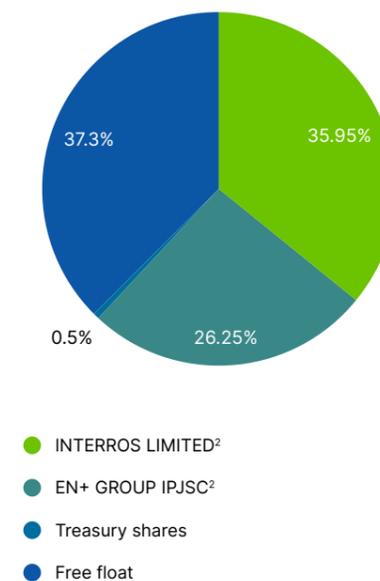
On 19 August 2021, the General Meeting of Shareholders resolved to reduce the Company's authorised capital to RUB 153,654,624 through cancellation of 4,590,852 repurchased ordinary shares. Following all the Russian statutory procedures to complete the reduction of the authorised capital, the Company cancelled 4,590,852 treasury shares on 6 October 2021.

The remaining 791,227 shares uncanceled after the buyback were kept as treasury shares.

As at the end of 2021, the authorised capital of MMC Norilsk Nickel was made up of 153,654,624 ordinary shares with an aggregate market value of USD 47.5 bn as at 30 December 2021. The Company's ordinary shares have been trading on the Russian market since 2001 (MOEX: GMKN). American depositary receipts (10 ADRs represent one share) were also issued in 2001 and are traded on the LSE (ticker: MNOD) and over the counter in the US (ticker: NILSY).

The Company's shareholding structure as at the end of 2021: INTERROS LIMITED — 35.95%, EN+ GROUP IPJSC — 26.25%, treasury shares — 0.5%, shares and ADRs in free float and held by investors in Russia, the USA, Europe, Asia and other regions — 37.3%.

Shareholding structure as at 31 December 2021, %



² Indirect control of stake (via controlled entities)

Governance bodies

● GRI 102-18, 102-20

Pursuant to MMC Norilsk Nickel's Articles of Association, its governance bodies are:

- the General Meeting of Shareholders, the Company's supreme governance body;
- the Board of Directors, a collegial governing body in charge of strategic management of the Company and oversight of its executive bodies;
- the Management Board and the President that represent the collegial and sole executive bodies of Nornickel, respectively, and manage day-to-day operations.

Board of Directors

● GRI 102-22, 102-23, 102-24

The Board's authority and formation process, as well as the procedure for convening and holding Board meetings are determined by the Articles of Association and Regulations on the Board of Directors.

According to the Articles of Association, the Board of Directors has 13 members. Members of the Board are elected at the Annual General Meeting of Shareholders for a period extending until the next Annual General Meeting of Shareholders. The current size of the Board of Directors is best aligned with Nornickel's goals and objectives. It is also well-balanced in terms of independence, which ensures efficient decision-making in line with the interests of all stakeholders and improves the quality of adopted managerial decisions. The Board of Directors currently includes six independent directors who provide professional unbiased opinion on all agenda items.

As at 31 December 2021, the Board of Directors consisted of 13 members³:

- six independent directors: Gareth Peter Penny, Sergey Bratukhin, Sergey Volk, Roger Munnings, Evgeny Shvarts and Robert Edwards⁴;
- six non-executive directors: Stanislav Luchitsky, Alexey Bashkirov, Sergey Barbashev, Sergey Batekhin, Maxim Poletaev and Vyacheslav Solomin;
- one executive director: Marianna Zakharova.

As at 31 December 2021, the Board of Directors was chaired by Gareth Peter Penny, an independent director.

● GRI 102-19, 102-20

The Board of Directors oversees the Company's management, financial and business affairs. The Board has the responsibility to define the principles of and approaches to organising the risk management and internal control framework and to monitor its implementation. The Board of Directors may instruct the management team 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. As a participant of the Company's risk management process, the Board of Directors is responsible for:

- analysing the main risks associated with the Company's activities and ensuring the implementation of actions and procedures to manage such risks (pursuant to the Company's Charter);
- approving the Company's key risks reporting;
- approving risk appetite.

● GRI 102-20, 102-29, 102-31, 102-33, 102-34

The Board of Directors meets as and when required, but at least once every six weeks.

In 2021, the Board of Directors of MMC Norilsk Nickel held 43 meetings (10 meetings in person and 33 meetings in absentia).

The most discussed topic during the Board meetings in 2021 was corporate governance.

As part of these meetings, it considered 102 matters, including 30 corporate governance matters, 15 deal approvals, 11 economic and financial matters, 3 social and environmental matters, and 43 other matters⁵.

Committees of the Board of Directors

● GRI 102-20, 102-22

The Board of Directors has five committees.

The committee operations, structure, functions and membership are defined by the respective committee regulations.

³ Director biographies are available on the corporate website at <https://www.nornickel.com/company/governance/board-of-directors/> and in the Company's Annual Report for 2021.

⁴ In March 2022, Gareth Peter Penny, Roger Munnings and Robert Edwards resolved to leave the Company's Board of Directors.

⁵ The Board of Directors' committees considered matters relating to stakeholder engagement on the ESG agenda, the Company's internal control and risk management systems, management reports, including on operational and health and safety issues, as well as progress on Sulphur Programme 2.0.

Key functions of the Board's committees

Committee	Key functions
Audit Committee	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> preliminary review of matters pertaining to sustainable development, investment planning, restructuring, and interaction with capital markets and government authorities.
Budget Committee	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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

Committees of the Board of Directors	Directors	Chairman		Share of directors	
		Independent	Non-executive	Independent	Non-executive
Audit Committee	5	+	+	60%	40%
Budget Committee	5		+	60%	40%
Strategy Committee	5		+	40%	60%
Corporate Governance, Nomination and Remuneration Committee	5	+	+	80%	20%
Sustainable Development and Climate Change Committee	5	+	+	80%	20%

Evaluation of the Board of Directors performance

The Company has conducted regular assessments of the Board of Directors' performance since 2014. Nornickel has developed its Performance Evaluation Policy for the Board of Directors in line with the Bank of Russia's Corporate Governance Code and global best practices, as well as recommendations of independent consultants. 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. The questionnaire contains 77 questions, divided into three parts and 15 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 self-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, the Company organises an external independent evaluation of the Board of Directors' performance once every three years. The next external evaluation is scheduled for 2022 and will cover the Board's performance in 2021.

Director induction and training

● GRI 102-27

Apart from providing training for employees and management, the Company also focuses on proper induction of the Board of Directors' members. 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, where they get an opportunity to discuss the most important aspects of the Company's operations directly with the persons in charge. The Corporate Secretary makes sure the new directors familiarise themselves with the existing by-laws of the Company.

All members of the Board of Directors receive annual training in dealing with insider information. 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. The Board members are informed about their rights and duties, including the requirement to notify the Company of changes in their statuses.

Executive bodies

The President and the Management Board¹ 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 2021, Vladimir Potanin had held the position of the President (CEO before 2015) for 9 years and 13 days.

Nornickel's management regularly reports to the Board of Directors on various areas of the Company's operations and takes steps to submit problems and concerns for preliminary discussion in order to ensure the most impartial and informed decision-making possible. A more detailed structure of sustainable development management by executive bodies is available in the Sustainability Governance subsection of the Strategic Vision section.

Prevention of conflict of interest

● GRI 102-25

Nornickel implements various measures to prevent and settle potential conflicts of interest among its shareholders, members of the Board of Directors and top management. The Company created the Conflict of Interest Commission at the Head Office to ensure better prevention, identification and settlement of conflicts of interest, as well as to develop and improve corporate culture.

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.

In accordance with Nornickel's Articles of Association, transactions involving a conflict of interest for a shareholder owning more than 5% of voting shares in the Company are subject to special consideration by the Board of Directors and can only be executed upon an approval by a qualified majority voting of the Board members (10 out of 13). Nornickel's by-laws also state that members of the Board of Directors and the Management Board 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.

Nornickel has in place the Regulations on the Prevention and Management of Conflicts of Interest, which apply to all of the Company's employees. The document outlines the methods to identify potential and existing conflicts of interest and ways to settle them.

¹ The full list and biographies of the Management Board members are available on the corporate website at <https://www.nornickel.com/company/governance/board-of-management/> and in the Company's Annual Report for 2021.



НОРНИКЕЛЬ
LIVE

ПРЯМАЯ ЛИНИЯ С ВИЦЕ-ПРЕЗИДЕНТАМИ



Ensuring transparency and dialogue with stakeholders on corporate governance

● GRI 102-21

Each year, Nor Nickel strives to increase stakeholder involvement in corporate governance, as it is an important factor of our operating efficiency.

The Company is committed to maintaining a high level of transparency in its business operations and making all the necessary disclosures in line with global best practices, which take the form of press releases, presentations, annual and sustainability reports, statements of material facts, and other interactive tools. We place a special emphasis on environmental and sustainability communications. Following the diesel fuel spill incident in Norilsk, the Company quickly organised a way to keep all stakeholders posted about the situation. We continue publishing updates on the clean-up operation and the Great Norilsk Expedition on our corporate website.

We disclose quarterly production results and accounting statements prepared under the Russian Accounting Standards (RAS) on the Company's website. Every six months, we publish IFRS financial statements, issuer reports, and affiliate lists.

In 2021, despite the pandemic, the Company maintained an active dialogue with a wide range of Russian and international investors. Nor Nickel has been historically using various communication channels such as conference presentations, road shows, and site visits for investors. In 2021, we held a number of online one-on-one meetings, some of which were attended by the Company's top management. In November 2021, the Strategy Day was traditionally held, attended by the Company's senior executives and the Chairman of the Board of Directors.

We also organise regular online dialogues to identify key strengths and weaknesses of the top management — employee relations. In 2021, over 40 Group facilities held 1.5-hour online meetings with heads of business units to inform the employees about the Company's growth plans and strategy and answer the most important and relevant questions.

Remuneration

● GRI 102-35, 102-36

Key principles and mechanisms of remunerations due to the governing bodies are set out in the by-laws¹ of the Company. The Board of Directors monitors and oversees the Company's remuneration framework.

The Board of Directors' annual remuneration is set out in the Remuneration Policy for Members of the Board of Directors 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 2021, the Annual General Meeting of Shareholders set the 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 quarter².

The remuneration of senior executives consists of the base salary and bonuses. Bonuses are linked to the Company's performance, including both financial (EBITDA, free cash flow) and non-financial indicators (workplace injury rates, labour productivity).

● GRI 102-28

To engage its top executives in sustainability management, the Company included HSE targets in their annual 2021 team KPIs (aggregate weight of 40%). 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	20%	20%	30%
KPI target	A 20% reduction of TRI (Total Recordable Injuries) vs the 2013–2020 minimum figures	Zero environmental incidents classified as an emergency	Delivery of environmental projects

¹ For more details, please see our corporate website at <https://www.nornickel.com/investors/disclosure/corporate-documents/#corporate-codes-and-policies>.

² This amount is after taxes withheld in accordance with the applicable Russian laws.

Risk management framework

Integrated in Nor Nickel's business processes, its corporate risk management framework allows for risk-oriented decision-making at various levels to achieve strategic and operational goals.

Key objective of risk management include:

- increase the likelihood of achieving the Company's goals;
- make resource allocation more efficient; and
- boost the Company's investment case and shareholder value.

Our risk management framework relies on the principles and requirements of the Russian and international laws and professional standards, including the Corporate Governance Code recommended by the Bank of Russia, GOST R ISO 31000:2019 (Risk Management), COSO ERM (Enterprise Risk Management — Integrating with Strategy and Performance), and 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 (Bank of Russia's Information Letter No. IN-06-28/143 dated 1 October 2020).

Key risk management responsibilities and functions

● GRI 102-26

<p>BOARD OF DIRECTORS</p> <p>AUDIT COMMITTEE OF THE BOARD OF DIRECTORS</p>	<p>KEY FUNCTIONS</p> <ul style="list-style-type: none"> • Approving the Corporate Risk Management Policy • Supervising the process of building the risk management framework • Approving the Company's Risk Appetite Statement (annually) • Reviewing and approving the risk management roadmap and assessing the progress (annually) • Reviewing reports on strategic and key risks (annually/quarterly) • Assessing risk management efficiency (annually)
<p>MANAGEMENT BOARD</p> <p>RISK MANAGEMENT COMMITTEE OF THE MANAGEMENT BOARD</p>	<p>KEY FUNCTIONS</p> <ul style="list-style-type: none"> • Reviewing strategic risks and reports on key risks • Reviewing the materialised risks and key takeaways • Reviewing risk appetite parameters • Risk management decision-making with regard to key risks • Reviewing Business Continuity Plans • Reviewing CRMF and ICS development strategy and plans • Reviewing the performance of Steering Risk Management Committees of Units
<p>RISK MANAGEMENT SERVICE</p>	<p>KEY FUNCTIONS</p> <ul style="list-style-type: none"> • Drafting and updating the risk management methodology • Reporting on Top 20 risks (quarterly) • Reporting on strategic risks (annually) • Strengthening quantitative risk assessment using simulation modelling • Developing a business continuity management framework • Educating and training employees in hands-on risk management practices
<p>RISK OWNERS / HEADS OF BUSINESS UNITS</p>	<p>KEY FUNCTIONS</p> <ul style="list-style-type: none"> • Managing risks on a day-to-day basis as part of the integrated risk management model, including identification, assessment and/or prioritisation, planning, putting into action risk response plans, developing and implementing risk management activities • Risk-oriented decision-making
<p>INTERNAL AUDIT</p>	<p>KEY FUNCTIONS</p> <ul style="list-style-type: none"> • Conducting an independent evaluation of the effectiveness of risk management, internal control and corporate governance (annually)



Structure of the risk management framework

● GRI 102-29, 102-30

We have formalised our risk management structure, allocating relevant roles and duties to all employees.

Improving the risk management framework in 2021

In 2021, the Company made the following efforts to enhance its risk management framework:

- conducted an additional internal 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 2022 budget and evaluated its sensitivity to key risks;
- improved an approach to setting and decomposing risk appetite indicators taking account ESG metrics in the relevant statement;
- expanded the list of dedicated risk management committees, with existing ones working as planned;
- drafted, tested and prepared for introducing risk management KPIs;
- updated a corporate online course on risk management basics and made it mandatory for new hires;
- piloted a GRC-type system built as part of risk management automation;
- designed a target quantitative model to assess the risk of equipment failure in a testing environment, improved the approach to assessing risks of decommissioning buildings in permafrost of the Norilsk Industrial District;
- implemented a project to streamline integration of risk management into budgeting;
- kicked off a review of long-term climate change risks for a number of Polar Division's key assets in line with TCFD requirements¹.

¹ For more details, please see the Climate Change section.

Insurance

Insurance is one of the most important tools for managing risks and finances and protecting the assets of the Company and its shareholders against any unforeseen losses related to its operations, including due to external hazards.

Nornickel has centralised its insurance function to consistently implement uniform policies and standards supporting a holistic approach to managing insurance policies and fully covering every risk at all times. The Company annually approves a comprehensive insurance programme that defines key parameters by insurance type and key project.

We have implemented a corporate insurance programme that covers assets, equipment failures and business interruptions across the Group. Our corporate insurance policies are issued by major Russian insurers in cooperation with an international broker. This helps the Group make sure that its risks are underwritten by highly reputable international re-insurers.

The same principles of centralisation apply to the Group's freight, construction and installation, aircraft and ship insurance arrangements. The Group companies, as well as its directors and officers, carry business and third-party liability insurance.

To optimise terms of coverage and better manage covered risks, we follow the best mining industry practices.

Key sustainability 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 NID, environmental and conservation legislation, social and labour relationships, information security, and climate change.

A high-level map of material risks takes into account international standards on risk management.

The reporting year saw two previously identified risks materialise:

- an ore handling facility and an adjoining elevator walkway of Norilsk Concentrator collapsed during structural reinforcement repairs;
- the Company suspended operations in Oktyabrsky and Taimyrsky mines due to an increased water inflow.

At Norilsk Concentrator, the Company reinforced key load-bearing structures and restored operations using a new crushing flowchart. The two buildings of the old crushing section were fully decommissioned.

The concentrator is creating a monitoring system for buildings and structures. On top of that, the Company keeps building a new Norilsk Concentrator to create advanced economically efficient ore processing capacities and ensure a reliable supply chain.

We completed a full set of measures to pump water from mines and make them operational. At all our mines, we are conducting additional hydrogeological exploration, with mining in close proximity to areas of potential groundwater accumulation stopped at two of them. In early 2022, we expect to finalise the hydrogeological model and update mining projects. We are also working to expand drainage capacities.

Map of key sustainability risks



- 1 ● Market risk (decline in competitive edge in the market)
 - 2 ● Risk of toughened environmental requirements
 - 3 ● Workplace injuries
 - 4 ● Information security risks
 - 5 ● Technical and production risk
 - 6 ● Power blackouts at production and social facilities in the Norilsk Industrial District (NID)
 - 7 ● Compliance risk
 - 8 ● Social risk
 - 9 ● Risk of insufficient water resources
 - 10 ● Soil thawing
 - 11 ● Epidemiological risk
 - 12 ● Supply chain disruption
- Risk level unchanged vs the previous year
● New risk

Risk: The effect of uncertainty on objectives (ISO / GOST R 310000).
Risk source: An element which alone or in combination has the potential to give rise to risk (ISO / GOST R 310000).

Key sustainability risks

GRI 102-15

1. Market risk¹

Description	Mitigants
<p>Reduced ability of the Company's products to compete in the market may shrink their liquidity and result in sales at discounts to the market price and a decrease in the Company's income.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> Higher market standards for ESG compliance and product quality; competition from producers of cheaper nickel; growing role of carbon-free transport programmes; changing consumption patterns in the hi-tech segment; introduction of external trade restrictions by foreign regulators with negative implications for Nor Nickel's operations (tariff and non-tariff regulatory measures). 	<p>To manage this risk, the Company:</p> <ul style="list-style-type: none"> monitors and reviews market requirements to product quality and ESG compliance; helps boost global industrial and investment demand for the Company's metals; monitors transport electrification trends; 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.

Risk assessment

Risk effect	Risk source	Risk level change y-o-y
high	combined	none

2. Risk of toughened environmental requirements

Description	Mitigants
<p>Our regions of operation have seen toughening environmental regulations, administrative penalties and government oversight over environmental compliance.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> Strong emphasis placed by domestic and international communities on environmental protection and sustainable development; active environmental law-making, including new standards and tougher limits on emissions and discharges, changing licence requirements and procedures for issuing waste management standards; amendments to the Russian Code of Administrative Offences: failure to comply with improvement notices of government supervisory bodies, repeated violations, breach of requirements to prevent and clean up oil and petroleum product spills, failure to equip stationary emission and discharge sources with automated metering tools as required; tougher procedures to decommission hazardous production facilities and waste disposal facilities as regards drafting and expert review of preventive and pollution response action plans; emission quotas to be introduced in twelve Russian cities, including Norilsk and Krasnoyarsk, as part of an experiment in 2020–2024. 	<p>To manage this risk, the Company:</p> <ul style="list-style-type: none"> put in place the Environmental and Climate Change Strategy; manages environmental risks; implements a programme to protect the environment and enhance environmental efficiency; provides for industrial environmental control; arranges for the Company's representatives to take part in working groups on drafting and amending environmental laws; monitors bills and draft regulations; conducts legal due diligence and assessment of the impact of draft regulations on its operations; contributes to drafting laws and regulations and makes proposals on amending those currently in effect.

Risk assessment

Risk effect	Risk source	Risk level change y-o-y
medium	combined	none

¹ This risk includes transition risks associated with climate change.

3. Workplace injuries

Description			Mitigants						
<p>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.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> Unsatisfactory organisation of operations; process disruption; exposure to hazardous factors. <p>Risk assessment</p> <table border="1"> <thead> <tr> <th>Risk effect</th> <th>Risk source</th> <th>Risk level change y-o-y</th> </tr> </thead> <tbody> <tr> <td>high</td> <td>internal</td> <td>none</td> </tr> </tbody> </table>			Risk effect	Risk source	Risk level change y-o-y	high	internal	none	<p>To manage this risk, the Company:</p> <ul style="list-style-type: none"> continuously monitors compliance with health and safety 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 occupational health and safety (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.
Risk effect	Risk source	Risk level change y-o-y							
high	internal	none							

4. Information security risks

Description			Mitigants						
<p>Potential cyber crimes may result in an unauthorised transfer, modification or destruction of information assets, disruption or lower efficiency of IT services, business, technological and production processes of the Company.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> 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. <p>Risk assessment</p> <table border="1"> <thead> <tr> <th>Risk effect</th> <th>Risk source</th> <th>Risk level change y-o-y</th> </tr> </thead> <tbody> <tr> <td>high</td> <td>combined</td> <td>none</td> </tr> </tbody> </table>			Risk effect	Risk source	Risk level change y-o-y	high	combined	none	<p>To manage this risk, the Company:</p> <ul style="list-style-type: none"> 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; 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.
Risk effect	Risk source	Risk level change y-o-y							
high	combined	none							

5. Technical and production risk

Description	Mitigants						
<p>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 and the environment that will require compensation.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> • 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. <p>Risk assessment</p> <table border="1"> <thead> <tr> <th>Risk effect</th> <th>Risk source</th> <th>Risk level change y-o-y</th> </tr> </thead> <tbody> <tr> <td>medium</td> <td>combined</td> <td>none</td> </tr> </tbody> </table>	Risk effect	Risk source	Risk level change y-o-y	medium	combined	none	<p>To manage this risk, the Company:</p> <ul style="list-style-type: none"> • 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; • introduces ranking criteria and determines the criticality of 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 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. • assesses physical risks taking into account climate change. <p>In 2021, key technical and production risks were insured as part of the property and business interruption (downtime) insurance programme, with emphasis placed on best risk management practices in the mining and metals industry.</p>
Risk effect	Risk source	Risk level change y-o-y					
medium	combined	none					

6. Power blackouts in the Norilsk Industrial District

Description	Mitigants						
<p>The failure of key equipment at the generating facilities and transmission networks may result in power, heat and water shortage at key production sites and social facilities in the NID.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> • Isolation of the NID’s power system from the national grid (Unified Energy System of Russia); • harsh weather and climatic conditions, including low replaces transmission towers; temperatures, storm winds, snow load; • length of power, heat and gas transmission lines; • wear and tear of key production equipment and infrastructure. <p>Risk assessment</p> <table border="1"> <thead> <tr> <th>Risk effect</th> <th>Risk source</th> <th>Risk level change y-o-y</th> </tr> </thead> <tbody> <tr> <td>medium</td> <td>combined</td> <td>none</td> </tr> </tbody> </table>	Risk effect	Risk source	Risk level change y-o-y	medium	combined	none	<p>To manage this risk, the Company:</p> <ul style="list-style-type: none"> • operates and maintains generating and mining assets as required by the technical documentation, industry rules, regulations, and laws; • monitors the technical condition of linear facilities, including monitoring by independent experts; • timely constructs and launches transformer facilities, timely replaces transmission towers; • timely upgrades (replaces) power units’ equipment at heat and power and hydropower plants; • timely upgrades and renovates trunk gas and condensate pipelines and gas distribution networks.
Risk effect	Risk source	Risk level change y-o-y					
medium	combined	none					

7. Compliance risk

Description	Mitigants						
<p>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.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> Discrepancies in rules and regulations; considerable powers and a high degree of discretion exercised by regulatory authorities; <p>Risk assessment</p> <table border="1"> <thead> <tr> <th>Risk effect</th> <th>Risk source</th> <th>Risk level change y-o-y</th> </tr> </thead> <tbody> <tr> <td>medium</td> <td>combined</td> <td>none</td> </tr> </tbody> </table>	Risk effect	Risk source	Risk level change y-o-y	medium	combined	none	<p>To manage this risk, the Company:</p> <ul style="list-style-type: none"> 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; takes actions to prevent unauthorised 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, thefts or other wrongdoings; asses the effectiveness of anti-corruption controls in the Group. The Company drafted (updated) and approved the following documents: <ul style="list-style-type: none"> the Methodology of Business Process Outsourcing; List of Insider Information (new version); Internal Control Rules for Preventing, Identifying, and Combating the Unlawful Use of Insider Information and/or Market Manipulation (new version); Methodology for Identifying, Analysing, Assessing and Monitoring Regulatory Risk Related to Combating Insider Information Unlawful Use and Market Manipulation at MMC Norilsk Nickel Procedure for Notifying MMC Norilsk Nickel Governance Bodies and Audit Commission of Blackout Periods in Accordance with the Russian Laws and amendments to the Procedure for Notifying Persons Discharging Managerial Responsibilities at MMC Norilsk Nickel of Blackout Periods in Accordance with the European Union Laws and for Disclosing Information on Transactions by Such Persons and Persons Closely Associated with Them; Procedure for Maintaining the List of Insiders (updated); Regulations on Interaction of PJSC MMC Norilsk Nickel Business Units and Russian Business Units within Norilsk Nickel Group to Disclose/Provide Information Required by the Securities Market (updated).
Risk effect	Risk source	Risk level change y-o-y					
medium	combined	none					

8. Social risk

Description	Mitigants						
<p>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.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> 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 in spending on social programmes and charity. <p>Risk assessment</p> <table border="1"> <thead> <tr> <th>Risk effect</th> <th>Risk source</th> <th>Risk level change y-o-y</th> </tr> </thead> <tbody> <tr> <td>medium</td> <td>combined</td> <td>none</td> </tr> </tbody> </table>	Risk effect	Risk source	Risk level change y-o-y	medium	combined	none	<p>To manage this risk, the Company:</p> <ul style="list-style-type: none"> strictly abides by the collective bargaining agreements made between the Group's companies and employees (23 bargaining agreements in total); actively interacts with regional and local authorities, and civil society institutions; fulfils its social obligations under public-private partnership agreements; 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.
Risk effect	Risk source	Risk level change y-o-y					
medium	combined	none					

9. Risk of insufficient water resources¹

Description			Mitigants
<p>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.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> Abnormal natural phenomena (drought) caused by climate change. 			<p>To manage this risk, the Company:</p> <ul style="list-style-type: none"> 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 (Rosgidromet) 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 captive hydropower plants to increase power output through improving the performance of hydroelectric units.
Risk assessment			
Risk effect	Risk source	Risk level change y-o-y	
medium	external	none	

10. Soil thawing

Description			Mitigants
<p>Loss of pile foundation bearing capacity may cause deformation of buildings and structures leading to their destruction.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> Climate change, average annual temperature increase (over the last 15–20 years); increased depth of seasonal thawing. 			<p>To manage this risk, the Company:</p> <ul style="list-style-type: none"> regularly monitors the condition of foundation beds for buildings and structures built on permafrost; runs geodetic control of changes in buildings' positions; uses satellite monitoring of the Company's facilities with subsequent analysis of the monitoring data; rolls out a geotechnical monitoring system across operations to perform ongoing monitoring of the Company's buildings and structures; monitors soil temperature at buildings' foundations; monitors the facilities' compliance with operational requirements for crawl spaces; develops recommendations and corrective action plans to ensure safe operating conditions for buildings and structures.
Risk assessment			
Risk effect	Risk source	Risk level change y-o-y	
medium	external	none	

¹ Risks 9 and 10 are physical risks related to climate change. For more details, please see the Climate Change section.

11. Epidemiological risk

Description			Mitigants
<p>The risk is associated with infectious disease outbreaks and related preventive and anti-epidemic measures.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> Viral infection outbreaks; epidemiological restrictions imposed by national and local governments. 			<p>The Company has implemented a set of measures to mitigate the consequences of the risk materialisation:</p> <ul style="list-style-type: none"> full pay levels maintained with additional compensations paid to employees working non-remotely at the Group's production facilities and in its offices; remote working arrangements put in place for office staff; personal protective equipment, tests, control devices, and disinfectants procured for all the Group's assets; medicines and equipment, including 1 automatic immunochemistry analyser, 940 UV air flow cleaners-recirculators, 489 contactless thermometers and over 324,000 test kits, purchased; support provided to increase the capacity of local hospitals; local volunteers assisted in supporting employees who require regular health monitoring; mandatory testing for COVID-19 put in place; extended shifts introduced for shift workers arriving in Chita/Norilsk; vaccination information communicated to employees, with an additional paid day off (based on average salary) provided after each day of COVID-19 vaccination or revaccination.
Risk assessment			
Risk effect	Risk source	Risk level change y-o-y	
medium	external	none	

12. Supply chain disruption

Description			Mitigants
<p>Supply chain disruption in existing transportation and logistics schemes.</p> <p>Key risk factors:</p> <ul style="list-style-type: none"> 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, pandemic spread, and other factors; improper performance of contractors. 			<p>To manage this risk, the Company:</p> <ul style="list-style-type: none"> 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; made a list of critical equipment and materials suppliers and takes steps to prevent supply disruptions and monitor the business of said partners; runs logistics expansion programmes.
Risk assessment			
Risk effect	Risk source	Risk level change y-o-y	
medium	external	new	

Finance and tax management

Economic efficiency

Economic efficiency is essential for us to meet our strategic goals and finance ESG transformation.

The key factors driving the improvement of Nornickel's economic performance are investment and profitability management, initiatives on increasing the shareholder value, and best-in-industry shareholder returns.

In 2021, our consolidated revenue increased by 15% to USD 17.9 bn mainly due to higher exchange metals prices and stronger sales of palladium stocks accumulated in 2020. This helped offset the production decline caused by 1H 2021 incidents.

EBITDA rose by 37% to USD 10.5 bn on the back of revenue growth, with Bystrinsky GOK EBITDA reaching USD 1.1 bn. EBITDA margin totalled 59%.

Our CAPEX for the year increased by 57% to a record USD 2.8 bn due to the strategic CAPEX growth for key projects. Expenses under the Sulphur Programme, which has entered the active phase, exceeded USD 500 mln, while investment in the South Cluster project and expansion of Talnakh Concentrator saw a three- and four-fold increase, respectively. Expenses on capitalised overhauls, industrial safety and fixed assets upgrade at the Group companies grew by more than 40% and surpassed USD 800 mln.

Our net debt remained almost flat at USD 4.9 bn, with the net debt/EBITDA ratio amounting to 0.5x as at 31 December 2021.

Tax strategy

● GRI 207-1

Timely payment of taxes and compliance with tax laws are vital for achieving Nornickel's strategic goals in sustainable development.

Nornickel is Russia's major taxpayer in the metals and mining industry.

The key document governing the Company's tax matters is its Tax Strategy Policy, which 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 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 MMC Norilsk Nickel's Management Board. Updates and significant changes are introduced as needed, but at least once every three years.

Approach to taxation

The Group is committed to openness and transparency in managing its tax compliance, including by:

- disclosing relevant information for stakeholders on its corporate portal to the maximum practicable extent;
- taking a zero-tolerance approach to non-transparent corporate structures used for tax avoidance.

The Company has in place the Tax Department, which prepares internal regulations (guidelines, explanations, information letters) 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.

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.

All 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.

The Group's foreign entities interpret applicable tax legislation and resolve controversial tax issues independently.

Financial highlights¹

● GRI 102-7

Indicator	2017	2018	2019	2020	2021
Revenue, RUB bn	536.8	728.9	877.8	1,116.9	1,316.9
Gross profit, RUB bn	270.2	408.2	543.1	752.2	888.8
EBITDA, RUB bn	236.4	389.2	513.7	552.4	775.9
EBITDA margin, %	44	53	58	49	59
Net profit, RUB bn	127.4	187.8	387.6	263.8	512.9
Assets, RUB bn	958.3	1,059.5	1,205.5	1,529.5	1,741.2
Total CAPEX ² , RUB bn	116.7	99.2	85.3	128.7	202.9

¹ In accordance with Nornickel Group's 2021 consolidated financial statements in Russian roubles. https://www.nornickel.com/upload/iblock/765/ifrs_eng_usd_consolidation_reporting_12m_2021_final.pdf. Gross profit data for 2019 and 2020 adjusted in line with the previous reports.

² Includes costs paid in Russia for new construction projects, expansion, retrofit or upgrade of existing facilities, acquisition of machinery and equipment, R&D and other expenses, as well as housing and amenity construction.

Direct economic value generated and distributed, RUB bn³

● GRI 201-1

Indicator	2017	2018	2019	2020	2021
1. Direct economic value generated	541.0	734.6	884.6	1,123.3	1,324.1
2. Economic value distributed, including:	519.0	684.6	918.4	990.5	1,141.2
Operating expenses ⁴	194.1	228.5	239.1	449.0	281.8
Community investments and charity ⁵	17.7	12.9	14.4	36.4	76.0
Payroll and other employee remuneration and benefits, including payroll taxes	120.4	128.8	136.8	146.6	163.6
Payments to providers of capital (interest, dividends ⁶)	128.6	243.1	383.7	213.8	412.2
Gross tax payments	58.3	71.3	144.4	144.8	207.6
3. Economic value retained	22.0	50.0	-33.8	132.8	182.9

³ Calculated on an accrual basis under the IFRS. The Company used an in-house calculation methodology developed in line with the GRI Standards.

⁴ From 2020, this line has included environmental and decommissioning provisions.

⁵ Excluding CAPEX.

⁶ Taking into account dividends accrued.

Tax management at Nornickel Group

● GRI 102-26, 207-2

Participant	Key functions
Board of Directors	<ul style="list-style-type: none"> Review the report on the efficiency assessment of Nornickel Group corporate risk management framework
Management Board	<ul style="list-style-type: none"> Approve the Tax Strategy Policy Review the reports on tax risk management
Senior Vice President and CFO at PJSC MMC Norilsk Nickel	<ul style="list-style-type: none"> Oversee the activities of the Tax Department Organise and control the implementation of the Risk Management Regulations
Tax Department	<ul style="list-style-type: none"> Provide tax support for Russian and foreign Group companies: collect the requests from tax authorities and prepare responses prepare internal regulations (guidelines, explanations, information letters) for the Group's Russian companies set up the Legal Information Portal, a database of internal explanations and documents on taxes oversee tax compliance of Nornickel's Russian and foreign companies manage tax risks of the Group's Russian companies
Tax experts of the Shared Services Centre, tax experts in business units, employees of local accounting business units	<ul style="list-style-type: none"> Prepare tax accounts and reports
Employees of the financial services of foreign companies	<ul style="list-style-type: none"> Prepare tax accounts and reports Interpret tax legislation and resolve controversial tax issues Manage tax risks
Corporate Trust Line	<ul style="list-style-type: none"> Collect reports of unethical or illegal tax practices
Independent external auditor	<ul style="list-style-type: none"> Conduct statutory audits of consolidated financial statements, including tax disclosures¹

Key regulations: MMC Norilsk Nickel's Risk Management Regulations

¹ For more details, please see https://www.nornickel.com/upload/iblock/765/lfrs_eng_usd_consolidation_reporting_12m_2021_final.pdf

Cooperation with tax authorities

● GRI 207-3

Just like other stakeholders, our relations with tax authorities are governed by openness, partnership, timeliness of response handling, and completeness of disclosure. 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 participates in the tax monitoring system, which provides tax authorities with real-time access to the Company's tax and accounting data

and eliminates the need for inspections. By giving tax authorities direct access to its corporate accounting system, the Group clearly demonstrates its highly professional and ethical approach to tax matters.

2021 tax payments breakdown, RUB bn²

	Income tax	Mineral extraction tax	Licences and similar payments	Total
MMC Norilsk Nickel Group	152,273	31,000	11	183,284
South Cluster	6,181	5,804	0	11,985
Kola MMC Group	-39	1,981	—	1,942
NN Harjavalta	1,065	—	—	1,065
GRK Bystrinskoye	1,300	248	0	1,548
Other mining businesses	0	0	0	0
Other non-metals businesses	2,060	—	—	2,060
Total	162,840	39,033	11	201,884

² 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.

2021 tax payments by country, RUB bn

	Income tax	Mineral extraction tax	Licences and similar payments	Total
Russia	160,072	39,033	11	199,116
Finland	1,065	—	—	1,065
Switzerland	1,670	—	—	1,670
Other countries	33	0	—	33
Total	162,840	39,033	11	201,884

Anti-corruption

Preventing and fighting corruption

● SASB EM-MM-510a.1

We traditionally pay special attention to developing and implementing anti-corruption initiatives covering corporate, government and partner relations.

We value the trust of our shareholders, investors, partners, employees, the government and other stakeholders, and make consistent efforts to build an anti-corruption and compliance framework based on zero tolerance to any form of corruption at all levels.

Nornickel's Anti-Corruption Policy is our underlying document in this area. 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 the Company's representatives and contractors, 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.

Additionally, Nornickel has in place the Business Ethics Code setting forth corporate rules and ethical standards guiding its employees in discharging their duties.

Nornickel Group's Russian business units adopt and implement their own anti-corruption regulations in line with the Company's anti-corruption policy. We take all the necessary and reasonable steps to ensure our foreign operations comply with the policy's key principles and requirements.

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.

In 2021, we were awarded A1, the top score in the RSPP's Russian Business Anti-Corruption Rating. This rating proves the strong anti-corruption efforts of the Company's management and our high standards in preventing corruption.

Our representatives take an active part in developing and implementing domestic and international policies on combating corruption. Andrey Bougrov, Nornickel's Senior Vice President for Sustainable Development, is the Company's top executive in charge of anti-corruption practices. He holds membership in a number of Russian and international organisations that supervise this area, in particular:

- Expert Committee of the Russian Presidential Anti-Corruption Directorate;
- Non-profit Partnership National Council on Corporate Governance;
- Expert Council on Sustainable Development at the Russian Ministry of Economic Development;
- Expert Group for Corporate Governance, Special Administrative Districts, Bankruptcy Proceedings and Valuation at the Russian Ministry of Economic Development (head);
- B20 Integrity and Compliance Task Force;
- representative of the Russian Union of Industrialists and Entrepreneurs engaged in groups and committees of the Business and Industry Advisory Committee to the OECD (BIAC): Anti-Corruption Task Force and the Corporate Governance Committee.

Corruption risk management

● GRI 205-1

In 2021, the Company started to draft and introduce a new methodology to assess and manage corruption risks. Every quarter, we monitor and revise these risks. In 2021, the assessment covered 100% of our business units, with no corruption risks materialising.

The Company's security service checks new contractors for involvement in 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.

● GRI 205-3

In 2021, the active and targeted inspections of Nornickel's Security Service in cooperation with law enforcement authorities resulted in criminal cases against four of the Group's employees on charges of commercial bribery (article 204 of the Russian Criminal Code).

These cases are being investigated for the purpose of getting a complete, comprehensive, and unbiased picture of the circumstances surrounding the transgressions, including their reasons and other context.

Anti-corruption governance framework¹

● GRI 102-26

<p>KEY ANTI-CORRUPTION REGULATIONS</p>	<ul style="list-style-type: none"> • Anti-corruption laws of the Russian Federation and other countries where the Company operates • Applicable international laws • Anti-Corruption Charter of the Russian Business • Anti-Corruption Policy of MMC Norilsk Nickel • Business Ethics Code • Code of Conduct and Ethics for Members of Board of Directors of MMC Norilsk Nickel • Supplier Code of Conduct • Regulation on the Prevention and Management of Conflicts of Interest in the Company • Regulation on the Conflict of Interest Commission • Regulation on Business Gifts • Standard anti-corruption agreement (appendix to the employment contract) • Procedure for Anti-Corruption Due Diligence of By-Laws Adopted by the Head Office of MMC Norilsk Nickel
<p>UNITS IN CHARGE</p>	<ul style="list-style-type: none"> • Board of Directors — determining key strategic anti-corruption priorities and overseeing their implementation • President — organising measures to ensure that the requirements and principles of the anti-corruption policy are met • Corporate Relations Department — identifying and documenting corruption risks; developing and controlling risk management measures • Corporate Trust Line — providing prompt response to reported violations, abuses and theft • HR Services — organising staff training on combating corruption • Security services — checking counterparties and candidates to vacancies; responding to corruption incidents • Heads of Group divisions and companies — ensuring compliance with the anti-corruption policy
<p>FOCUS AREAS</p>	<ul style="list-style-type: none"> • Prevention and management of conflicts of interest • Anti-corruption due diligence of by-laws • Counterparty due diligence to confirm their reliability, solvency and financial stability • Procurement procedures • Government cooperation, promotion of justice and the rule of law • Business gifts and hospitality expenses • Sponsorship and charity • Staff training in preventing and fighting corruption • Awareness of the Company's corruption management policy among stakeholders • Adopting standards and codes of conduct • Internal control of business operations and accounting • Participation in collective initiatives

¹ For more details on internal documents and initiatives to prevent and combat corruption, raising legal awareness and laying the foundation for employee and counterparty law abidance, please see the Preventing and Combating Corruption section at <https://www.nornickel.com/sustainability/anti-corruption/>.

Creating awareness and training employees on Nornickel's anti-corruption policies and practices in 2021, by region

● GRI 205-2

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	51,260	4,065	11,913	6,675	2,713	76,626
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	4,254	1,189	1,075	3,128	159	9,805
Share of employees trained on the Group's anti-corruption policies and practices, %	8.3%	29.2%	9.0%	46.9%	5.9%	12.8%

Creating awareness and training employees on Nornickel's anti-corruption policies and practices in 2021, by category

● GRI 205-2

Indicator	Managers	White-collar employees	Blue-collar employees	Total
Number of employees made aware of the Group's anti-corruption policies and practices	11,822	16,821	47,983	76,626
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	1,042	3,506	5,257	9,805
Share of employees trained on the Group's anti-corruption policies and practices, %	8.8%	20.8%	11.0%	12.8%

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 conducts mandatory preventive talks with the staff on the unacceptability of law violations and its zero tolerance for any unlawful acts, including corruption. The topics also cover the Business Ethics Code and the inevitability of penalty for any crimes.

Measures like these enable Nornickel to take adequate and timely action not just in identifying such acts, but also in preventing them, which is one of the main goals of the Company's responsible units.

Anti-corruption training

To raise employee awareness of our anti-corruption initiatives, we organise training in basic relevant 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 for new staff and a dedicated online course on compliance with anti-corruption laws for our HR function.

As at the end of 2021, 100% of employees were made aware of the Group's existing corruption prevention policies. Over the year, the dedicated training on the requirements and provisions of the corporate anti-corruption regulations covered 9,805 people.

Corporate Trust Line

● GRI 102-17

In 2010, the Company set up the Corporate Trust Line, part of the Internal Control Department, to ensure prompt management response to reported abuse, theft, and other violations.

The service is governed by the Procedure on the Corporate Trust Line. Responsible for the service are its operator and head along with the Director of the Internal Control Department.

The principles underlying the Corporate Trust Line include guaranteed confidentiality for whistle-blowers, independent review of reports, and timely and unbiased investigation of all cases irrespective of the position and employment period of employees against whom allegations are made. This is how we prevent retaliation against or pressure on whistle-blowers.

Any stakeholder may contact the Corporate Trust Line. The line handles reports on 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, email: skd@nornik.ru. Reports can be filed via the dedicated 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 response by the Head of the Corporate Trust Line) within 21 days. The exceptions are reports that require immediate action or additional investigation. If the report is found substantiated, a set of control measures is taken, and if a violation is confirmed, steps are taken to correct the situation, eliminate any negative consequences, and inform stakeholders.

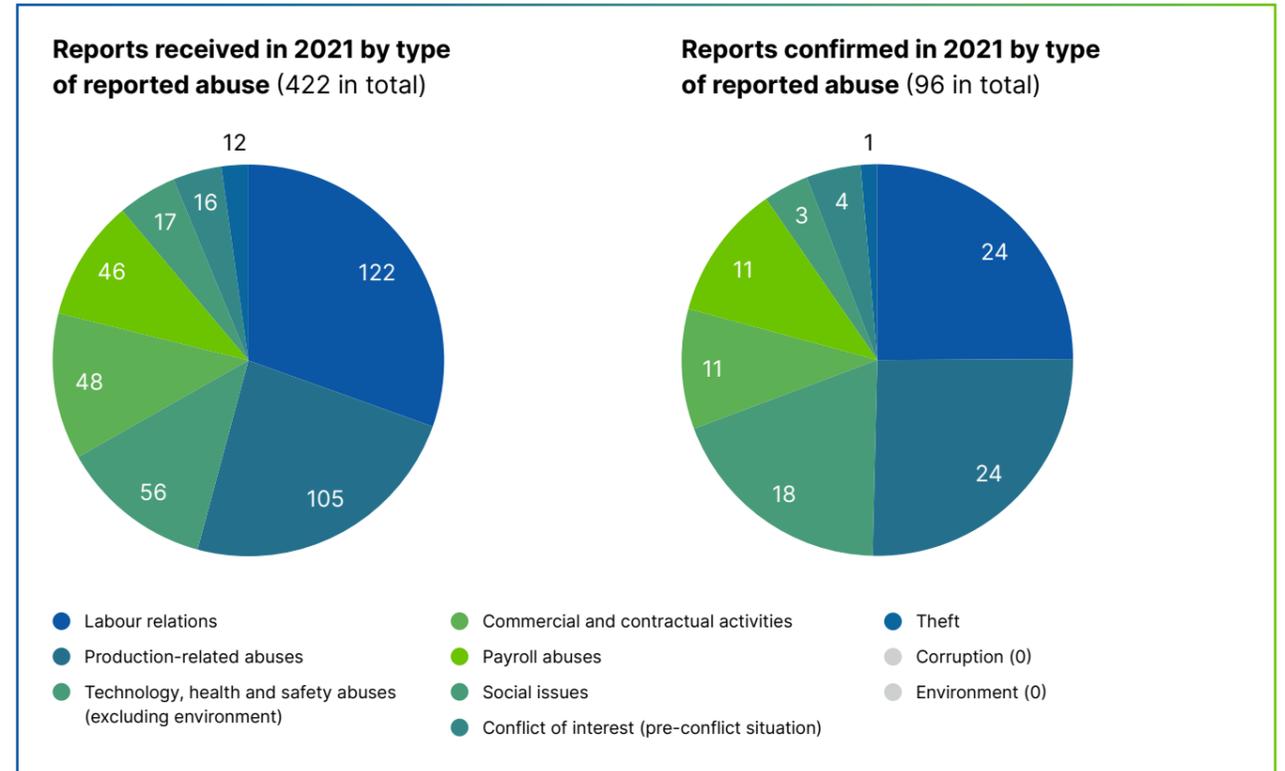
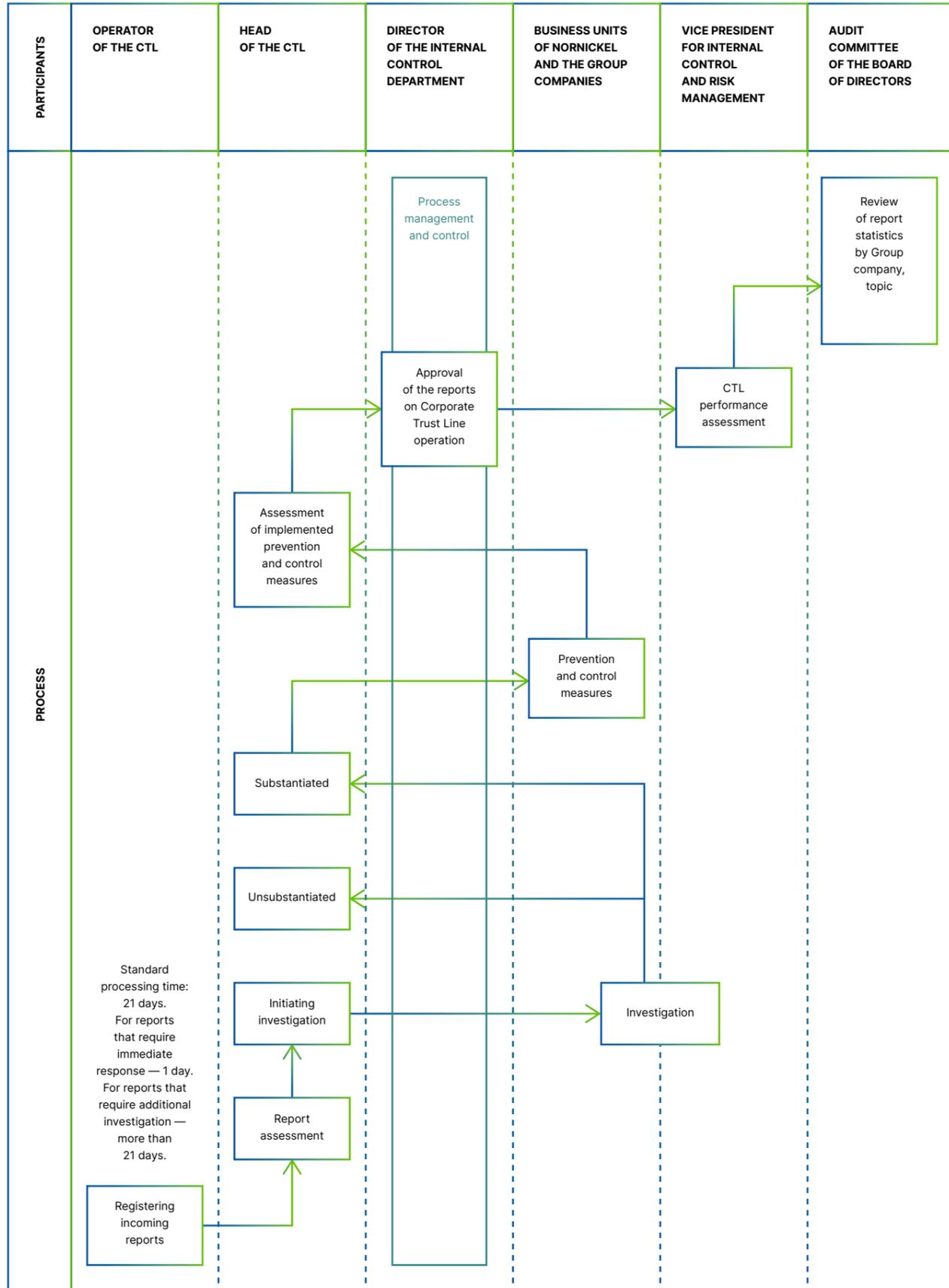
In 2021, the Corporate Trust Line received 1,243 reports, with 422 accepted for review and 96 confirmed. Most reports had to do with production and labour relations. As at 31 December 2021, 70 reports were being processed.

Report statistics (broken down by Group company and type of reported abuse) are submitted to units in charge on a quarterly basis. The performance of the Corporate Trust Line is subject to review by the Board's Audit Committee and an interactive assessment by the Vice President for Internal Control and Risk Management.

Persons in charge of the Corporate Trust Line have individual KPI targets of improving incoming reports processing.

Framework for registering and reviewing reports by the Corporate Trust Service

GRI 102-26



Supply chain responsibility

Managing the ESG aspects at all value creation chain stages 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 processes include both interaction with feedstock suppliers in the upstream sector and control over sustainability ensuring high product quality and promoting innovative technologies in the downstream sector aiming to confirm product "history" and its ESG characteristics, including the carbon footprint. In the future, supply chain management processes will also cover suppliers of goods, works, and services.

Responsible procurement

Nornickel's key responsible procurement priorities are to ensure that its key suppliers and contractors comply with the main ESG requirements that the Company follows in its operations and exclude interaction with any counterparties that grossly violate the principles of sustainable development.

In 2021, MMC Norilsk Nickel approved its Responsible Sourcing Policy¹ and its Supplier Code of Conduct² which reflect the Company's responsible sourcing principles. If any violation of the policy and code principles by any supplier is discovered, the Company applies a set of measures to reduce the risks of interacting with that counterparty, including suspending or terminating interaction with such counterparty, depending on the severity of the violation.

To mitigate the operational and financial risks and costs, reduce the working capital, make supplies more reliable, and improve the delivery cycle, Nornickel relies on a wide range of adopted documents establishing mandatory unified procurement principles and approaches.

Checking suppliers and contractors for compliance with ESG requirements

In 2021, to ensure responsible sourcing for all individual supply chains in accordance with the ESG requirements, Nornickel approved the Supplier Code of Conduct. The Code establishes mandatory, targeted, and expected requirements for suppliers which are revised on an annual basis or as significant changes occur in the relevant supply chain.

¹ The policy is available on the Company's official website at: https://www.nornickel.ru/upload/iblock/b0a/politika_po_otvetstvennomu_vyboru_postavshchikov.pdf

² The code is available on the Company's official website at: https://www.nornickel.com/files/en/suppliers/purchasing_policy/supplier-code-of-conduct-pjsc-mmc-norilsk-nickel.pdf

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, up to and including the complete termination of engagement.

To monitor suppliers' compliance with the requirements of the Supplier Code of Conduct and select the best suppliers based on the ESG criteria, Nornickel started developing a due diligence management system (DDMS) in 2021. The system is focused 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, JDDS;
- the Company's major customers.

The methodological basis for developing the DDMS is the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas as well as the Five-Step Framework for Risk-Based Due Diligence in the Mineral Supply Chain.

In 2021, as part of the first step from the Five-Step Framework for Risk-Based Due Diligence of Supply Chain, Nornickel developed and released the Supplier Code of Conduct and the Responsible Sourcing Policy, which are public documents available on the Company's official website, and revised the Human Rights Policy¹.

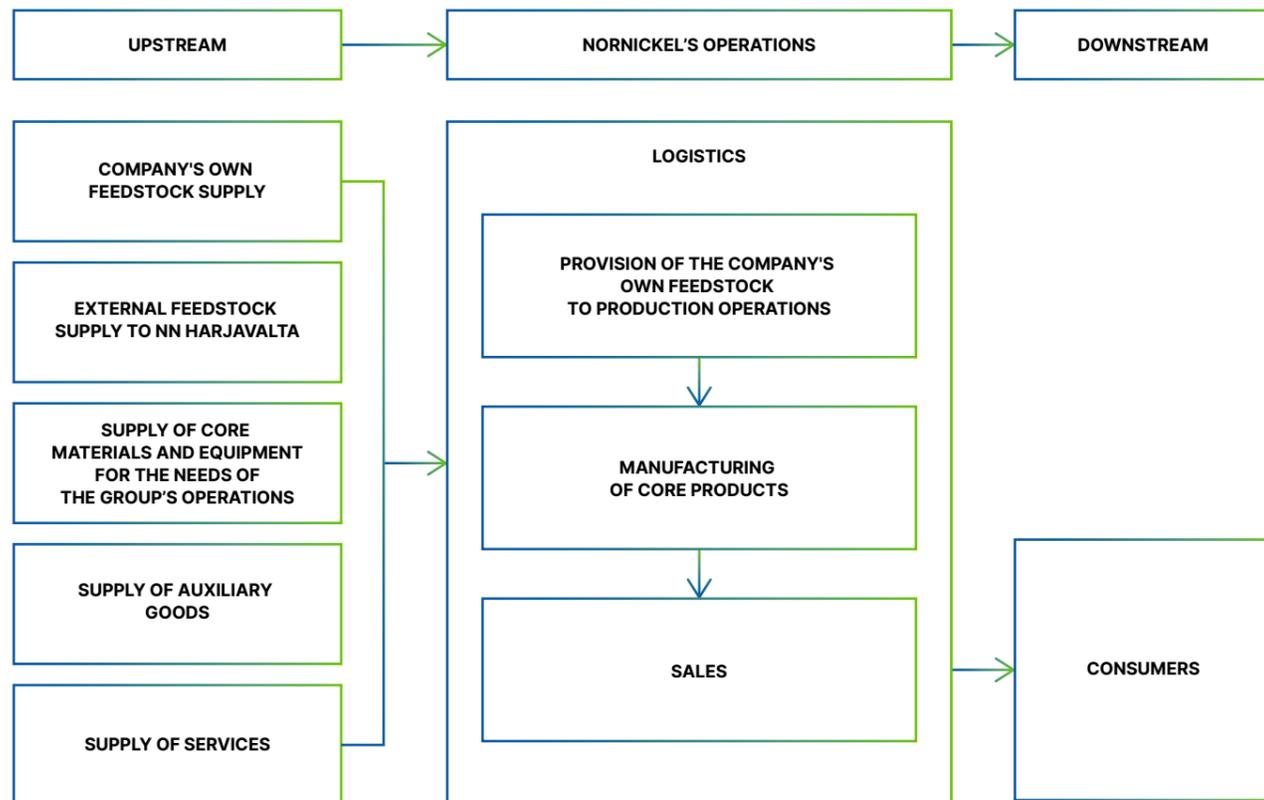
In 2021, Kola MMC developed the Due Diligence System standard (part of DDMS), conducted a supply chain due diligence procedure and issued a supply chain due diligence report² and a 2021 due diligence report³. In February 2022, the Corporate Trust Line Procedure was updated.

Nornickel is planning to complete the development of all DDMS tools in 2022, roll out the system at other divisions, and implement the entire five-step framework, introducing the DDMS for feedstock suppliers at the first stage with further expansion to suppliers of goods, works, and services. To implement the DDMS into business processes across the entire group, Nornickel is developing a Code Implementation Roadmap and training the employees of Nornickel's head office and divisions.

In addition to the DDMS, Nornickel traditionally carries out detailed sustainability compliance control procedures as part of its major procurement procedures.

Key elements of Nornickel's supply chain

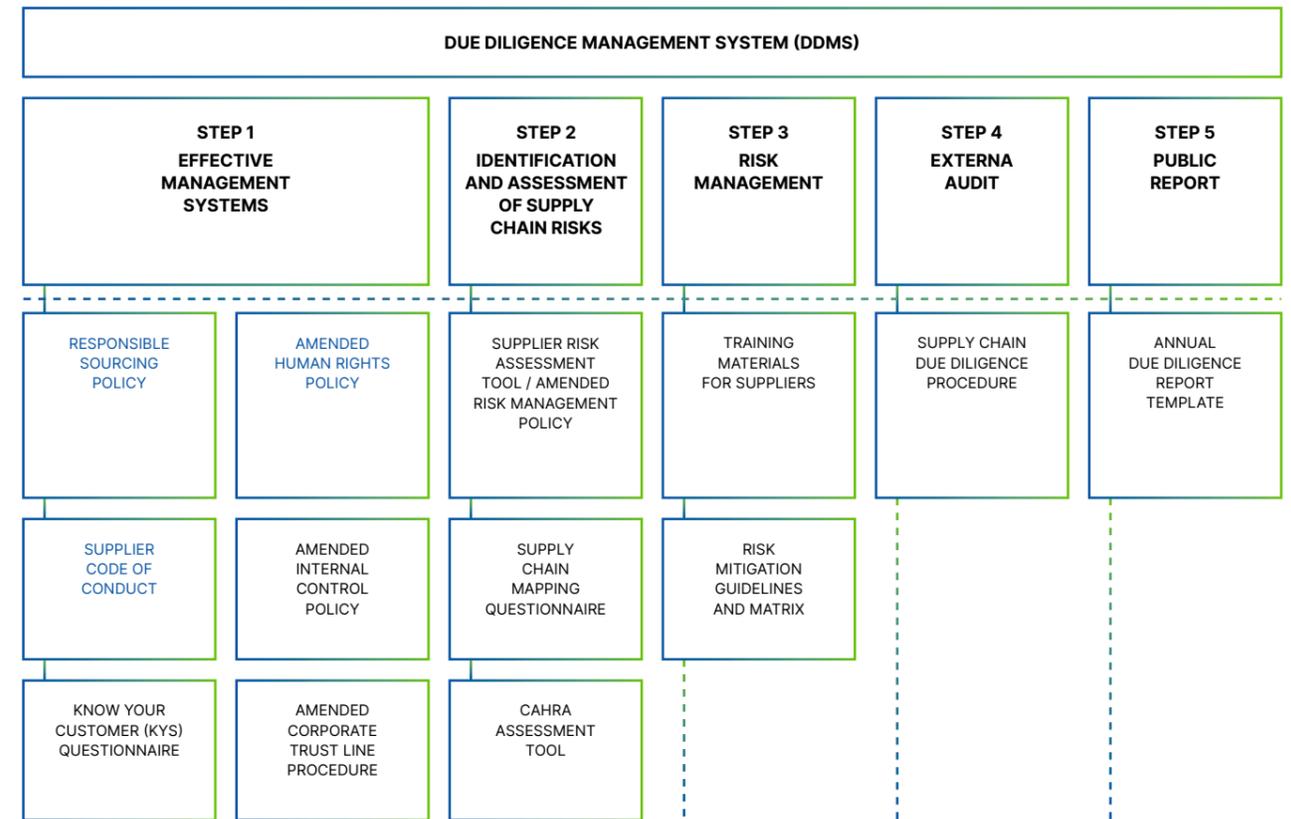
● GRI 102-9, 306-1



¹ The policy is available on the Company's official website at: PJSC_MMC_Norilsk_Nickel_Human_Rights_Policy_rus.pdf (nornickel.ru)

² The document is available at: <https://www.kolagmk.ru/pages/6626-otvetstvennaya-cepochka-postavok.html>

³ The document is available at <https://www.nornickel.ru/files/ru/business/annual-report-kgmk-2022.pdf>.



Nornickel's by-laws on responsible procurement

- Key procurement by-laws
- Regulation on the Product Procurement Procedure for MMC Norilsk Nickel's Enterprises
 - Procurement policies by category (group of similar products)
 - A standard master agreement signed with every supplier⁴
 - MMC Norilsk Nickel's Policy Regarding Support for Small and Medium Enterprises
 - Norilsk Nickel Group's efficiency improvement programme

- Policies setting out ESG requirements for the Company's suppliers and contractors⁵
- MMC Norilsk Nickel's Responsible Sourcing Policy
 - MMC Norilsk Nickel's Supplier Code of Conduct
 - Business Ethics Code of MMC Norilsk Nickel
 - Community Engagement Policy
 - Renewable Energy Sources Policy
 - Occupational Health and Safety Policy
 - Working Conditions Policy⁶
 - Indigenous Peoples' Rights Policy
 - Human Rights Policy
 - Anti-Corruption Policy of MMC Norilsk Nickel

⁴ The Master Agreement is available for review on the Company's official website at https://www.nornickel.ru/files/ru/tender_documents/Tipovye-formy-PAO-GMK-NORNIK.rar

⁵ 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 at: <https://www.nornickel.com/investors/disclosure/corporate-documents/corporate-documents>

⁶ 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.

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

In 2021, Nornickel continued the practice of selecting suppliers based on the analysis of equipment life-cycle costs (ownership, operation, and disposal) by including appropriate provisions in the statement of work or draft contract. It is important for Nornickel to develop relationships with reliable suppliers who strive to improve the environmental component of production operations. Nornickel takes into account suppliers' efforts to secure responsible resource consumption and reduce environmental impacts, in particular by using modern equipment and technological materials, regular pilot testing, and production upgrade.

Ensuring procurement efficiency and transparency

Nornickel's procurement operations are carried out in accordance with internal procedures and policies. The Company's procurement process is certified for compliance with ISO 9001 and ISO 14001.

In 2021, the Company signed over **4,700 contracts** for centralised procurement of materials and equipment worth around **RUB 130.2 bn.**

To handle both centralised (through MMC Norilsk Nickel) and decentralised (at the Group's Russian business units) procurement activities, we use SAP SRM, an automated system for supplier relationship management. By 2021, 26 companies affiliated with the Group and MMC Norilsk Nickel divisions had joined the SAP SRM system and over 15,000 potential suppliers had registered in it, of which over 7,000 had been accredited. 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 can 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.

To maintain an ongoing dialogue with suppliers, our website has a dedicated Suppliers page, which provides key information on the Group's procurement principles and procedures and planned material requirements. 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.

Transparent procurement. Participation in RSBN initiative

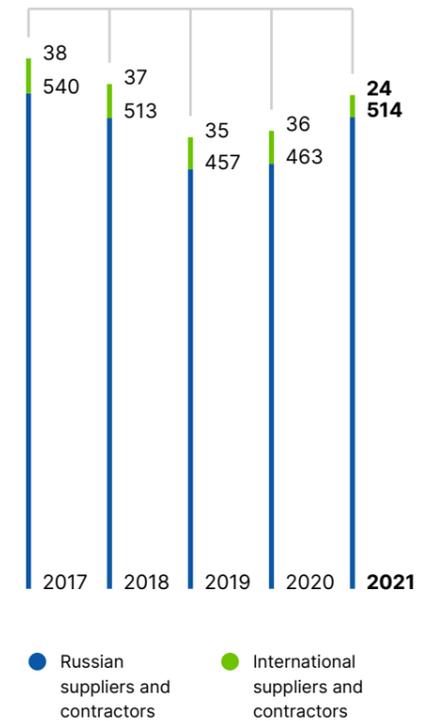
To improve procurement transparency, Nornickel joined the international Responsible Sourcing Blockchain Network (RSBN) in January 2021. This initiative brings together sellers and buyers of across the minerals supply chain. With Nornickel joining the RSBN, a series of its supply chains will be audited annually against key responsible sourcing requirements by RCS Global. An independent audit will be conducted in 2021, with its results to be recorded in the blockchain network without any changes.

Support for domestic producers

Support for domestic producers is a part of Nornickel's responsible sourcing efforts. To increase competition and phase out imported equipment with that manufactured locally, the Company has a centralised pilot testing mechanism in place. Foreign suppliers are mainly engaged for delivering unique equipment or systems that have no Russian alternatives.

Over **95%** share of domestic suppliers in 2021

Breakdown of Nornickel Group's suppliers and contractors, number of companies



Product quality and supply reliability

Product quality assurance

As a product manufacturer, Nornickel is responsible for compliance with the laws, environmental and occupational health and safety requirements during its production process. 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.

The key production operations of the Group, i.e. MMC Norilsk Nickel, Kola MMC, GiproNickel Institute, Norilsk Nickel Harjavalta, are certified to ISO 9001:2015. The Company has put together, implemented, and is dynamically developing a corporate integrated management system as per ISO 9001, ISO 14001, and ISO 45001.

Nornickel Group's 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 4192-96 (Labelling) requirements and contractual obligations.

● GRI 102-2

NORILSK brand copper cathodes produced by MMC Norilsk Nickel'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.

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.

In 2021, the Company faced no major fines for a failure to comply with product supply rules and requirements.

Ensuring reliable and uninterrupted supplies

Nornickel's sales strategy is focused on ensuring sustainable positioning 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.

Nornickel Group's production operations ensure reliable and uninterrupted supplies of products to consumers driven by:

- efficient self-developed product delivery planning and monitoring system;
- its existing quality management system certified to ISO standards;
- professional qualifications of the sales and production personnel;
- close coordination between marketing, production and delivery units;
- availability of corporate cargo fleet and unique logistics competencies;
- regular monitoring of customer satisfaction and feedback.

Throughout the history of the Norilsk Nickel Group, it never once failed to meet its obligation to deliver products to consumers

In 2021, Nornickel's customer base included 356 companies, mostly industrial consumers. Nornickel sells its products on all key markets, with its footprint spanning 36 countries as at the end of 2021.

Corporate Integrated Management System (CIMS)



* Updated in 2017

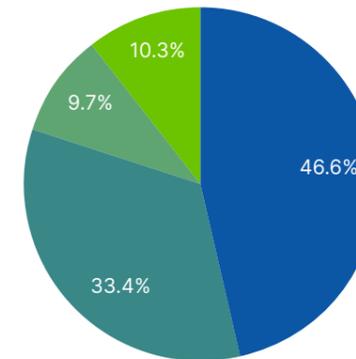
** Updated in 2021

*** Updated in 2020

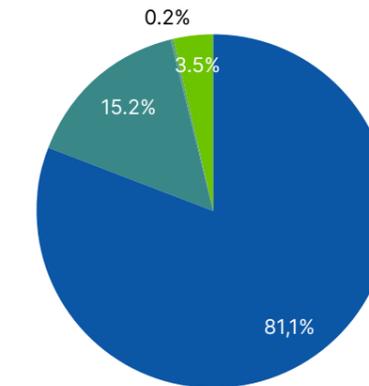
Revenue from key metal sales in 2021 by region, %

● GRI 102-6

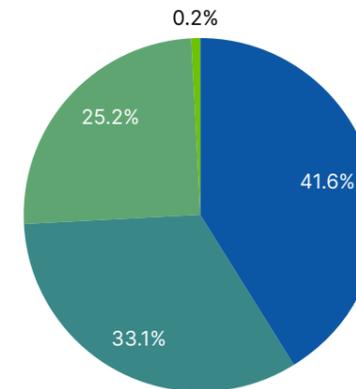
Nickel



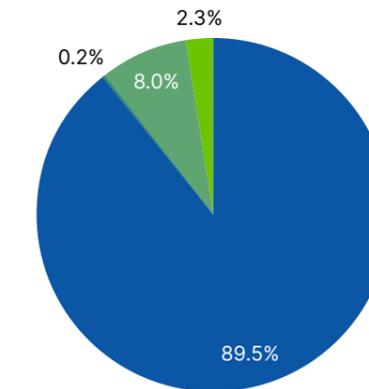
Copper



Palladium



Platinum



- Europe
- Asia
- Americas
- Russia and CIS

Customer satisfaction

The Company conducts annual surveys to analyse and evaluate customer satisfaction with its core products. Compliance with contractual obligations is audited and analysed on an ongoing basis.

The key to positive survey results is maintaining or exceeding target customer satisfaction level at 2.50 points (out of 3 points). Surveys cover key customers accounting for at least 50% of total product sales.

According to the 2021 survey, the customer satisfaction level stood at 2.88 points out of 3.

In 2021, the Company received 18 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 (eight complaints were deemed unfounded), with remedial action plans developed to address twelve complaints (including six that had been rejected).

Research and development, digital technologies

Research and development

R&D and innovations are necessary to achieve Nornickel's strategic priorities of increasing output, improving efficiency, and reducing the negative impact on the environment.

The Company's innovative development is driven by Gironickel Institute and Nornickel Digital Lab both forming part of the Group.

Gironickel Institute is the main research and design platform of Norilsk Nickel Group. It is one of Russia's largest research and design centres for mining, metallurgy, concentration, and processing of minerals. 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. A significant part of the work carried out by the Institute is focused in some way or other on addressing environmental issues.

Since 2013, Nornickel has had an R&D Panel working to improve the quality of the scientific and technical solutions.

The Company also engages Russian and foreign R&D and engineering companies, and collaborates with numerous national universities to carry out its projects.

In 2021, most of research, development and technical and economic studies were aimed at adjusting the Company's strategic development, developing production, technical and economic solutions for mining and processing facilities, assessing the environmental impact of projects and developing environmentally friendly solutions. The main strategic priorities are drastic improvements in environmental protection and occupational safety, development and implementation of upgrading projects for existing production operations and construction of new production operations in order to increase production volumes and supplies of key metals to the global market, as well as preserving the Company's financial stability during the transition of major investment projects into an active phase.

Key innovative projects

Nornickel's mining operations are among the most innovative ones in the industry. The Company regularly rehabilitates and upgrades its mine hoisting units, increasing their reliability and performance efficiency, and ensuring a high degree of automation. Given a significant increase in the volume of mine workings, monitoring systems are introduced for mine ventilation networks and ore quality control at the outlet of each mining operation.

Comprehensive development projects for all mines provide for the introduction and use of battery-operated and autonomous self-propelled machinery for drilling, loading and delivery of ore, emulsion explosives, and other technical solutions to improve the efficiency and the environmental and industrial safety of mining operations.

Adoption of state-of-the-art technologies in metallurgy

To address the environmental problems in the Norilsk Industrial District by eliminating the existing converter operations at Polar Division's Copper Plant, we initiated the construction of a continuous converting facility consisting of two sequentially operating units. 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 process¹.

In 2021, the copper production operation was discontinued in Monchegorsk to cut sulphur dioxide emissions. In 2022–2024, copper will only be produced by Polar Division. Kola MMC is planning to launch copper production in 2025 based on 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 requirements are met through obtaining a flow of SO₂-containing gases, which flow is constant in terms of composition, and their capturing, and increase direct copper extraction for marketable products².

Vertical of Innovation projects

In 2021, Nornickel created the Vertical of Innovation, with the Digital Lab projects switching to it. Since its establishment, over 400 ideas have been collected at production operations. All the ideas were subjected to an expert review to select the most cost-effective projects focusing on the environment and industrial safety. The potential effect of the initiatives that have already been implemented exceeds RUB 800 mln.

For example, a hardware-software system prototype was created by the converter matte discharge section. The system uses video analytics to determine the presence of personnel in a hazardous zone and send a beam with a warning sign onto the floor. Also, Hovermap helped develop smart mobile scanning to guide people out of hazardous zones.

¹ The technology being implemented is based on an invention protected by Russian Patent No. 2625621, "A Method of Continuous Processing of Copper Nickel-Containing Sulphide Materials into Blister Copper, Waste Slag, and Copper-Nickel Alloy", with the exclusive right to it owned by the Company. In 2021, patents for that invention were obtained in Canada, China, Finland, and Sweden, with patent registration ongoing in the US, Peru, and South Africa.

² The roast-leach-electrowinning technology is protected by Russian Patent No. 2706400, with the rights jointly held by the Company and Kola MMC. International registration of the technology is currently underway.

Customer satisfaction on a 3-point scale



241.4

RUB mln
total funding for R&D and feasibility studies

The Vertical of Innovation actively supports environmental projects (30% of all initiatives in the portfolio), including:

- digital monitoring of the quality of effluents discharged for compliance with the statutory water use requirements, with reference to the development of a system for the collection, analysis, and visualisation of information from the “Automatic Laboratories”;
- setting up an electronic record keeping system for the results of industrial environmental control across all areas of the negative impact on the environment with automated generation of reports, declarations, etc.;
- monitoring of waste disposal sites using a quadcopter, including to prevent the risks of unauthorised waste disposal.

Together with the Southwest State University, the Company is developing industrial exoskeletons¹ to reduce the physical load on people involved in metallurgical operations. In 2021, the Company was making arrangements for producing a pilot batch of heavy industrial exoskeletons. They were tested by Norilsk Division’s production sites, with special training courses organised at Norilsk Nickel Corporate University and the needs and costs of large-scale production assessed and estimated².

¹ For more details on the benefits of industrial exoskeletons and their impact on work efficiency and safety, please see the Company’s 2020 Sustainability Report at https://www.nornickel.com/files/en/investors/disclosure/NN_CSO2020_ENG_23.06.pdf

² As part of the development of industrial exoskeletons in 2021, the Company became the rights holder for two utility models protected by Russian Patents No. 198903 “Exoskeleton” and No. 206505 “A Device for Improving Load Lifting Safety”.

The state standard for industrial exoskeletons is scheduled for publishing in the first half of 2022. The Digital Lab experts help draft testing standards and regulations for the development, production, and pilot operation of exoskeletons as part of Rosstandart’s Technical Committee on Personal Protective Equipment.

Application of robotisation solutions

2021 saw the active development of Norilsk Nickel’s Robotisation Service continue. By late 2021, robots built on the basis of the RPA platform helped the Company save more than 23,000 man-days by performing more than 920,000 operations for employees.

Thanks to the cumulative effect of the robots that are already in operation and the increased development of new solutions in 2021, the number of man-hours saved by using robots quadrupled y-o-y.

The Company’s demand for RPA solutions is growing every year, with the service developing more than 110 initiatives at the moment.

Digital technology

The development of digital technologies is one of Nornickel’s most important tools for improving production safety and efficiency, ensuring decarbonisation, and gaining other competitive advantages. The company strives to obtain leadership and unique competencies in the field.

In 2021, the Company adopted a new IT development strategy, with a new business unit to be set up, which will not merely perform IT transformation functions, but will act as an equal business partner and tech leader.

This functional area will be responsible for:

- supporting the Company’s strategic goals;
- facilitating and coordinating the process for making digital business decisions;
- implementing and developing jointly made decisions;
- creating unique expertise and staff for breakthrough technologies;
- training and involving all employees of the Group in the transformation process.

Nornickel’s IT Development Strategy is aimed at improving such performance indicators as reliability and accessibility, speed and flexibility, efficiency and technological leadership.

Technological Breakthrough 2.0

In terms of practical application of digital technologies, the Company is actively working in several areas. Since 2020, the Company has been implementing the Technological Breakthrough 2.0 project pipeline which aims to transition to safe, environmentally friendly, and efficient digital production based on innovations, big data analytics, and unmanned mining technologies.

Technological breakthrough 2.0 affects the entire production chain of the Company. In 2021, we identified 15 priority areas which include more than 70 initiatives.

In 2021, Nornickel became Russia’s first company to put unmanned mining dump trucks into commercial operation at the Skalisty mine. The project based on Sandvik AutoMine, an underground automation technology, won Global CIO’s Project of the Year Award in the Metallurgy and Continuous Production category.

Priority areas of Technology Breakthrough 2.0

Contribution to UN Sustainable Development Goals (SDGs)	Benefits from previously created tools	Autonomous mine	Key new tools
<ul style="list-style-type: none"> • Monitoring and control of environmental risks • Control over occupational health, safety, and environmental protection • Implementation of projects aimed at achieving the SDGs through 2030 	<ul style="list-style-type: none"> • Monitoring the implementation and application of the tools provided by the preceding Technological Breakthrough 1.0 programme in mining operations • Rollout of effective products and solutions (Metal Balance, dispatching control, simulation modelling system, etc.) • Implementation of new effective digital tools 	<ul style="list-style-type: none"> • Increasing production efficiency through unmanned technologies • Increasing production safety by removing people from hazardous areas 	<ul style="list-style-type: none"> • Technical monitoring of all energy resources consumption and energy efficiency • Control of concentration and metallurgical processes by using “advisors” • Autonomous and remotely controlled mine machinery • Simulation modelling of all process stages, risk management using the ebitda@risk model • Digital mine surveying

IT infrastructure and automation of management processes

Nornickel uses a host of digital systems that are regularly updated. To reduce the Company’s environmental footprint, the corporate infrastructure monitoring was supplemented with a capacity management process in 2021, which enabled the effective monitoring and scheduling of the disposal of IT infrastructure resources.

To increase the speed and flexibility of infrastructure provision for achieving the Company’s objectives, the design of a corporate cloud platform was completed in 2021. The platform was made as user-friendly as possible. It will simplify the ordering model for cloud services and streamline the approval process.

Understanding the growth prospects for business needs and the external risks, the Company continues to implement a programme for the provision of capacity reserves in data processing centres (DPCs) and server rooms. The reserves will cover development plans and provide a buffer for urgent business needs that arise in response to rapidly changing environment.

The SAP ERP-based resource management platform continues to play a leading role in organising Nornickel’s business processes. In 2021, nine support companies joined it. In the future, that system will also be replicated at the Company’s foreign assets, finally closing the management loop for the global supply chain and ensuring that the entire chain can be traced from the production assets to the end consumer.

In 2021, the Company’s Head Office and Kola MMC launched a risk management and internal control system based on the SAP GRC platform. The system aims to ensure the effective functioning of the risk management processes and the internal control system through the automation of information collection, consolidation, and processing.

In 2021, we also launched an internal audit management system based on the SAP Audit Management platform, which will help standardise the processes used by the Group’s internal audit functions and increase the maturity level of the internal audit processes across the Company, as well as create a shared information environment.

Nornickel Booking project

In 2021, we automated the selection process for travel services in accordance with the Company’s rates for administrative and business expenses and travel policies. Thanks to the automation, the average cost of business trips is expected to drop by about 23%.

Training young AI professionals

Nornickel is actively implementing a data-driven approach to management in its technological and management processes. The Company jointly with the MIPT centre for educational programmes launched a master’s programme, “AI Transformation in Industry”, which was developed with the participation of the metallurgical concern’s best experts.

This is unique programme, as it was created directly for the needs of the mining company. Students will undergo multi-disciplinary training in mathematics, programming, and IT. The masters will also have sufficient practical work experience through constant application of their knowledge in addressing the Company’s current business needs.

Data Lake and artificial intelligence

In 2021, Nornickel completed a Data Lake prototype based on the machine learning and artificial intelligence technologies. This digital platform is designed to tackle a wide range of production and non-production tasks, with the time to market significantly reduced. In 2021, the information systems of several production sites were integrated into the Data Lake, with work commencing to integrate the process solution of the artificial intelligence platform which will be used to prototype and pilot a number of process optimisation scenarios.

In 2021, we also continued the development and testing of a number of optimisation systems for concentration processes at Talnakh Concentrator based on the machine learning technology. The algorithms provide real-time recommendations for ore grinding and flotation to increase the metal recovery in concentrate.

The concentration process optimisation algorithm was also successfully tested at one of Bystrinsky GOK's flotation sections. Talnakh Concentrator uses computer vision for real-time monitoring of ore sizes on several conveyors upstream of the semi-autogenous grinding mill. This system is essential for optimum grinding control.

Digitalisation in regions of operation

● GRI 203-2

Communication systems development

The Company adopted a development plan for communication systems seeking to provide ubiquitous access to Nornickel's services and information systems, improve personnel mobility, and meet information security requirements. A large-scale programme for service networks development at production sites and mines which is being rolled out through 2025 will create a basic infrastructure for the implementation of Nornickel's industrial facility development plans.

In 2021, the following steps were taken by the Company to ensure high-quality digital communication:

- The upgrade of the corporate network of regional segments was completed
- Internet traffic filtering stations were built
- A basic standardised Wi-Fi infrastructure was built in the most popular office areas
- The design of a corporate telephone network spanning the entire Group was completed
- In cooperation with MTS, work was carried out to improve LTE quality at the Company's transportation and logistics infrastructure facilities, which will enable the implementation of automation systems for warehouse operations in 2022 by using SAP-based mobile terminals.

In 2021, the implementation of the Fibre Optic Communication Line (FOCL) Construction Project in Norilsk continued, providing for the construction of a more than 956 km fibre optic communication line from Novy Urengoy to Norilsk.

The project aims to provide the Company's production operations with high-speed communication as well as to improve the quality of life in the Norilsk Industrial District by the creation of conditions for providing broadband Internet access, enhancing the quality of services, expanding the range of communication services provided, and raising the quality of public services provided as part of the existing government initiatives. The implementation of the project also forms a foundation for the further development of infrastructure on the Taimyr Peninsula.

Electronic services for employees and local communities

Nornickel implements digital programmes that are focused on improving not only its own infrastructure, but also on meeting the digital needs of local communities and employees.

2021 saw the launch of a unified software system for Your Home corporate housing programme. Its participants will be able to pay for utilities and make instalment payments online. In addition, the system can be used to register the very fact of housing acquisition, enter into a contract, and collect a package of documents.

The Company is actively promoting the City Online social project which aims 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 City Online platform is available as a web version and a mobile application in as many as five cities and can be accessed at <https://city.online/>. More than 145,000 users are registered on the platform. Since its launch, the platform has been visited by more than one million unique users. As at the end of 2021, the web and mobile versions of the platform had 35 and 16 services respectively. The most popular services are GO.Media, Playbill, Broadcasts (web version), Map, and Transport.¹

In 2021, the City Online launched an infrastructure service to create an air quality monitoring system in Norilsk seeking to improve the urban environment quality and the comfort of people's lives as well as to reduce the social tension related to the environment.

Any further development of the platform will be focused on maintaining the popular online services and identifying anchor social services and their "extension" into complete products, as well as on the introduction of infrastructure products represented by hardware and software systems.

¹ The web and mobile versions of the platform are registered with Rospatent as City Online software and recognised as the best digital solution for the Smart City according to ComNews Awards. The Best Solutions for the Digital Economy".

Corporate security

Corporate security is an essential element of sustainable development for the Group companies. As a leader in the metals and mining industry and a strategically important business, Nornickel seeks to ensure uninterrupted operations, including through strong information security.

The Company's Corporate Security Unit is in charge of developing and implementing comprehensive corporate security measures and acts in line with the Russian laws, applicable international regulations, internal standards and guidelines. To strengthen corporate security, the Company continues expanding its system of analytical situation centres.

● GRI 102-26

The Management Board, and all of Nornickel's governance levels are involved in drafting internal regulations and methodologies and implementing corporate security measures. Their responsibilities include creating an information security risk management system along with reviewing and approving budgets for relevant programmes and projects.

Nornickel has developed a comprehensive corporate security management system. We pay special attention to supporting strategic investment and environmental projects.

Ensuring information security

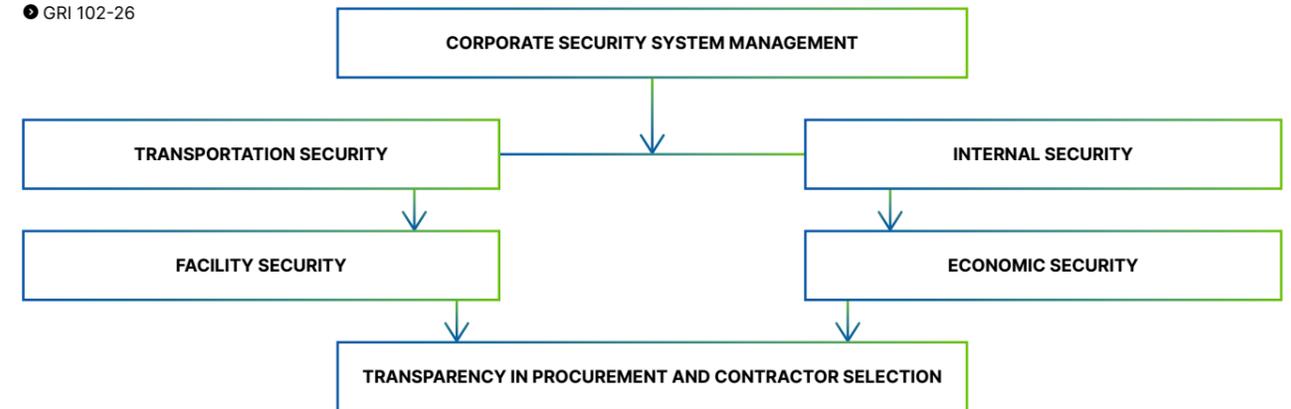
As information is one of the most valuable resources today, Nornickel is developing its own Information Security Management System (ISMS). The ISMS covers day-to-day production management, supplies of feedstock and process materials, as well as control over production and finished product shipment targets.

To support robust information security and streamline it, the Company is subject to regular audits for compliance with personal data and critical infrastructure protection requirements and international standards on cybersecurity management, testing and assessment of data protection, vetting inspections to check information security in river and marine navigation, and other control procedures.

The last three years saw the ISO/IEC 27001:2013-compliant ISMS introduced at Nadezhda Metallurgical Plant, Copper Plant of Polar Division, and at Murmansk Transport Division. The external entities which conducted the certification audits noted Nornickel's strong competence and conformity of its information security management systems to international standards and global best practices.

The Company operates an Information Security Incident Response Centre that leverages advanced technological solutions and relies on national and international best practices in cyber security management. Seamless information security processes and procedures have been developed and documented to ensure Nornickel's business continuity in the event of incidents and emergencies. These procedures are tested for relevance at least once a quarter.

● GRI 102-26



Information security training

Nornickel developed and approved the Rules of Raising Awareness in Information Security. On top of that, there are annual staff training plans based on current trends and newly identified risks and cyber threats. Furthermore, employees of Nornickel's Head Office and facilities operating in the regions of its operation take regular knowledge tests.

To audit the systems' performance, drill response to information security threats, and enhance the corporate information security system, the Company arranges recurrent training and workshop sessions dealing, among other things, with simulated phishing attacks and other threats to IT infrastructure. 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 sent to 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.

Corporate security: engagement with stakeholders and best practice sharing

In Russia, Nornickel is actively engaged in public-private partnerships to maintain high security levels and enhance social stability at its facilities and in the regions of operation. We administer more than 30 federal regulations on transport security, combating terrorism, and other security aspects.

In 2021, we made an emphasis on ongoing cooperation with:

- the Ministry of Internal Affairs of Russia to prevent stealing of products and materials containing precious and non-ferrous metals, prevent drug addiction and combat illegal drug trafficking, as well as maintain security at public events;
- the Federal Customs Service of Russia to prevent cross-border smuggling of metal-bearing materials;
- the Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters (EMERCOM) to drill emergency responses and disaster relief operations.

Our collaboration with law enforcement and regulatory authorities includes our representatives' participation in public and advisory boards of the Ministry of Internal Affairs, Investigative Committee, Transport Prosecutor's Office, and in interagency working groups.

Each year, Nornickel takes an active part in major national and international forums and conferences in information and transport security.

In September 2021, together with representatives of the Russian Ministry of Transport, federal agencies for various types of transport, and ministries of transport of the country's constituent entities, heads of Nornickel's relevant functions participated in the 10th National Conference of Transport Security and Anti-Terrorism Technologies-2021. Participants made proposals as regards amendments to the transport security legislation and certain aspects of complying with it.

Anti-money laundering and counter-terrorist financing initiatives

As required under the Federal Law On Anti-Money Laundering and Combating the Financing of Terrorism, the Company implements initiatives to combat money laundering and financing of terrorism and proliferation of weapons of mass destruction.

The key principle of internal control for AML/CFT purposes is the risk-based approach. It primarily concerns assessing the risks of customer transactions related to money laundering, and financing of terrorism and proliferation of weapons of mass destruction. Secondly, it directly relates to taking measures to mitigate money laundering and terrorist financing risks and their potential effects, among other things, by engaging all employees, within their competences, in identifying signs of the breach of law.

Depending on the risk exposure, the Company may take different measures, such as due diligence of customers prior to entering into contracts, identification of beneficial owners, analysis of customers' business reputation and other reasonable and available measures.

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GRI content index

● GRI 102-55

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perform- ance Indicator
GRI 101: Foundation (2016)¹							
GRI 102: General Disclosures (2016)	Organisational profile						
	102-1	Name of the organisation	12	—	—	—	—
	102-2	Activities, brands, products, and services	12, 206	—	—	—	—
	102-3	Location of headquarters	274	—	—	—	—
	102-4	Location of operations	13	—	—	—	—
	102-5	Ownership and legal form	—	—	Privately owned public joint-stock company	—	—
	102-6	Markets served	20, 207	—	—	—	—
	102-7	Scale of the organisation	12-13, 193	—	For more details on the Company's shareholding structure, please see our Annual Report for 2021: https://www.nornickel.com/investors/reports-and-results/ , and for details on asset and liability structure see our consolidated financial statements for 2021 https://www.nornickel.com/upload/iblock/765/ifrs_eng_usd_consolidation_reporting_12m_2021_final.pdf	—	—
	102-8	Information on employees and other workers	120, 242	—	—	8	3.1.1.
	102-9	Supply chain	202	—	—	—	—
	102-10	Significant changes to the organisation and its supply chain	—	—	There were no significant changes to the supply chain in 2021. The Board of Directors resolved to repurchase 5,382,865 of Nornickel's own outstanding shares (representing 3.4% of its authorised capital). Information is also disclosed in Nornickel's 2021 Consolidated Financial Statements (page 52): https://www.nornickel.com/upload/iblock/765/ifrs_eng_usd_consolidation_reporting_12m_2021_final.pdf	—	—
	102-11	Precautionary principle or approach	53	—	—	—	—
	102-12	External initiatives	34, 41	—	—	—	1.1.
102-13	Memberships of associations	34, 41	—	—	—	—	

¹ See the About the Report section.

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perform- ance Indicator
Strategy							
102-14	Statement from senior decision-maker	6	—	—	—	—	—
102-15	Key impacts, risks, and opportunities	35, 63, 74, 182	—	—	—	—	—
Ethics and integrity							
102-16	Values, principles, standards, and norms of behaviour	102	—	—	For more details on the Company's values please see our corporate website: https://www.nornickel.com/company/mission-and-values/	16	—
102-17	Mechanisms for advice and concerns about ethics	199	—	—	Information is disclosed in the Business Ethics Code of MMC Norilsk Nickel (pages 10–11): https://www.nornickel.com/investors/disclosure/corporate-documents/ Currently, ethics-related inquiries are handled by the Corporate Trust Line.	—	—
Corporate governance							
102-18	Governance structure	32-33, 171	—	—	—	—	—
102-19	Delegating authority	171	—	—	—	—	—
102-20	Executive-level responsibility for economic, environmental, and social topics	32-33, 171-172	—	—	Information is also disclosed in Nornickel's 2021 Annual Report: https://www.nornickel.com/investors/reports-and-results/	—	—
102-21	Consulting stakeholders on economic, environmental, and social topics	176	—	—	Information is also disclosed in Nornickel's 2021 Annual Report: https://www.nornickel.com/investors/reports-and-results/	16	—
102-22	Composition of the highest governance body and its committees	171	—	—	Information is also disclosed in Nornickel's 2021 Annual Report: https://www.nornickel.com/investors/reports-and-results/	5, 16	3.1.12.
102-23	Chair of the highest governance body	—	—	—	Information is also disclosed in Nornickel's 2021 Annual Report: https://www.nornickel.com/investors/reports-and-results/	16	—
102-24	Nominating and selecting the highest governance body	—	—	—	Information is disclosed in Nornickel's 2021 Annual Report: https://www.nornickel.com/investors/reports-and-results/ , and on pages 3–5 of the Policy on Development and Approval of Vote Recommendations on Candidates Nominated to the Board of Directors of MMC Norilsk Nickel: https://www.nornickel.com/investors/disclosure/corporate-documents/	5, 16	—
102-25	Conflicts of interest	173	—	—	Information is disclosed in 2021 Annual Report: https://www.nornickel.com/investors/reports-and-results/	16	—

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perfor- mance Indicator
102-26		Role of highest governance body in setting purpose, values, and strategy	52-53, 110, 120, 151, 177, 194, 197, 200, 213	—	—	—	—
102-27		Collective knowledge of highest governance body	—	—	Information is disclosed in 2021 Annual Report: https://www.nornickel.com/investors/reports-and-results/ See also the Professional Development Policy for Members of Board of Directors of MMC Norilsk Nickel: https://www.nornickel.com/upload/iblock/c61/2014.11.10_Induction_and_Continuing_Education_Policy_ENG_Final_Draft.pdf	4	—
102-28		Evaluating the highest governance body's performance	—	—	Information is disclosed in 2021 Annual Report: https://www.nornickel.com/investors/reports-and-results/ See also the Performance Evaluation Policy for Board of Directors of MMC Norilsk Nickel: https://www.nornickel.com/upload/iblock/030/Board_Performance_Evaluation_Policy.pdf	—	—
102-29		Identifying and managing economic, environmental, and social impacts	171, 180	—	In 2021, the Company held consultations on sustainability agenda with ICM members.	16	—
102-30		Effectiveness of risk management processes	180	—	—	—	—
102-31		Review of economic, environmental, and social topics	171	—	—	—	—
102-32		Highest governance body's role in sustainability reporting	2	—	—	—	—
102-33		Communicating critical concerns	171	—	—	—	—
102-34		Nature and total number of critical concerns	171	—	—	—	—
102-35		Remuneration policies	176	—	See also the Remuneration Policy for Members of the Board of Directors of MMC Norilsk Nickel: https://www.nornickel.com/upload/iblock/195/REMUNERATION_POLICY_for_MEMBERS_OF_BOARD_OF_DIRECTORS_.pdf	—	—
102-36		Process for determining remuneration	176	—	—	—	—
102-37		Stakeholders' involvement in remuneration	—	—	Remuneration is paid in accordance with the Remuneration Policy for Members of Board of Directors at MMC Norilsk Nickel, and no stakeholders take part in determining the amount of remuneration.	16	—

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perfor- mance Indicator
102-38		Annual total compensation ratio	—	—	Not disclosed for personal data protection reasons.	—	—
102-39		Percentage increase in annual total compensation ratio	—	—	Not disclosed for personal data protection reasons.	—	—
Stakeholder engagement							
102-40		List of stakeholder groups	43	—	—	—	—
102-41		Collective bargaining agreements	124	—	—	8	3.1.4.
102-42		Identifying and selecting stakeholders	42	—	—	—	—
102-43		Approach to stakeholder engagement	44, 48	—	—	—	—
102-44		Key topics and concerns raised	44, 232, 260, 262	—	—	—	—
Reporting practice							
102-45		Entities included in the consolidated financial statements	2, 232	—	Information is disclosed on page 80 of 2021 Consolidated Financial Statements: https://www.nornickel.com/investors/reports-and-results/	—	—
102-46		Defining report content and topic boundaries	2, 48, 234	—	—	—	—
102-47		List of material topics	234	—	—	—	—
102-48		Restatements of information	2	—	—	—	—
102-49		Changes in reporting	2	—	—	—	—
102-50		Reporting period	2	—	—	—	—
102-51		Date of most recent report	—	—	23 April 2021	—	—
102-52		Reporting cycle	—	—	Annual	—	—
102-53		Contact point for questions regarding the report	276	—	—	—	—
102-54		Claims of reporting in accordance with the GRI Standards	2	—	—	—	—
102-55		GRI content index	216	—	—	—	—
102-56		External assurance	268	—	—	—	—

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perfor- mance Indicator
Economic performance							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	192	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	192	—	—	1, 5, 8, 16	—
	103-3	Evaluation of the management approach	192	—	—	—	—
GRI 201: Economic Performance (2016)	201-1	Direct economic value generated and distributed	193	—	—	7, 8, 9	1.2 1.3 1.4 1.6. 1.7.
	201-2	Financial implications and other risks and opportunities due to climate change	63, 74	Disclosure with omissions. The Company does not currently conduct a financial assessment of the risks associated with climate change.	The Company plans to develop a system for managing these risks in 2022-2023.	13	—
	201-3	Defined benefit plan obligations and other retirement plans	132	—	—	—	1.8.
	201-4	Financial assistance received from government	—	—	The Group did not receive significant government grants for the 12 months ended 31 December 2021. As at 31 December 2021, the government was not listed in the shareholder register of MMC Norilsk Nickel	—	—
Market presence							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	120	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	120	—	—	1, 5, 8, 16	—
	103-3	Evaluation of the management approach	120	—	—	—	—
GRI 202: Market Presence (2016)	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	125	—	—	1, 5, 8	—
	202-2	Proportion of senior management hired from the local community	122	—	—	8	—

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perfor- mance Indicator
Indirect economic impacts							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	142, 212	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	142	—	—	1, 5, 8, 16	—
	103-3	Evaluation of the management approach	142	—	—	—	—
GRI 203: Indirect Economic Impacts (2016)	203-1	Infrastructure Investments and services supported	26, 144	—	—	2, 5, 7, 9, 11	—
	203-2	Significant Indirect economic Impacts	142-143, 212	—	—	1, 2, 3, 8, 10, 17	—
Anti-corruption practices							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	196	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	197	—	—	16	—
	103-3	Evaluation of the management approach	199	—	—	—	—
GRI 205: Anti-corruption (2016)	205-1	Operations assessed for risks related to corruption	196	—	—	16	—
	205-2	Communication and training about anticorruption policies and procedures	198	—	—	16	—
	205-3	Confirmed incidents of corruption and actions taken	196	—	—	16	—
Tax							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	192	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	194	—	—	8, 16	—
	103-3	Evaluation of the management approach	194	—	—	—	—
GRI 207: Tax (2019)	207-1	Approach to tax	192	—	—	17	—
	207-2	Tax governance, control and risk management	194	—	—	17	—
	207-3	Stakeholder engagement and management concerns related to tax	195	—	—	17	—
	207-4	Country-by-country reporting	—	—	The indicator is not disclosed due to the confidential nature of information (this information is a trade secret of the Company)	17	1.3

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perform- ance Indicator
Energy							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	77	—	See also the Report Boundaries appendix		
	103-2	The management approach and its components	77, 79	—	—	16	2.12
	103-3	Evaluation of the management approach	77	—	—	—	—
GRI 302: Energy (2016)	302-1	Energy consumption within the organisation	78	—	Energy sales to third-party consumers Electricity 3,906 TJ Thermal energy in steam: 125.6 TJ Thermal energy in hot water: 15,943.3 TJ	7, 8, 12, 13	2.2.
	302-2	Energy consumption outside of the organisation	—	—	The total amount of energy consumption outside the organisation is not disclosed as the relevant records are not kept.	7, 8, 12, 13	—
	302-3	Energy intensity	78	—	—	7, 8, 12, 13	2.2.1.
	302-4	Reduction of energy consumption	79	—	—	7, 8, 12, 13	—
	302-5	Reductions in energy requirements of products and services	—	—	Not applicable to the Company's products due to the fact that the Company's key products are metals, which are not energy consumers per se	7, 8, 12, 13	—
Water and effluents							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	88	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	88-89	—	—	16	2.12
	103-3	Evaluation of the management approach	88-89	—	—	—	—
GRI 303: Water and Effluents (2018)	303-1	Interactions with water as a shared resource	88, 237	—	—	6, 12	—
	303-2	Management of water discharge-related impacts	237	—	—	6, 12	—
	303-3	Water withdrawal	88, 89, 236, 237	—	—	6, 12	2.3
	303-4	Water discharge	88, 89, 238	—	The Company did not exceed discharge limits in 2021	6, 12	—
	303-5	Water consumption	88, 89	—	—	6, 12	2.4

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perform- ance Indicator
Biodiversity							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	95	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	96, 97	—	—	16	2.12
	103-3	Evaluation of the management approach	96, 97	—	—	—	—
GRI 304: Biodiversity (2016)	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	96	—	—	6, 14, 15	—
	304-2	Significant impacts of activities, products, and services on biodiversity	96	—	—	6, 14, 15	—
	304-3	Habitats protected or restored	93	—	—	6, 14, 15	—
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	97	—	—	6, 14, 15	—
—	MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated	93	—	—	3, 12, 14, 15	—
—	MM2	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place	—	—	There are no such sites	6, 14, 15	—
Emissions							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	76, 80	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	60, 80	—	—	16	2.12
	103-3	Evaluation of the management approach	60, 80	—	—	—	—

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perfor- mance Indicator
GRI 305: Emissions (2016)	305-1	Direct (Scope 1) GHG emissions	76	—	Methane (CH ₄) and nitrous oxide (N ₂ O) are estimated to have a global warming potential of 25 and 298, respectively, according to decision 24/CP.19 of the UNFCCC Conference of the Parties. Indirect emissions (Scope 2) are calculated using the location-based method	3, 12, 13, 14, 15	—
	305-2	Energy indirect (Scope 2) GHG emissions	76	—			
	305-3	Other indirect (Scope 3) GHG emissions	76	—	—	3, 12, 13, 14, 15	—
	305-4	GHG emissions intensity	76	—	Indicator based on Scope 1 and 2 emissions.	13, 14, 15	—
	305-5	Reduction of GHG emissions	—	—	Company has started working on a comprehensive programme tracking climate changes, including measures to reduce emissions. The possibility of disclosing indicators will be considered as the necessary data is accumulated over the next three years	13, 14, 15	—
	305-6	Emissions of ozone- depleting substances (ODS)	85	—	—	3, 12, 13	—
	305-7	Nitrogen oxides (NO _x), sulphur oxides (SO _x), and other significant air emissions	80, 239	—	Persistent organic pollutants (POPs) are not emitted. Hazardous air pollutant (HAP) emissions are not disclosed as there is no such a category according to the Russian laws.	3, 12, 13, 14, 15	2.6.
Waste							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	86	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	86	—	—	16	2.12
	103-3	Evaluation of the management approach	86	—	—	—	—
GRI 306: Waste (2020)	306-1	Waste generation and significant waste- related impacts	16-17, 85, 202	—	—	3, 6, 12, 14	2.7. 2.7.2.
	306-2	Management of significant waste- related impacts	86	—	—	3, 6, 12	2.8.
	306-3	Waste generation	85, 239, 240	—	—	3, 6, 12, 14, 15	2.9.
	306-4	Waste diverted from disposal	86, 239, 240	—	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).	3, 12	—
	306-5	Waste directed to disposal	87, 239, 240	—	Partially disclosed (without breakdown by waste-to-energy and waste burning without energy generation).	6, 15	—

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perfor- mance Indicator
Environmental compliance							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	—	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	—	—	—	16	2.12
	103-3	Evaluation of the management approach	—	—	—	—	—
GRI 307: Environmental Compliance (2016)	307-1	Non-compliance with environmental laws and regulations	54, 245	—	—	16	2.10.
Employment							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	120	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	120	—	—	5,8,16	—
	103-3	Evaluation of the management approach	120	—	—	—	—
GRI 401: Employment (2016)	401-1	New employee hires and employee turnover	122, 242	—	—	5, 8	3.1.2. 3.1.3.
	401-2	Benefits provided to full-time employees that are not provided to temporary or part- time employees	241	—	—	8	—
	401-3	Parental leave	243	—	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	5, 8	—
Labour/management relations							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	46, 123	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	123	—	—	16	—
	103-3	Evaluation of the management approach	123	—	—	—	—
GRI 402: Labour/ Management Relations 2016	402-1	Minimum notice periods regarding operational changes	124	—	—	8	—
	MM4	Number of strikes and lockouts exceeding one week, by country	124	—	—	—	—

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perform- ance Indicator
Occupational health and safety							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	110	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	110	—	—	3, 8, 16	—
	103-3	Evaluation of the management approach	110	—	—	—	—
GRI 403: Occupational Health and Safety (2018)	403-1	Occupational health and safety management system	110, 111, 114	—	—	8	3.1.9
	403-2	Hazard identification, risk assessment, and incident investigation	111, 114	—	—	8	3.1.5. 3.1.6. 3.1.7. 3.1.8.
	403-3	Occupational health services	115, 117	—	—	8	—
	403-4	Worker participation, consultation, and communication on occupational health and safety	116	—	—	8, 16	—
	403-5	Worker training on occupational health and safety	111, 117	—	—	8	—
	403-6	Promotion of worker health	129, 131	—	—	3	—
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	111	—	—	8	—
	403-8	Workers covered by an occupational health and safety management system	245	—	—	8	—
	403-9	Work-related injuries	112, 244	—	Contractor injury rates are not disclosed due to the lack of accounting for the number of hours worked. The Company will consider introducing an appropriate accounting system within the next three years	3, 8, 16	3.1.5. 3.1.6. 3.1.7. 3.1.8.
	403-10	Work-related ill health	112, 244	—	The number of fatalities caused by work-related ill health are 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.	3, 8, 16	—

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perform- ance Indicator
Training and education							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	126	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	126	—	—	16	—
	103-3	Evaluation of the management approach	126	—	—	—	—
GRI 404: Training and Education (2016)	404-1	Average hours of training per year per employee	127	—	There is no breakdown of injury rates by gender due to the lack of centralised records. The Company will consider developing an appropriate accounting system within the next three years	4, 5, 8	3.1.10.
	404-2	Programmes for upgrading employee skills and transition assistance programmes	127	—	—	8	—
	404-3	Percentage of employees receiving regular performance and career development reviews	243	—	—	5, 8	—
Non-discrimination							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	102, 122	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	102-103, 122	—	—	5, 16	—
	103-3	Evaluation of the management approach	102-103, 122	—	—	—	—
GRI 406: Non- Discrimination (2016)	406-1	Incidents of discrimination and corrective actions taken	106	—	—	5, 8	3.2.2.
Freedom of association and collective bargaining							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	116, 122	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	116, 122	—	—	5, 8, 16	—
	103-3	Evaluation of the management approach	116, 122	—	—	—	—
GRI 407: Freedom of Association and Collective Bargaining (2016)	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	—	—	None	8	3.2.1.

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perfor- mance Indicator
Rights of indigenous peoples							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	150	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	152	—	—	1, 5, 8, 16	—
	103-3	Evaluation of the management approach	152	—	—	—	—
GRI 411: Rights of Indigenous Peoples (2016)	411-1	Incidents of violations involving rights of indigenous peoples	150	—	—	—	3.2.3.
—	MM5	Total number of operations taking place in or adjacent to indigenous peoples' territories, and number and percentage of operations or sites where there are formal agreements with indigenous peoples' communities	150	—	The Head Office of MMC Norilsk Nickel has formal agreements with the indigenous northern minorities	1, 2	—
Local communities							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	47, 142, 150	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	47, 142, 150	—	—	1, 5, 8, 16	—
	103-3	Evaluation of the management approach	47, 142, 150	—	—	—	—
GRI 413: Local Communities (2016)	413-1	Operations with local community engagement, impact assessments, and development programmes	—	—	Such programmes are implemented in 1 out of 76 (1.31%) Group divisions and entities operating in Russia (the Company's Head Office) within the reporting perimeter	—	3.3.3.
	413-2	Operations with significant actual and potential negative impacts on local communities	80	—	—	1, 2	3.3.3.
—	MM6	Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples	—	—	None	1, 2	—
—	MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and indigenous peoples, and the outcomes	—	—	No disputes	1, 2	—

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perfor- mance Indicator
Public policy							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	47	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	47	—	—	5, 8, 16	—
	103-3	Evaluation of the management approach	47	—	—	—	—
GRI 415: Public Policy (2016)	415-1	Political contributions	—	—	The Company avoids donations and sponsorships that may be perceived as political contributions	16	—
Socioeconomic compliance							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	192	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	192	—	—	5, 8, 16	—
	103-3	Evaluation of the management approach	192	—	—	—	—
GRI 419: Socioeconomic Compliance (2016)	419-1	Non-compliance with laws and regulations in the social and economic area	245	—	—	16	3.4.2.
Emergency preparedness							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	118	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	118	—	—	16	—
	103-3	Evaluation of the management approach	118	—	—	—	—
—	MM3	Total amounts of overburden, rock, tailings, and sludges and their associated risks	239, 240	—	—	3, 6, 12	—
Shutdown of production facilities							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	46, 123, 136	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	46, 123, 136	—	—	1, 5, 8, 16	—
	103-3	Evaluation of the management approach	46, 123, 136	—	—	—	—
—	MM10	Number and percentage of operations with closure plans	—	—	The IFRS financial statements reflect a decommissioning provision for 11% of the operations within the reporting perimeter. As at 31 December 2021, this provision stood at RUB 57.1 bn	—	—

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perfor- mance Indicator
Company-specific topics							
Geological exploration and mining							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	93	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	93	—	—	15	—
	103-3	Evaluation of the management approach	93	—	—	—	—
Production asset upgrade							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	19, 71	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	19, 71	—	—	8,9	—
	103-3	Evaluation of the management approach	19, 71	—	—	—	—
Science, technology and innovation							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	208	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	208	—	—	9	—
	103-3	Evaluation of the management approach	208	—	—	—	—
Digitalisation of production and management							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	210	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	210	—	—	9	—
	103-3	Evaluation of the management approach	210	—	—	—	—
Corporate security							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	213	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	213	—	—	16	—
	103-3	Evaluation of the management approach	213	—	—	—	—
Response to the COVID-19 pandemic							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	147	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	147	—	—	3	—
	103-3	Evaluation of the management approach	147	—	—	—	—

GRI standard	Disclo- sure number	Disclosure	Page/link	Omission	Comments	UN sus- tainable develop- ment goal	RSP Preference perfor- mance Indicator
Emergency forecasting and technogenic safety							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	118	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	118	—	—	9,13	—
	103-3	Evaluation of the management approach	118	—	—	—	—
R&D activities							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	208	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	208	—	—	9	—
	103-3	Evaluation of the management approach	208	—	—	—	—
Responsible business conduct and business ethics							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	126	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	126	—	—	16	—
	103-3	Evaluation of the management approach	126	—	—	—	—
Stakeholder engagement							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	42	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	42	—	—	17	—
	103-3	Evaluation of the management approach	42	—	—	—	—
Norilsk renovation and comprehensive social and economic development plan implementation							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	145	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	145	—	—	8,9, 11	—
	103-3	Evaluation of the management approach	145	—	—	—	—
Support for small and medium enterprises (SME) in the regions of operation							
GRI 103: Management Approach (2016)	103-1	Material topics and boundaries	147, 160- 161, 164	—	See also the Report Boundaries appendix	—	—
	103-2	The management approach and its components	147, 160- 161, 164	—	—	8,11	—
	103-3	Evaluation of the management approach	147, 160- 161, 164	—	—	—	—

Definition of material topics

● GRI 102-46

The Company maps out material topics in line with the GRI Standards' principles for defining report content and inputs from external and internal stakeholders. The materiality matrix relies on the following:

- opinion polls on material topics;
- dialogues with stakeholders;
- mass media coverage of the Company;
- benchmarking against major Russian and international mining peers.

● GRI 102-44

As part of the 2021 Sustainability Report preparation, material sustainability topics were defined in four stages.

At the first stage, the Company arranged for the material topics from the 2020 Sustainability Report to be reviewed by external and internal stakeholders. Over 130 stakeholders took part in the poll, with more than half of them representing the regions where the Company operates (Norilsk Industrial District, Kola Peninsula, Trans-Baikal Territory) and their local authorities, environmental organisations, social NGOs, Company employees, the business community and other stakeholder groups.

At the second stage, the Company held a dialogue¹ with experts and key stakeholders to verify, through expert voting, proposals to revise the materiality of individual topics submitted in the poll. In addition, the session participants assessed three additional topics from

the list proposed by the polled stakeholders in terms of their potential influence on stakeholder assessments and decisions (Z-axis of the significance matrix).

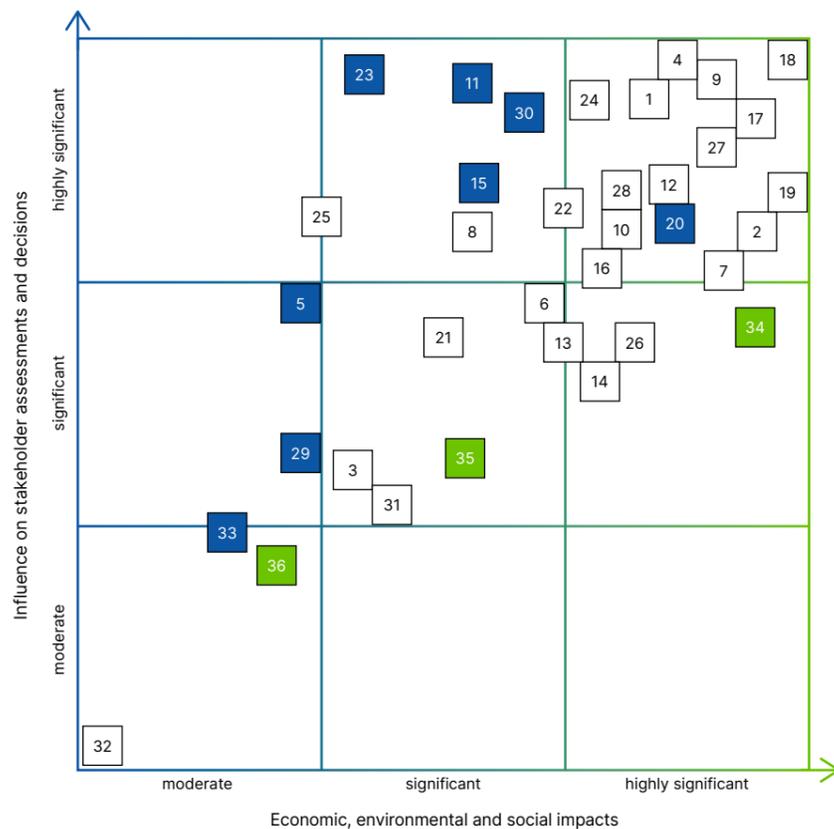
At the third stage, the working group for the Report preparation assessed the materiality of additional topics in terms of their economic, environmental, and social impact.

At the last stage, the working group summed up the materiality assessment results, with due regard to the recommendations provided by the session participants, and finalised an updated map of material topics.



Map of material topics

● GRI 102-47



The topics were assessed on a scale from 0 to 3, with 0 assigned to insignificant/irrelevant topics, 1 — to moderately (borderline) significant topics, 2 — to significant topics, and 3 — to critical topics.

The sector borders were set according to average rankings from the respondents, with a score above 1.3 to 1.99 corresponding to moderate significance, 2 to 2.49 assigned to significant topics, and 2.5 to 3 meaning high significance. Material topics are those that have a significant impact on both dimensions or rank as highly significant on at least one dimension. Significant topics are those that have a meaningful impact on at least one dimension, for instance, topic No. 5. Other topics, including No. 32, 33 and 36, were deemed insignificant and are either not disclosed in the Report or disclosed in a summary format.

The topics highlighted in blue had their significance reassessed compared to the matrix of material topics included in the 2020 Sustainability Report, based on the results of the December 2021 stakeholder dialogue. The topics highlighted in green were added to the matrix for the first time as part of the 2021 Sustainability Report, based on stakeholder recommendations derived from the opinion poll and the December dialogue.

No. on the map	Disclosures (aspects)	Link to GRI topics
1	Financial results of operations	GRI 201: Economic performance
2	Responsible payment of taxes to budgets of various levels	GRI 207: Tax
3	Indirect economic impacts	GRI 203: Indirect economic impacts
4	Relationships with local communities and indigenous peoples, social and economic impact on the regions of operation	GRI 203: Indirect economic impacts GRI 411: Rights of indigenous peoples GRI 413: Local communities
5	Supply chain responsibility	GRI 102-9: Supply chain GRI 102-10: Significant changes to the organisation and its supply chain
6	Anti-corruption and transparency of operations	GRI 205: Anti-corruption practices
7	Responsible business conduct and business ethics	GRI 102-16 – 102-39
8	Stakeholder engagement	GRI 102-40 – 102-44
9	Compliance	GRI 307: Environmental compliance GRI 419: Socioeconomic compliance
10	Decent working conditions, relations between employees and management	GRI 202: Market presence GRI 401: Employment GRI 402: Labour/management relations GRI 407: Freedom of association and collective bargaining
11	Training and developing our staff	GRI 404: Training and education
12	Occupational health and safety	GRI 403: Occupational health and safety
13	Respect for human rights	GRI 406: Non-discrimination GRI 411: Rights of indigenous peoples
14	Public policy	GRI 415: Public policy
15	Energy consumption and efficiency	GRI 302: Energy
16	Water consumption and wastewater discharge	GRI 303: Water and effluents
17	Biodiversity and land use	GRI 304: Biodiversity
18	Pollutant emissions	GRI 305: Emissions
19	Waste management	GRI 306: Waste
20	Greenhouse gas emissions and climate change	GRI 305: Emissions
21	Geological exploration and mining	—
22	Production asset upgrade	—
23	Science, technology and innovation	—
24	Digitalisation of production and management	—
25	Corporate security	—
26	Shutdown of production facilities	GRI MM Closure planning
27	Emergency preparedness	GRI MM Emergency preparedness
28	Response to the COVID-19 pandemic	—
29	Participation in Russian national projects	—
30	Emergency forecasting and technogenic safety	—
31	R&D activities	—
32	Organisational changes: division-based structure and its impact on employees	—
33	Promotion of the healthy lifestyle, fitness and sports among local communities and employees	—
34	Norilsk renovation and comprehensive social and economic development plan implementation	—
35	Support for small and medium enterprises (SME) in the regions of operation	—
36	Support for educational institutions and career guidance	—

¹ For more details on the session, please see the press release on the Company's corporate website at <https://www.nornickel.ru/news-and-media/press-releases-and-news/nornikel-provel-dialog-s-zainteresovannymi-storonami?type=news>. For the dialogue minutes and the table of key stakeholder proposals, see the corresponding Appendices to the Report.

GRI indicators

Environmental performance

Total water withdrawal

● GRI 303-3/ SASB EM-MM-140a.1

Indicator, mcm		Total water withdrawal	Water withdrawn from external sources ¹	Including						
				from surface water bodies	from under-ground sources	effluents from third parties	natural water inflow	municipal water supplies and other water utilities (excluding NTEC)	from NTEC ²	
Group's total	2021	451.8	351.2	224.91	29.42	30.08	57.4	9.4	100.58	
	2020	484.1	374.9	259.75	30.91	29.16	46.75	8.29	109.24	
	2019	414.5	319.34	227.31	26.29	20.57	36.50	8.67	95.20	
	2018	453.5	356.79	254.28	28.275	21.28	44.15	8.84	96.70	
	2017	429.2	335.64	233.46	31.88	20.67	40.59	9.04	93.58	
Including:	Polar Division and Norilskenergo ²	2021	78.7	29.8	0.00	0.00	5.47	24.36	0.00	48.9
		2020	78.4	25.6	0.00	0.00	5.48	20.1	0.00	52.8
		2019	69.6	26.5	0.00	0.00	13.66	12.85	0.001	43.12
		2018	82.8	38.1	0.02	0.00	15.68	22.41	0.00	44.71
		2017	100.1	44.5	0.02	0.00	15.07	29.44	0.00	55.61
	Norilsk-Taimyr Energy Company	2021	257.95	257.95	209.69	28.79	17.44	2.04	0.00	0.00
		2020	286.0	286.0	234.62	30.63	18.0	2.7	0.00	0.00
		2019	240.23	240.23	212.78	26.14	1.32	0.00	0.00	0.00
		2018	269.47	269.47	241.23	28.24	0.00	0.00	0.00	0.00
		2017	251.98	251.98	220.42	31.57	0.00	0.00	0.00	0.00
Kola MMC	2021	32.49	32.49	11.134	0.00	0.00	13.04	8.32	0.00	
	2020	38.2	38.2	21.3	0.00	0.00	8.7	8.3	0.00	
	2019	27.95	27.95	13.25	0.00	0.00	6.07	8.63	0.00	
	2018	32.82	32.82	11.75	0.00	0.03	12.39	8.65	0.00	
	2017	31.73	31.73	11.60	0.30	0.04	11.11	8.68	0.00	

¹ Excluding water reused from NTEC networks

² Included in water withdrawal from Norilsk-Taimyr Energy Company

Water withdrawal by water source and type in 2021, mcm

● GRI 303-3/ SASB EM-MM-140a.1

Indicator	Total water withdrawal	Including						
		Water from surface water bodies	Water from under-ground sources	Effluents from third parties	Natural water inflow	Water from municipal and other water utilities (excl. Norilsk-Taimyr Energy Company)	Sea or ocean water	Water from Norilsk-Taimyr Energy Company
Group's total	351.2	224.9	29.4	30.1	57.4	9.4	0.02	100.6
incl. fresh water		224.9	29.4	14.6	10.4	9.4	0.0	100.6
incl. other water		0.02	0.0	15.4	47.0	0.0	0.02	0.02

Water sources

● GRI 303-1, 303-2,303-3 / 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. The Company's operations do not have a material impact on the water bodies.	Wastewater is discharged into water bodies of the Yenisey River and Norilsk-Pyasino water system. The Company's operations do not have a material impact on the water bodies.
Polar Transport Division of MMC Norilsk Nickel		
Krasnoyarsk Transport Di-vision of MMC Norilsk Nickel		
Medvezhy Ruchey		
Norilskgazprom		
Norilsktransgaz		
Norilsknickelremont		
Polar Construction Compa-ny		
Norilsk Production Support Complex		
NN Technical Services		
Taimyr Fuel Company	Water is withdrawn from the water bodies of the Barents Sea. The Company's operations do not have a material impact on the water bodies.	Wastewater is discharged into the water bodies of the Barents Sea. The Company's operations do not have a material impact on the water bodies.
Yenisey River Shipping Company		
Norilsk Airport		
Norilsk-Taimyr Energy Company		
Pechengastroy		
Norilskpromtransport		
Norilsk Trading and Produc-tion Association		
Renons LLC		
Lesosibirsk Port		
Murmansk Transport Divi-sion of MMC Norilsk Nickel		
Kola MMC	Water is withdrawn from the Amur River. The Company's operations do not have a material impact on the water bodies.	Wastewater is discharged into the Amur River. The Company's operations do not have a material impact on the water bodies.
Taimyr Fuel Company		
GRK Bystrinskoye		
Vostokgeologiya	Water is withdrawn from the Black Sea. The Company's operations do not have a material impact on the water bodies.	Wastewater is discharged into the Black Sea. The Company's operations do not have a material impact on the water bodies.
Zapolyarye Health Resort		

Water use

Indicator, mcm		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	2021	1,280.82	25.19	1,255.65	31.60	1,052.07	84.6	
	2020	1,458.13	23.01	1,435.12	31.17	1,229.04	86.4	
	2019	1,343.53	18.76	1,324.77	30.70	1,141.32	87.2	
	2018	1,412.13	20.08	1,392.04	31.46	1,178.47	85.7	
	2017	1,342.07	18.53	1,323.54	32.64	1,105.40	84.8	
Including: Polar Division and Norilskenergo ¹	2021	460.8	14.93	445.91	27.71	384.2	89.3	
	2020	471.2	13.6	457.6	27.7	384.2	89.4	
	2019	461.22	10.51	450.71	29.40	388.69	90.7	
	2018	463.50	12.13	451.37	29.25	389.50	90.4	
	2017	512.32	11.81	500.51	30.49	426.18	89.1	
	Norilsk-Taimyr Energy Company	2021	626.95	0.9	626.05	0.94	514.21	82.2
		2020	764.52	0.92	763.60	0.97	641.13	84
		2019	656.49	0.91	655.57	0.89	551.06	84.1
		2018	709.11	1.00	708.12	1.11	578.17	81.7
	Kola MMC	2017	620.74	1.00	619.74	1.05	503.43	81.3
2021		100.32	1.8	98.5	0.1	98.4	98.2	
2020		141.4	1.6	139.8	0.2	139.7	98.9	
2019		156.49	1.67	154.82	0.14	149.98	95.9	
2018		171.58	1.75	169.82	0.00	158.59	92.4	
	2017	169.64	1.79	167.85	0.00	157.47	92.8	

Total effluents² and pollutants discharged³

GRI 303-4

Indicator		Total effluents, mcm	Including				Pollutants in effluents, kt	
			insufficiently treated	contaminated untreated	treated to standard quality at treatment facilities	standard clean (without treatment)		
Group's total	2021	193.8	33.75	60.31	4.92	94.77	237.0	
	2020	202.42	33.07	54.80	4.34	110.21	244.34	
	2019	142.35	26.22	35.98	4.56	75.60	210.62	
	2018	164.45	30.96	34.26	6.59	92.60	232.37	
	2017	147.55	28.63	33.52	6.13	79.26	216.63	
Including: Polar Division and Norilskenergo ¹	2021	36.98	1.22	35.4	0.37	0.0	60.0	
	2020	33.74	1.71	31.66	0.38	0.0	66.76	
	2019	23.70	1.44	20.95	0.83	0.47	58.30	
	2018	34.98	3.69	28.69	1.86	0.72	72.66	
	2017	45.29	6.28	33.40	4.96	0.66	73.0	
	Norilsk-Taimyr Energy Company	2021	88.2	0.00	6.91	0.0	81.28	3.0
		2020	104.85	0.00	8.79	0.1	96.05	3.0
		2019	74.56	0.00	2.10	0.004	72.46	1.13
		2018	91.56	0.00	0.00	0.00	91.55	1.36
	Kola MMC	2017	78.16	0.00	0.00	0.01	78.15	0.392
2021		27.5	25.91	0.88	0.71	0.00	122.0	
2020		25.82	25.15	0.67	0.00	0.00	126.7	
2019		22.07	21.81	0.26	0.00	0.00	124.43	
2018		25.59	25.47	0.13	0.00	0.00	148	
	2017	22.27	22.25	0.02	0.00	0.00	142.93	

¹ Starting 2020, this line includes effluents of Polar Division only, with effluent volumes of Norilskenergo, a subsidiary of MMC Norilsk Nickel, shown in the NTEC line.

² Effluents are measured instrumentally with certified gauges and also based on the Calculation of Water Consumption and Water Discharge Guidelines and other indirect indicators as approved by the territorial office of the Federal Water Resources Agency.

³ Key pollutants include suspended solids, oil products, metal salts, and nitrogen compounds.

NOx, SOx and other significant air emissions, including their type and weight⁴

GRI 305-7

Indicator, kt		Group's total	Polar Division	Norilsk-Taimyr Energy Company	Kola MMC	
						Total amount
	2020	1,968.12	1,857.51	10.06	83.37	
	2019	1,952.66	1,819.18	10.65	110.79	
	2018	1,926.63	1,789.01	11.69	117.45	
	2017	1,845.55	1,705.00	11.51	121.88	
Including: Nitrogen oxides	2021	11.38	0.67	8.34	1.41	
	2020	9.96	0.6	6.9	1.63	
	2019	10.31	0.55	7.19	1.75	
	2018	11.22	0.61	8.02	1.76	
	2017	11.40	1.56	7.88	1.23	
	Sulphur dioxide	2021	1,601.40	1,585.18	0.1	15.78
		2020	1,910.77	1,836.88	0.01	73.23
		2019	1,898.14	1,798.64	0.001	99.36
		2018	1,869.62	1,764.65	0.002	104.82
		2017	1,784.97	1,675.85	0.003	109.07
Solids	2021	8.89	3.89	0.002	1.21	
	2020	14.55	4.07	0.002	6.13	
	2019	13.31	4.21	0.002	6.98	
	2018	14.51	5.55	0.003	7.57	
	2017	13.42	6.06	0.004	6.87	

Total weight of waste by type and disposal method, mt

GRI 306-3, 306-4, 306-5, MM3/ SASB EM-MM-150a.8

Indicator		Total, mt	Including			
			Polar Division	Kola MMC	GRK Bystrinskoye ⁵	
Waste-related activity	Generation	2021	156.42	13.68	7.47	85.45
		2020	145.23	14.76	8.07	87.53
		2019	36.42	15.62	7.85	—
		2018	30.72	15.71	8.31	—
		2017	31.93	23.26	8.61	—
	Waste input from third parties	2021	1.58	0.35	0	0
		2020	0.97	0.10	0	0
		2019	0.63	0.57	0	—
		2018	3.07	3.04	0	—
		2017	0.03	0.03	0	—
	In-house waste recycling	2021	23.7	6.15	4.01	3.87
		2020	34.25	10.55	6.07	12.13
		2019	22.77	14.34	4.25	—
		2018	21.63	15.79	2.46	—
		2017	20.76	17.75	3.01	—
In-house waste treatment	2021	0.0001	0	0.00	0	
	2020	0.004	0	0.002	0	
	2019	0.003	0	0.001	—	
	2018	0.006	0	0.006	—	
	2017	0.001	0	0	—	
Waste transfer to third parties (for recycling or treatment)	2021	5.76	5.39	0.04	0.003	
	2020	3.48	3.23	0.04	0.003	
	2019	0.50	0.24	0.014	—	
	2018	1.52	0.03	0.01	—	
	2017	0.07	0.04	0.02	—	
Waste transfer to third parties (for disposal)	2021	0.58	0.16	0	0	
	2020	0.25	0.14	0	0.001	
	2019	0.64	0.07	0	—	
	2018	1.64	0.08	0	—	
	2017	0.11	0.07	0	—	
Waste disposal at in-house waste disposal sites	2021	127.5	6.03	3.41	77.32	
	2020	111.24	2.26	2.73	76.33	
	2019	6.03	3.22	2.81	—	
	2018	10.97	3.72	5.83	—	
	2017	12.67	7.08	5.59	—	

⁴ 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.

⁵ 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.

Waste management in 2021 by hazard class and waste type, kt

● GRI 306-3, 306-4, 306-5, MM3/ SASB EM-MM-150a.4, EM-MM-150a.5, EM-MM-150a.6, EM-MM-150a.7, EM-MM-150a.8)

Indicator, kt	Hazard class 1	Hazard class 2	Hazard class 3	Hazard class 4	Incl. mining waste and tailings	Hazard class 5	Incl. mining waste and tailings	Total	Incl. hazard classes 1-4 waste (% of total)
Generation	0.04	0.05	5.64	1,487.1	0.00	154,923.27	151,240.4	156,416.09	1%
Waste generation after treatment	0.00	0.00	1.34	1.03	0.00	0.00	0.00	2.37	100%
Waste input from third parties	0.00	0.01	1.07	104.82	0.00	1,478.10	0.00	1,584.00	7%
In-house waste recycling	0.00	0.00	1.57	0.59	0.00	23,694.31	21,273.95	23,696.46	0.01%
incl. direct recycling	0.00	0.00	0.87	0.02	0.00	13,536.22	12,351.98	13,537.12	0.01%
incl. other recycling activities and processing	0.00	0.00	2.04	1.60	0.00	10,158.08	8,921.97	10,161.72	0.04%
In-house waste treatment	0.00	0.01	0.00	0.10	0.00	0.03	0.00	0.14	79%
Waste transfer to third parties (for processing or recycling)	0.00	0.04	4.08	131.56	0.00	5,630.11	1,807.40	5,765.79	2.4%
Waste transfer to third parties (for treatment)	0.04	0.01	1.60	0.73	0.00	0.15	0.00	2.52	94%
Waste transfer to third parties (for disposal)	0.00	0.00	0.03	228.38	0.00	347.66	0.00	576.07	40%
Transfer to local municipal solid waste operator	0.00	0.00	0.00	13.54	0.00	1.85	0.00	15.40	88%
Waste disposal at in-house waste disposal sites	0.00	0.00	0.09	1,327.46	0.00	126,171.85	124,928.5	127,499.4	1%

Social performance

Benefits for employees of Polar Division

● GRI 401-2

Benefits	Full-time work		Temporary work ¹		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)	+	+	+	+	+ ²	+ ²	— 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 law)	+	+	+	+	+ ⁴	+ ⁴	+ ⁴

¹ Work under a fixed-term employment contract.

² 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.

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 ⁵		Seasonal work ⁶		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	+	+	+	+	—	—	— ⁷
Health resort treatment and vacations	+	+	+	+	—	—	— ⁷
Vouchers for children's wellness recreation tours	+	+	+	+	—	—	— ⁷
Pension plans	+	+	+	+	—	—	—
Termination benefits (apart from those prescribed by the applicable laws)	+	+	+	+	—	—	—

¹ Work under a fixed-term employment contract.

² At Kola MMC, there is no seasonal work; employees do not work seasonally.

³ In-house employees doing bywork can be granted benefits by their primary employer.

Headcount by type of employment, gender and region, employees

● GRI 102-8

Indicator	2021		
	Total	male	female
Total headcount as at the latest reporting date	77,755	54,663	23,092
Contractors working under civil contracts as at the latest reporting date	1,129	784	345
Employees as at the latest reporting date	76,626	53,879	22,747
Employees working under fixed-term contracts (temporary and seasonal jobs) as at the latest reporting date	3,944	2,353	1,591
including in the Norilsk Industrial District	2,616	—	—
including in the Krasnoyarsk Territory (except for NID)	136	—	—
including in the Kola Peninsula Industrial District (Murmansk Region)	194	—	—
including in Moscow and other regions of Russia	898	—	—
including in the Trans-Baikal Territory	100	—	—
Employees working under unlimited contracts (permanent jobs) as at the latest reporting date	72,682	51,526	21,156
including in the Norilsk Industrial District	48,652	—	—
including in the Krasnoyarsk Territory (except for NID)	3,929	—	—
including in the Kola Peninsula Industrial District (Murmansk Region)	11,719	—	—
including in Moscow and other regions of Russia	5,769	—	—
including in the Trans-Baikal Territory	2,613	—	—
Full-time employees as at the latest reporting date	75,773	53,312	22,461
Part-time employees as at the latest reporting date	80	29	51

New and terminated employments (by gender, age and region of operations) in 2021, employees

● GRI 401-1

Indicator	2021
New hires	17,642
including male	12,568
including female	5,074
including 29 y. o. and below	6,077
including 30 through 44 y. o.	8,098
including 45 y. o. and above	3,467
including in the Norilsk Industrial District	12,125
including in the Kola Peninsula Industrial District (Murmansk Region)	1,327
including in the Krasnoyarsk Territory (except for NID)	923
including in Moscow and other regions of Russia	2,648
including in the Trans-Baikal Territory	619
Terminated employments	14,803
including male	10,697
including female	4,106
including 29 y. o. and below	3,534
including 30 through 44 y. o.	6,255
including 45 y. o. and above	5,022
including in the Norilsk Industrial District	10,065
including in the Kola Peninsula Industrial District (Murmansk Region)	1,616
including in the Krasnoyarsk Territory (except for NID)	973
including in Moscow and other regions of Russia	1,593
including in the Trans-Baikal Territory	564

Employee outflow ratio by region in 2021, %

Indicator	2021
Kola Peninsula Industrial District (Murmansk Region)	13.6
Krasnoyarsk Territory (excluding NID)	23.9
Moscow and other regions of Russia	23.9
Norilsk Industrial District (NID)	19.6
Trans-Baikal Territory	20.8

Employee outflow ratio by gender and age in 2021, %

Indicator	2021
Employee outflow, total	19.4
Employee outflow, male	19.9
Employee outflow, female	18.0
Employee outflow, 29 y. o. and below	31.5
Employee outflow, 30 through 44 y. o.	16.7
Employee outflow, 45 y. o. and above	20.0

Employee inflow ratio by region in 2021, %

Indicator	2021
Kola Peninsula Industrial District (Murmansk Region)	11.1
Krasnoyarsk Territory (excluding NID)	22.7
Moscow and other regions of Russia	39.7
Norilsk Industrial District (NID)	23.7
Trans-Baikal Territory	22.8

Employee inflow ratio by gender and age in 2021, %

Indicator	2021
Employee inflow, total	23.1
Employee inflow, male	23.3
Employee inflow, female	22.3
Employee inflow, 29 y. o. and below	54.1
Employee inflow, 30 through 44 y. o.	21.6
Employee inflow, 45 y. o. and above	13.8

Number of employees on maternity and/or childcare leave in 2021

● GRI 401-3

Indicator	2021
Employees on maternity and/or childcare leave as at the year-end	1,528
including male	58
including female	1,470
Employees back from maternity and/or childcare leave over the year	771
including male	51
including female	720

Assessment of employees in Russia, % 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	0.7	19.7	36.3	10.0
Share of male employees covered by competency assessment	0.8	25.3	38.0	10.0
Share of female employees covered by competency assessment	0.2	17.9	31.1	9.9
KPI-based assessment				
Share of employees covered by KPI-based assessment	0.1	50.2	64.0	19.9
Share of male employees covered by KPI-based assessment	0.1	45.5	60.0	15.6
Share of female employees covered by KPI-based assessment	0.1	54.4	76.6	31.0

Key occupational injury rates by region and gender in 2021

● GRI 403-9, 403-10

Indicator	Across Norilsk Nickel Group	Kola Peninsula Industrial District	Norilsk Industrial District	Krasnoyarsk Territory (except for NID)	Trans-Baikal Territory	Moscow and other regions
Fatal workplace injuries, including:	11	0	11	0	0	0
men	11	0	11	0	0	0
women	0	0	0	0	0	0
FIFR	0.1	0	0.15	0	0	0
Lost time workplace injuries, including:	42	9	24	5	4	0
men	36	9	19	4	4	0
women	6	0	5	1	0	0
LTIFR	0.38	0.54	0.33	0.71	0.83	0
High-consequence work-related injury rate	0.12	0.18	0.13	0.14	0	0
Total record-ed workplace injuries in accordance with the Russian labour laws (minor + high-consequence + fa-tal)	53	9	35	5	4	0
men	47	9	30	4	4	0
women	6	0	5	1	0	0
Severe injuries	13	3	9	1	0	0
men	11	3	7	1	0	0
women	2	0	2	0	0	0
Occupational diseases	213	70	137	5	1	0
men	202	59	137	5	1	0
women	11	11	0	0	0	0
Occupational disease rate	1.94	4.23	1.91	0.71	0.21	0
Lost day rate	23.39	22.01	28.52	8.08	0	0
Absentee rate ¹	3.58	4.29	3.64	4.24	1.37	2.06
Injury rate ²	0.48	0.54	0.49	0.71	0.83	0
Hours worked, mil-lion	109.95	16.55	71.73	7.08	4.84	9.75
Total record-ed workplace injuries among contractors' employees engaged at the Group's sites, in accordance with the Russian labour laws	30	4	21	0	5	0
men	30	4	21	0	5	0
women	0	0	0	0	0	0
including fa-talities:	2	0	2	0	0	0
men	2	0	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

	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 that have HSMS in place	74,603	53,496	36,404
Share of employees of the Group's business units covered by HSMS in the Group's total headcount, %	100	71.6	48.7
Headcount of contrac-tors working at the Group's sites and covered by HSMS	8,010	4,804	1,763
Share of employees of contractors covered by HSMS in the total headcount of contrac-tors, %	100	60	22

Fines and non-financial sanctions related to environmental and social impacts in 2021

● GRI 307-1, 419-1

Indicator	Number of non-financial sanctions	Number of fines imposed	Amount of fines, RUB '000
Total fines and non-financial sanctions	481	394	55,072
Environmental laws and regu-lations	54	108	11,930
Anti-competitive behaviour and breach of anti-trust laws	1	2	20
Non-compliance with labour laws	14	19	686.5
Non-compliance with health and safety laws	44	49	4,375
Non-compliance with consumer protection laws, including with respect to product infor-mation and la-belling	7	8	170
Non-compliance with marketing (advertising) regulations	0	0	0
Non-compliance with regula-tions on the impact of products and services on health and safety	0	3	150
Failure to time-ly comply with the improve-ment notices issued by regulatory authorities	40	39	4,773
Non-compliance with fire safety requirements	45	14	1,612
Breach of sani-tary and epi-demiological laws unrelated to product re-quirements	18	14	460
Breach of capi-tal construction laws	48	34	6,335
Breach of in-dustrial safety laws	124	56	19,250
Breach of transportation security laws	34	6	868
Other grounds	52	42	4,443

In 2021, the Group companies accrued RUB 55.1 mln² in fines under 394 imposed sanctions, including 108 for environmental impact, 19 for breach of labour laws, and 267 imposed on other grounds.

² Excluding the compensation of damages by NTEC in February 2021 totalling RUB 146.2 billion in relation to the HPP-3 diesel spill incident in May 2020.

Norilsk Nickel Harjavalta key quantitative indicators

Headcount¹	
Average headcount, including:	294.5
blue-collar employees	167.08
men	156.25
women	10.83
managers and white-collar employees	127.42
men	61.25
women	66.17
including:	
white-collar employees	91.75
men	35.08
women	56.67
managers	35.67
men	26.17
women	9.50
Average headcount as at the latest reporting date	283
Energy consumption within the organisation	
Electric power, TJ	586.8
Thermal energy in steam, TJ	799.7
Thermal energy in hot water, TJ	544.3
Water withdrawal	
Total water withdrawal, '000 m ³	11,742
Surface water bodies, '000 m ³	11,420
Underground sources, '000 m ³	318
Effluents from third parties, '000 m ³	0
Natural water inflow, '000 m ³	0
Municipal and other water utilities, '000 m ³	4
Water discharge	
Total effluents, '000 m ³	23,630
By treatment category	
insufficiently treated, '000 m ³	0
contaminated untreated, '000 m ³	0
treated to standard quality at treatment facilities, '000 m ³	1,065
standard clean (without treatment), '000 m ³	10,744
By destination	
Surface water bodies, '000 m ³	11,809
Underground water bodies, '000 m ³	0
Sea or ocean water bodies, '000 m ³	0
Effluents to municipal and other water utilities, '000 m ³	4
By quality category	
fresh water, '000 m ³	0
other water, '000 m ³	11,813
Effluents to municipal and other water utilities, '000 m ³	
fresh water, '000 m ³	0
other water, '000 m ³	11,813
Pollutants in effluents, kt	31

¹ Based on FTE.

Water consumption	
Total water used, '000 m ³	11,742
water used for utility and other needs, '000 m ³	4
water used for production needs, '000 m ³	11,738
including water reused, '000 m ³	0
including water recycled, '000 m ³	83
Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated	
Total disturbed area, beginning of period, ha	46
New suppliers that were screened using environmental criteria	
Number of Norilsk Nickel Harjavalta's new suppliers that were screened using environmental criteria	8
New employee hires and employee turnover	
Number of new employee hires	53
women	17
men	36
29 y. o. and below	45
30 through 44 y. o.	5
over 45 y. o.	3
Number of terminated employments	54
women	20
men	34
29 y. o. and below	35
30 through 44 y. o.	11
over 45 y. o.	8
Parental leave	
Employees back from maternity leave and/or 18/36 month child care leave (over the reporting period)	10
men	7
women	3
Worker participation, consultation, and communication on occupational health and safety	
Number of joint health and safety committees (commissions)	2
Work-related injuries	
Total work-related fatalities, including / Total work-related injuries, including	0
men	0
women	0
Total high-consequence work-related injuries, including / high-consequence work-related injuries (excluding fatalities)	0
men	0
women	0
Total minor work-related injuries, including / Total minor work-related injuries	0
men	0
women	0
Small injuries (injuries with no loss of ability to work and no transfer to another job and/or part-time work, but with the injured seeking treatment at a medical facility)	359
Dangerous occurrences	316

Work-related ill health	
Total occupational diseases, including	0
men	0
women	0
Average hours of training per year per employee	
Total training man-hours	7,167
including men, man-hours	5,513
including women, man-hours	1,654
including managers, man-hours	644
including white-collar employees, man-hours	1,660
including blue-collar employees, man-hours	4,863
Percentage of employees receiving regular performance and career development reviews	
Number of employees covered by competency assessment for the reporting year	247
men	185
female	62
blue-collar employees	144
white-collar employees	82
managers	21
Number of employees covered by KPI-based assessment for the reporting year	283
men	213
female	70
blue-collar employees	161
white-collar employees	87
managers	35

Disclosure under SASB Metals&Mining sustainability accounting standard (2018)

Topic	SASB code	Accounting metric	Disclosure	Page/link	Comment
Greenhouse gas emissions	EM-MM-110a.1	Gross global Scope 1 emissions	Full	Greenhouse gas emissions 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	—
		Air quality	EM-MM-120a.1	Air emissions of the following pollutants:	
		CO	Not disclosed	—	—
		NOx (excluding N ₂ O)	Full	Air pollutant emissions	—
		SOx	Full	Air pollutant emissions	—
		particulate matter (PM10)	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 renew-able	Full	Energy efficiency improvement and use 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 Wa-ter Stress	Full	Appendices	—
	EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Full	Protection of water bodies	—
Waste & hazardous materials management	EM-MM-150a.4	Total weight of non-mineral waste generated	Full	Appendices	—
	EM-MM-150a.5	Total weight of tail-ings 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 as-sociated 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	—

Topic	SASB code	Accounting metric	Disclosure	Page/link	Comment	
Biodiversity impacts	EM-MM-160a.1	Description of environmental management policies and practices for active sites	Full	Biodiversity conservation	—	
	EM-MM-160a.2	Percentage of mine sites where acid rock drainage is:				
		predicted to occur	Not disclosed	—	—	
		actively mitigated	Not disclosed	—	—	
	EM-MM-160a.3	Percentage of:				
		proved reserves in or near sites with protected conservation status or endangered species habitat	Partial	—	0%	
probable reserves in or near sites with protected conservation status or endangered species habitat		Not disclosed	—	0%		
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	Not disclosed	—		
		probable reserves in or near indigenous land	Not disclosed	—		
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 Northern 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 Northern 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	Full	Engagement of Employees in Safety Management	—	
	EM-MM-310a.2	Number and duration of strikes and lockouts	Full	Engagement of Employees in Safety Management	—	

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) contract employees	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	Preventing and Fighting 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 storage facilities management	EM-MM-540a.1	Tailing storage facility 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	—
		Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailing storage facilities	Full	Sustainable Waste and Tailing Dump Management Waste Disposal	—
	EM-MM-540a.2	Approach to development of emergency preparedness and response plans (EPRPs) for tailing storage facilities	Full	Waste Disposal	—
	EM-MM-540a.3	Approach to development of emergency preparedness and response plans (EPRPs) for tailing storage facilities	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 indicators

UNCTAD indicator	Page	Disclosure status	Information/comments	
A Economic indicators				
A.1 Revenue and/or (net) added value	A.1.1: revenue	—	Disclosed	RUB 1,316.9 bn
	A.1.2: added value	—	Disclosed	RUB 1,042.3 bn
	A.1.3: net added value	—	Disclosed	RUB 974.2 bn
A.2 Payments to the Government	A.2.1: taxes and other payments to the Government	195	Disclosed	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 49,031 mln The expenditures in question make 3.7% of the Company's consolidated revenue for 2021.
	A.3.2: community investment	—	Disclosed	RUB 53,806 mln The expenditures in question make up 4.0% of the Company's consolidated revenue for 2021
	A.3.3: total expenditures on research and development	—	Disclosed	RUB 241.43 mln ¹ The expenditures in question make 0.018% of the Company's consolidated revenue for 2021.
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 95.5% of total procurements in this category.
B Environmental indicators				
B.1 Sustainable use of water	B.1.1: water recycling and reuse	—	Disclosed	86%
	B.1.2: water use efficiency	—	Disclosed	The ratio between water withdrawal and net added value is 0.08 thousand cu m / RUB mln
	B.1.3: water stress	—	Disclosed	No water is withdrawn in water-scarce areas. ● SASB EM-MM-140a.1
B.2 Waste management	B.2.1: reduction of waste generation	—	Disclosed	In 2021, waste generation increased to 156.42 mt from 145.23 mt in 2020. The ratio between waste generation and net added value decreased from 239 t to 160 t / RUB mln
	B.2.2: waste reused, re-manufactured and recycled	—	Disclosed	In 2021, in-house waste recycling decreased to 13.54 mt from 34.25 mt in 2020. The ratio between in-house waste recycling and net added value decreased from 56 t to 12 t / RUB mln
	B.2.3: hazardous waste	—	Disclosed	In 2021, hazard classes 1-4 waste generation increased to 1,492.8 thousand t from 1,182.3 thousand t in 2020. The ratio between such waste generation and net added value went down from 1.94 t to 1.53 t / RUB mln
B.3 Greenhouse gas emissions	B.3.1: greenhouse gas emissions (scope 1)	—	Disclosed	The relative amount of scope 1 greenhouse gas emissions decreased from 15.14 t to 10.08 t of CO ₂ equivalent per RUB mln of net added value
	B.3.2: greenhouse gas emissions (scope 2)	—	Disclosed	In 2021, indirect GHG emissions (scope 2) decreased from 0.82 t to 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

¹ Includes research and development (R&D) and feasibility studies aimed to update the Norilsk Nickel Group's Development Strategy, expand production and protect the environment.

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 for the disclosure to be made in full compliance with UNCTAD guidelines. Along with in-house generation, Norilsk Nickel Group purchases electric power from third parties connected to Russia's unified energy system. In 2021, the share of power from renewable sources amounted to 47% for the Group and 52% for assets in the Norilsk Industrial District. For more details, please see the Climate Change section. Share of renewable energy in the Norilsk Industrial District's total energy consumption: • Total electricity consumption: 6.17 bn kWh • including HPP generated: 3.2 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: 934.05 mln kWh • including HPP generated: 485.7 mln kWh
	B.5.2: energy efficiency	—	Disclosed	In 2021, the ratio between total energy consumption by the Group and net added value was 0.16 TJ / RUB mln

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 24% The proportion of women on the Management Board is 40% (4 out of 10 members)
C.2 Human capital	C.2.1: average hours of training per year per employee	127	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 13,030 Blue-collar employees — RUB 6,939 Managers — RUB 30,092 White-collar employees — RUB 19,654
	C.2.3: employee wages and benefits with breakdown by employment type and gender	125, 130	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	114	Disclosed	Expenditures on employee health and safety make up 0.9% of the Group's consolidated revenue
	C.3.2: frequency/incident rates of occupational injuries	244	Partially disclosed	The Report discloses information about the occupational injury rate and lost day rate in accordance with the GRI requirements.
C.4 Coverage of collective bargaining agreements	C.4.1: percentage of employees covered by collective bargaining agreements	11	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 — 43 Attendance rate — 100%
	D.1.2: number and percentage of female Board members	—	Disclosed	The proportion of women on the Board of Directors is 8% (1 out of 13 members)
	D.1.3: Board members	—	Disclosed	Disclosed in the 2021 Annual Report ²
	D.1.4: number of meetings of the audit committee and attendance rate	—	Disclosed	Number of meetings of the Audit Committee — 12 Attendance rate — 100%
	D.1.5: compensation: total compensation per Board member (both executive and non-executive directors)	—	Disclosed	The 2021 Annual Report ² 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	245	Disclosed	—
	D.2.2: average hours of training on anti-corruption issues per year per employee	198	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.

² <https://www.nornickel.com/investors/ir-highlights/>

TCFD disclosures

Section	Disclosure	Page
Governance Describe the Board's oversight of climate-related risks and opportunities	a) Describe the Board's oversight of climate-related risks and opportunities	60-62
	b) Describe the management's role in assessing and managing climate-related risks and opportunities	32-33, 60-61, 62
Strategy Disclose the actual and potential impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning	a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term	63-64, 190
	b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning	61-71
	c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	61-69, 74-75
Risk management Describe how the organisation identifies, assesses, and manages climate-related risks	a) Describe the organisation's processes for identifying and assessing climate-related risks	61-62, 64, 74-75, 182-183, 190
	b) Describe the organisation's processes for managing climate-related risks	74-75, 180-183, 190
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management	61-62, 180-183, 190
Metrics and targets Disclose the metrics and targets used to assess and manage relevant climate-related risks	a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process	60-62, 77-79, 176
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	76
	c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	60-61

List of abbreviations

JSC	Joint-stock company
CMS AS	Control. Management. Security Automated System
GOK	Mining and processing plant
GOST	State standard
Group	Nornickel Group
HPP	Hydropower plant
VHI	Voluntary health insurance
IT	Information technologies
KolaMMC	Kola Mining and Metallurgical Company
KPI	Key performance indicators
IISRC	International Information Security Research Consortium
IPA	International Platinum Group Metals Association
IUCN	International Union for Conservation of Nature
IFRS	International Financial Reporting Standards
EMERCOM	Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters
NAIIS	National Association of International Information Security
VAT	Value added tax

NPO	Non-profit organisation
NID	Norilsk Industrial District
OJSC	Open joint-stock company
UN	United Nations
LLC	Limited liability company
OECD	Organisation for Economic Cooperation and Development
PJSC	Public joint-stock company
H&S	Occupational health and safety
AML / CFT / prevention of WMD proliferation	Anti-money laundering / counter-terrorism financing / prevention of proliferation of weapons of mass destruction
Russian business units	Russian business units of Norilsk Nickel Group
RSPF	Russian Union of Industrialists and Entrepreneurs
PPE	Personal protective equipment
CIS	Commonwealth of Independent States
FPIC	Free, Prior and Informed Consent
US	United States of America
TJ	Terajoule
HPP	Heat and power plant
FAEA	Federal Agency for Ethnic Affairs
FZ	Federal law
DC	Data centre
SDGs	UN Sustainable Development Goals
UNESCO	United Nations Educational, Scientific and Cultural Organisation
BVC	Bureau Veritas Certification
BIAC	The Business and Industry Advisory Committee
COSO ERM	The Committee of Sponsoring Organizations of the Treadway Commission Enterprise Risk Management
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
ERP	Enterprise Resource Planning
ESG	Environmental, Social and Governance
FIFR	Fatal-Injury Frequency Rate
HCM	Human Capital Management
ICMM	International Council on Mining and Metal
IRMA	Initiative for Responsible Mining Assurance
ISO	International Organisation for Standardisation
GRI	Global Reporting Initiative
LTIFR	Lost Time Injury Frequency Rate
OHSAS	Occupational Health and Safety Assessment System
PRI	Principles for Responsible Investment
SAP	System Analysis and Program Development
SRM	Supplier relationship management
TCFD	Task Force on Climate-related Financial Disclosures
UNCTAD	The United Nations Conference on Trade and Development

Glossary

Safe working conditions: working conditions where occupational exposure to harmful and/or hazardous production factors is prevented or controlled within the set limits.

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.

Stakeholder engagement: the Company's activities aimed at identifying stakeholders' expectations and concerns and their engagement in the decision-making process.

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.

Global Reporting Initiative (GRI): independent organisation developing sustainability reporting guidelines and standards.

Nornickel (Norilsk Nickel) Group: for the purpose of the 2021 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.

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.

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.

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.

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.

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.

Local communities: population with Russian citizenship.

Mission: statement of the Company's goals and objectives that distinguish it from its peers.

Young talents: graduates of universities and colleges whose post-graduate experience does not exceed three years.

Incentivisation: tools and methods of boosting staff performance and productivity, motivating an employee or a group of employees to achieve corporate goals.

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.

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.

Environmental protection and resource efficiency: corporate programmes aimed at minimising the Company's environmental impact.

Occupational disease: health disorder caused by a systematic and lasting exposure to workplace factors or a combination of production-specific working conditions.

Personnel development: set of initiatives aimed at employee recruitment, adaptation, retention, and fully unlocking their professional and creative potential.

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.

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.

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.

Certification: confirming compliance of qualitative characteristics with quality standard requirements.

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.

Social package: set of benefits, compensations, additional payments, statutory and additional services provided to employees by the employer on top of their salary.

Standard: regulation containing a set of requirements for activities and their products.

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.

Significant regions of operation: the Norilsk Industrial District, Krasnoyarsk Territory (except for the NID), Kola Peninsula Industrial District (Murmansk Region), Trans-Baikal Territory, Moscow and other Russian regions.

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.

Payroll budget: total payroll and social payments.

Tailing dump: facility encompassing dedicated structures and equipment designed to store radioactive, toxic or other tailings resulting from the concentration process.

Southern Cluster is Nornickel's promising project to develop reserves in the northern part of the Norilsk-1 Deposit.

Nornickel's sustainable development awards

Environment

- Nornickel's project to reduce sulphur dioxide and manufacture carbon-neutral nickel won Snob project's "Made in Russia" award.

Society

- Nornickel is the founder of the Cultural Evolution category in the annual HR Brand of the Year award by HeadHunter starting from 2019. In this category, the Company selects the best corporate culture development project. In 2021, the winner was Moscow Industrial Bank with the project named "Challenge accepted! Creating a new history of the bank".
- The international cultural project FusionNow launched by Nornickel was rated as the best one in the Development and Promotion of Territories category of the Silver Archer National Public Relations Award.
- The Company's CSR and HR projects won the best prize in four categories of the Crystal Pyramid 2021 contest, including two Grand Prix.
- The Company's young talent management projects were winners and runners-up in two categories of the Graduate Awards 2021 nationwide competition.
- 1st place in the Best Social Well-Being Programme category at the EMPLOYEE WELL-BEING AWARDS 2021 for the Company's corporate social policy project.
- InterComm 2021 international corporate communications award:
 - 1st place in the People and Technology category for the Digital Nornickel project for a communications programme supporting a corporate educational initiative to develop digital competencies and digital literacy;
 - 2nd place in the Common Denominator category for Nornickel — Shared Services Centre's Nickelisation — a platform for motivation and recognition project.

- Winner of the Effective Education Award 2021 with the Digital Nornickel project.
- The Social Investments in Future Education practice published on the UN DESA SDG Good Practices website at <https://sdgs.un.org/partnerships/social-investments-future-education> (School Break educational project and IMAKE League project).
- Gold award with the Those Who Care change management programme in the mineHR category of the MINEX Russia mining forum.
- Winner of the INVESTMENT LEADERS AWARD in the Best Business Financial Support Programme category for running an interest-free loans contest in the Pechengsky District
- 1st place in the 12th competition to recognise the Best Event Team According to the Russian Association of Communications and Corporate Media Directors, Best Social Event category for We Are the City! Picnic project.
- Investments in developing a healthy country. Best corporate practices All-Russian competition: Best Project — Nornickel's Corporate Sports in the Sports Culture Development category.
- 8th All-Russian Creating the Future competition that promotes best socio-humanistic practices:
 - 2nd place in the Head Start category for the Corporate Sports project
 - Winner in the Community of Communities category of the 8th All-Russian Creating the Future competition that promotes best socio-humanistic practices with Plant of Goodness, a project to develop employees in the community.
- Certificate of honour from the Mayor of Monchegorsk for implementing the Add Colours to your Town project successfully.
- Those Who Care change management programme — winner of the IPWeek international competition

- Monchegorsk was named the corporate volunteering capital at the Champions of Goodness national contest.
- Nornickel's social investments were recognised as the most efficient ones in the research named «Business and Territories: a New Stage of Relationship» conducted by experts of the Centre for Strategic Research and the Platform Centre for Social Design.
- In a GlobalData Plc survey, Nornickel ranked second in terms of the share of female employees (29.4%) among global mining companies.
- Nornickel's corporate sports development programme was recognised as the best in Russia in the Investments in Developing a Healthy Country All-Russian competition.
- Nornickel ranked second in the social performance rating among Russia's largest industrial companies by the Institute of Strategic Communications and Social Projects.
- In the Creating the Future competition of socio-humanistic practices, Nornickel's Plant of Kindness LIVE, a corporate volunteering programme, was recognised as the best one in the Community of Communities category, and Nornickel's corporate sports programme came second in the Head Start category.
- The World of Taimyr grant competition implemented as part of the World of New Opportunities corporate programme won the second prize in the Social Projects category of GPM Awards Russia 2021, a national competition for professional project management in the field of sustainable development.

Innovations

- The IT project named «System for improving the efficiency of the process of maintenance and repair of equipment (TORO) using SAP Process Mining by Celonis» implemented by Nornickel and RAMAX Group was recognised as the best IT solution in metallurgy and continuous production at the Global CIO expert community competition.
- Nornickel's projects became winners of the IPWeek 2021 International Improvement Project Competition. A joint project of Nornickel's Polar Division and the Corporate University — Project Development School 4.0 involving Nornickel's SSC — won the Grand Prix.
- The City Online digital platform by Edinstvo (Nornickel Group) was recognised as the best digital solution for Smart City by ComNews Awards. Best Solutions for the Digital Economy.
- The US-based Forbes presented Blockchain 50 2021, a new ranking of 50 major companies that actively use blockchain technology. Only one Russian company, Nornickel, made it to the list.

Awards of Nornickel's employees

- Nornickel took key positions in the Institutional Investor 2021 Emerging EMEA Executive Team ranking.
- According to the Top-1,000 Managers ranking by the Russian Managers Association and Kommersant publishing house:
 - Vladimir Potanin, President of the Company, has once again been included in the Business Leaders list;
 - Marianna Zakharova, First Vice President, Corporate Governance, Asset Management and Legal Affairs, tops the list of the best chief legal officers;
 - Larisa Zelkova, Senior Vice President, HR, Social Policy and Public Relations, came first among directors for public relations and corporate communications.
 - Andrey Grachev, Vice President, Federal and Regional Programmes, topped the list of directors for government relations;
 - Sergey Malyshev, Senior Vice President, CFO, came second in the CFO ranking.
- Nornickel's female employees received the Talented Woman in the Extractive Industry award established by the Russian branch of Women in Mining, an international organisation, supported by Nornickel.
- In 2021, 48 employees received government awards and 243 were presented with awards from various ministries and agencies. 1,782 employees received regional and municipal awards, 314 received Nornickel's corporate awards, and 1,920 people received internal awards at facilities. In 2021, a total of 4,307 of the Company's employees were awarded.

Sustainability reporting awards¹

- MarCom Awards 2021 — Platinum Award in the Corporate Social Responsibility Report category and Gold Award in the Corporate Social Responsibility Report Design category.
- LACP Vision Awards Spring 2021 — silver award in the Sustainability Report category.
- Moscow Exchange's Annual Report Competition — nominee (prize winner) in the Best CSR and Sustainability Report category.
- Annual Report Contest by RAEX (Expert RA) — winner in the Best Environmental Report category².
- Visionaries. Change Management award — 1st place in Best Sustainability Report in Line with Non-Financial Reporting Standards category;
- RSPF's 2020 Leaders of Russian Business: Dynamics and Responsibility contest (nominee in the High Quality of Reporting on Sustainable Development nomination).

¹ Awards received in 2021 by Nornickel's Sustainability Report 2020 (unless otherwise stated).

² The award was given to a dedicated report — White Paper on NTEC's HPP-3 Incident Clean-Up and Response.

Stakeholder dialogue minutes

● GRI 102-44

Nornickel has been historically engaged in dialogues with stakeholders while drafting sustainability reports. On 8 December 2021, the Company held a dialogue dedicated to definition of the Report's material topics¹.

Stakeholder dialogue minutes: “Discussing material topics of the 2021 Sustainability Report”

Date and time: 8 December 2021, 10:00–12:00 am

Format: online conference

Programme:

Item 1. Report: “Setting Priorities in Environment Protection and Climate Change”

Item 2. Report: “The Company's commitments in Environment Protection and Human Rights”

Item 3. Report: “The Framework of Nornickel's 2021 Sustainability Report”

Item 4. Verification of the materiality matrix

Item 5. Assessment of additional disclosures

ITEM 1. Report: “Setting Priorities in Environment Protection and Climate Change”

SPEAKERS:

- Stanislav Seleznev, Vice President for Ecology and Industrial Safety at MMC Norilsk Nickel

Stanislav Seleznev spoke about the Holistic Environmental Strategy adopted by the Board of Directors which aims to promote Nornickel as a metals and mining leader in protecting the environment and combating climate change, as well as its cascading to the Company's divisions. The Strategy covers six key areas: climate change, air, water, tailings and waste, and biodiversity. To this end, the Company intends to spend around USD 6 bn in 2022. He also highlighted Nornickel's current priorities. In line with the global agenda, the Company focuses on climate change, while reducing sulphur dioxide emissions would be a more impactful topic for the country at large. On top of that, Nornickel actively engages in clean-up campaigns to remove both leftover industrial waste and residues of its operations.

The dialogue participants asked follow-up questions to clarify details.

ITEM 2. Report: “The Company's commitments in Environment Protection and Human Rights”

SPEAKERS:

- Svetlana Ivchenko, Head of the Sustainable Development Department of MMC Norilsk Nickel

Svetlana Ivchenko shared her experiences and takeaways from drafting ESG-related policies. 2021 saw seven new policies adopted and another five policies updated. As part of the process, Nornickel maintained a dialogue with a wide range of stakeholders, including in the regions of its operations. The policies now feature a newly introduced governance section which helps reshape the current management system.

ITEM 3. Report: “The Framework of Nornickel's 2021 Sustainability Report”

SPEAKERS:

- Inessa Chernova, Head of Sustainability Reporting of MMC Norilsk Nickel

Inessa Chernova announced the key topics to be disclosed in the 2021 Sustainability Report, including key environmental performance results, industrial safety practices, interaction with indigenous peoples, and beyond. The objectives while preparing the Report include demonstrating the Company's transparency, ensuring a more detailed disclosure for stakeholders and compliance with international standards, providing for bilateral and public verification, and external audit. Inessa Chernova said that the Report would have 3 sections (E, S & G) dedicated to the respective activities of the Company.

ITEM 4. Verification of the materiality matrix. Expert discussion and voting.

Stakeholders were asked to assess the current materiality matrix on a scale from 0 to 100, with 0 standing for “insignificant” and 100 for “highly significant”.

8 topics were put to vote:

- supply chain responsibility;
- training and developing our staff;
- energy consumption and efficiency;
- greenhouse gas emissions and climate change;
- science, technology and innovation;
- participation in Russian national projects;
- emergency forecasting and technogenic safety;
- promotion of the healthy lifestyle, fitness and sports among local communities and employees.

The participants voted.

The most significant topics were chosen as follows:

- Science, technology and innovation (77.6 points)
- Emergency forecasting and technogenic safety (77 points)
- Greenhouse gas emissions and climate change (75.2points)
- Training and developing our staff (73.9 points)
- Energy consumption and efficiency (73.4 points)
- Promotion of the healthy lifestyle, fitness and sports among local communities and employees (65.8 points)
- Supply chain responsibility (58.5 points)
- Participation in Russian national projects (56.9 points)

ITEM 5. Assessment of additional disclosures. Expert voting.

The participants were asked to assess, on a scale from 0 to 100, three additional disclosures of the 2021 Sustainability Report that were proposed during the survey.

The participants voted.

The stakeholder vote assigned the following points to three topics:

- Norilsk renovation and comprehensive social and economic development plan implementation until 2035 (79 points)
- Support for educational institutions and career guidance (73.1 points)
- Support for small and medium enterprises (SMEs) in the regions of operation (60.7 points)

Follow-up questions by participants

1. Alexander Stotsky, CEO of the Project Office for Arctic Development: How does, and will, the Company cater to the needs of indigenous northern minorities?

Svetlana Ivchenko, Head of the Sustainable Development Department of MMC Norilsk Nickel: The Company has adopted its Indigenous Peoples' Rights Policy, with a number of other by-laws to follow, providing for engagement with indigenous northern minorities. On top of that, the existing agreement for infrastructure development in the regions of operation covers a host of initiatives supporting indigenous peoples.

Vasily Zakharov, Chief Manager of the Federal and Regional Programmes Department of MMC Norilsk Nickel: The Company runs a large-scale programme for interaction with indigenous peoples, which draws on extensive negotiations with local communities, opinion leaders, and the associations of indigenous minorities in Taimyr. In line with the newly adopted policy, we have recently held discussions in indigenous peoples' settlements, also attended by international experts. The first-hand feedback will help Nornickel develop initiatives fully reliant on inclusive consultations.

2. Sergey Shestakov, Director of the Lapland State Nature Biosphere Reserve: What nature reserve projects is the Company willing support?

Irina Lukacheva, Senior Manager of the Environmental Policy Division of MMC Norilsk Nickel: The Company will continue to support the ongoing nature reserve projects, while also elaborating individual programmes in cooperation with partner nature reserves, which we believe will result in more fascinating and insightful projects going forward.

3. Nikolay Doronin, Chairman of the Management Board of the Project Office for Arctic Development: How are Norilsk residents involved in discussions about renovation and comprehensive social and economic development?

Vasily Zakharov, Chief Manager of the Federal and Regional Programmes Department of MMC Norilsk Nickel: Numerous surveys and polls have been held in Norilsk by the Norilsk Development Agency and the municipal administration.

Svetlana Ivchenko, Head of the Sustainable Development Department of MMC Norilsk Nickel: The Norilsk Development Agency is a platform for communication and interaction between various stakeholders as regards renovation. In November 2021, we gathered many experts from all walks of life for a strategic session to discuss the long-term city development strategy from a variety of perspectives, including renovation, not to mention other regular stakeholder engagement campaigns which are many.

4. What about the large-scale biodiversity study around production sites? Do you happen to know any specific schedule? When is biodiversity restoration expected to commence?

Irina Lukacheva, Senior Manager of the Environmental Policy Division of MMC Norilsk Nickel: Please see the White Paper for more details on site renovation and the Great Norilsk Expedition. In partnership with the Russian Academy of Sciences, we will be studying the biodiversity situation around all Nornickel's industrial facilities during the next year, following which we will make findings, give consideration to stakeholders' recommendations, develop key performance indicators and a system to manage biodiversity preservation.

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.

Stakeholder recommendations

● GRI 102-44

Recommendations	Company response
Stakeholder recommendations based on surveys and dialogue devoted to the definition of material topics, as well as expert discussions of previous reports and other topics	
From external stakeholders	
Disclose the targets of the Holistic Environmental Strategy and yearly measurable indicators of the effective performance against the targets set forth in the Strategy.	Done. Disclosed in the ESG Strategy section.
Lay particular emphasis on tailing dam management and development of their safety improvement practices and recycling of tailings.	Done. Disclosed in the Tailing Dams and Waste section.
Specify the assessment of social impact, social progress, and positive shifts in the social environment resulting from the Company's programmes.	Done. Disclosed in sections of the Social chapter.
Provide more details on the impact of the Company's operations on the socioeconomic development of local communities.	Done. Disclosed in the Development of Local Communities section.
When describing its activities in biodiversity conservation, we recommend that the Company rely on best international practice such as the IUCN Guidelines for planning and monitoring corporate biodiversity performance.	Partially done. Disclosed in the Biodiversity section.
Focus on long-term effects of digitalisation across all aspects of sustainability and describe the risk management approach in this area.	Partially done. Disclosed in the Digital Technology section.
Disclose the targets for the next year and for the mid-term across all areas of sustainability.	Partially done. Disclosed in the relevant sections.
Expand on this topic and describe specific national projects that are believed to be worth mentioning.	Done in the Nornickel and UN SDGs and Air sections.
Independent certification of the most significant sustainability KPIs.	To be done in the next reports
Disclose findings of the human rights assessment.	To be done in the next reports
Holding public hearings on the draft report.	To be done in the next reports
From internal stakeholders	
Add a section on corporate healthcare.	Done. Disclosed in the Occupational Health and Safety section.
Ensure that sustainability metrics are aligned with the financial impact and published simultaneously with it.	To be done in the next reports

Opinion of the RSPB Council on Non-Financial Reporting on Norilsk Nickel Group's 2021 Sustainability Report for the purposes of public assurance



The Council on Non-Financial Reporting of the Russian Union of Industrialists and Entrepreneurs (the “Council”), established as per the Management Bureau’s Resolution dated 28 June 2007, reviewed, at the request of MMC Norilsk Nickel (the “Company”, the “Group”, “Nornickel”), Nornickel Group’s 2021 Sustainability Report (the “Report”).

The Company requested the RSPP to arrange for the public assurance of the Report, with the Council on Non-Financial Reporting 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.

From 30 April to 27 May 2022, the Council members reviewed the content of the Company’s Report and passed this Opinion in accordance with the Council’s 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 completeness and materiality.

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, accomplishments and key results, and the stakeholder relationship framework.

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, and following a collective discussion of the results of the Report’s independent assessment undertaken by the members of the Council on Non-Financial Reporting, the Council confirms as follows.

Nornickel Group’s 2021 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 2020 Report were addressed in the 2021 Report. The Report covers the Company’s progress on UN SDGs and targets under national projects, an action plan to implement an ESG agenda in 2021–2023, a roadmap for TCFD compliance, digital initiatives and targets of the Holistic Environmental Strategy. It also shows changes in a majority of key indicators over three to five years.

The Company’s 2021 Report contains relevant information relating to the below-listed aspects of responsible business conduct.

Economic freedom and responsibility.

The Report presents Nornickel’s development strategy through 2030, including key targets and projects, assesses the Company’s contribution to the Russian and global economy, and analyses long-term global trends related to the demand for the relevant metals, factoring in the climate agenda, among other things. Nornickel discloses financial and operational results in the reporting year, information on key products, in particular the first batch of carbon-neutral nickel, long-term targets of the investment programme and key domains and initiatives of the Company’s digital transformation. Available is data on the most important areas of production upgrade, including the comprehensive development of all mines, ESG strategy, which integrates the Environmental and Climate Change Strategy through 2031, social strategy and corporate governance and supply chain management initiatives, and an action plan to implement an ESG agenda in 2021–2023. The Report dwells on the corporate governance and risk management framework, including with respect to sustainable development, the Board of Directors and its newly established Sustainable Development and Climate Change Committee, and including ESG targets in the top management’s KPIs. The Company indicates responsibilities of various governance bodies as regards sustainability, and efficiency improvement measures, while also reporting on having its quality, environmental and health and safety management systems certified for compliance with international standards. The Report covers key programmes and initiatives contributing towards UN SDGs and national projects, a series of employee training programmes on the amended Business Ethics Code, as well as anti-corruption practices and efforts.

Business partnerships. As stated in the Report, the Company has approved a Stakeholder Engagement Policy and Stakeholder Engagement Plan. It also discloses engagement mechanisms, a stakeholder map and stakeholder participation in defining the Report’s material topics. Nornickel said it maintained a dialogue with stakeholders in line with international standards. The Report also describes the operation of the Corporate Trust Line, a permanent tool to manage complaints and queries and quickly respond to matters of importance for stakeholders, and tells of holding ESG events and communicating the Company’s ESG achievements to investors on a regular basis. Its topics include a Corporate Healthcare project, remuneration system, training and social programmes for staff, social partnerships, and measures to reduce injury rates. Additionally, the Report covers areas of customer relations and regular customer satisfaction surveys, while also dwelling on the Company’s efforts to integrate ESG principles into supply chain management, approval of the Supplier Code of Conduct, Responsible Sourcing Policy, and supplier and contractor cooperation mechanisms, including as regards responsible consumption of precious metals, and health and safety. When it comes to the HPP-3 clean-up efforts, the Company defines its priorities in engaging with Taimyr’s indigenous peoples and reports on signing a relevant cooperation agreement with the Federal Agency for Ethnic Affairs. The Report gives an account of Nornickel’s participation in committees, commissions and working groups created by government agencies and business community representatives to implement socially important projects, and regular communications with local communities through targeted research, surveys, focus groups and regional development centres.

Human rights. As indicated in the Report, Nornickel has aligned its Human Rights Policy with the international and Russian laws and added a new provision on obtaining a free, prior, and informed consent as a basis for relations with indigenous minorities. The Company has updated all of its key by-laws on human rights to ensure alignment with global best practices and the Company’s public commitments. The Report mentions that the Company regularly assesses the potential impact of its operations on human rights and checks new projects for compliance with the applicable Russian and international laws. A focus is placed on respecting labour rights, in particular as part of personnel development and social support programmes and the social partnership framework, with collective bargaining agreements covering 94% of the workforce. The Company informs the public about its efforts to collect information on alleged human rights violations via Nornickel’s Corporate Trust Line, regular employee polls, and sentiment surveys of local populations. There are details on the performance of offices for operating, social and labour relations, the first comprehensive employee training course in human rights, and partnership with the Women in Mining Russia non-profit organisation.

Environmental protection. The Report covers the Company’s progress against the Environmental and Climate Change Strategy adopted in 2020, which saw strategic goals set across the board and annual and long-term KPIs updated. The Company outlines corporate regulations and measures to improve environmental and climate change management, while also disclosing changes in key metrics of its environmental footprint and key related workstreams. There is data on major projects, such as the Sulphur Programme, establishment of an Environmental Monitoring Centre to cover the Company’s regions of operation, and response to the HPP-3 incident in Norilsk in 2020. The Company said it launched a pilot project on assessing physical climate change risks and the per-unit carbon footprint of its products.

The Report gives an account of climate risk management along with developed and planned measures on the climate agenda, including activities to keep greenhouse gas emissions at the lowest level in the metals and mining industry, increase the output of metals essential for the global transition to a green economy, and draft a roadmap to comply with TCFD recommendations. It also highlights Nornickel’s initiatives to improve energy efficiency, and states that the Company included an investment programme to fully upgrade the Norilsk Industrial District’s energy infrastructure in its strategy, stepped up industrial consumption of its own renewable energy, and purchased certificates for externally sourced renewable energy. The Company gives a summary of how it works with nature reserves to help conserve and restore biodiversity and preserve the unique Arctic nature, and collaborates with researchers in addressing environmental and climate change challenges.

Contribution to the development of local communities. The Report provides an overview of the Company’s activities broken down by regions of operation, discloses significant results of these activities, outlines areas of cooperation, showcases the tools for working with local communities, and discloses information on the key initiatives in each region. The regional breakdown provides data on tax and non-tax payments to budgets of all levels, unemployment rates in the context of job creation, and the development of entrepreneurship. Improvement of access to remote locations through using Nornickel’s transport infrastructure is listed as a priority area in supporting local communities. The Report highlights the Company’s role in approving the Comprehensive Social and Economic Development Plan for Norilsk until 2035. It also includes information about the Company’s support of its regions of operation amid the COVID-19 pandemic, and spending on healthcare initiatives. There is a mention of the opening of the first of the Company’s five medical centres planned for launch in the Norilsk Industrial District and Dudinka. The Report describes the implementation of Nornickel’s key projects on improving the well-being of local communities and provides information about the performance of regional development institutions supported by the Company, including the Norilsk Development

Agency, Second School Centre for community initiatives of the Pechengsky District, and Monchegorsk Development Agency. Also noted is the launch of a large-scale programme in Norilsk to clean up areas contaminated with industrial and construction waste. Information about the priorities and principles of the external social policy, implementation of social programmes for local communities, and interaction with indigenous northern minorities is also included in the Report. The World of Taimyr grant competition is listed as one of the key initiatives for supporting indigenous northern minorities. In addition, the Report tells of assessing the performance of social projects via a dedicated system.

Final provisions

The information contained herein generally describes the Group's strategy, business practices and results in sustainable development and corporate social responsibility as well as the supporting governance systems. The Report provides a detailed overview of the results of the Company's efforts to help achieve UN SDGs by 2030 and targets set out in Russia's national projects. It covers Nornickel's continued activities to eliminate damage caused by environmental industrial incidents that occurred in 2020 and the Company's response to the pandemic while disclosing a significant number of economic, social and environmental performance indicators, and presents stakeholder engagement on sustainable development matters, including as part of the definition of material topics and the reporting process.

The Report was prepared using internationally and domestically recognised reporting tools (e.g. the GRI Standards, Comprehensive option, GRI Sector Disclosures), which ensures comparability of the Group's information with that of other Russian and international companies. In drafting the Report, the Company also relied on the following documents: the UN Global Compact, the UN 2030 Agenda for Sustainable Development, ISO 26000:2010, SASB, Accountability Standards AA1000SES (2015) and AA1000AP (2018), the UNCTAD Guidance on core indicators for entity reporting on contribution towards implementation of the UN Sustainable Development Goals, and TCFD recommendations on climate-related risk disclosures.

The 2021 Report is the Company's eighteenth 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.

This specifically relates to the recommendation to show a more detailed and consistent comparison between planned objectives for the reporting period and the actual results and disclose the next year's and mid-term targets across all sustainability areas. For better communication, it is recommended that all sections of the Report follow a consistent approach to explaining performance, especially in cases of material changes.

It is recommended that the Company's future reports go into further detail about which of its sustainability regulations and procedures extend to its subsidiaries and how it controls their activities in this area and define the relevant key performance indicators.

The topic of industrial safety was included in the list of material topics and given a high priority; however, it was compared only with the health and safety GRI standards. At the same time, the topic's second component, which relates to the reliability of equipment, technological processes, as well as accidents and their impact on the environment and local communities, is equally important. Information on industrial safety is provided in several sections of the Report (health and safety, climate risk management, and 2020 spill clean-up). To provide a holistic view of the Company's OHS management, organisation and performance, it may be worth taking a uniform approach to the

analysis and presentation of the topic and complementing key information with references to the sections where these issues are addressed in relation to specific areas of activity.

It is proposed that future reporting of the Company's biodiversity conservation and restoration activities focus more on their end results and systemic approach, and less on the support of specific organisations involved.

Given the Company's role in the Russian economy, it is recommended to enhance and detail the presentation of Nornickel's contribution to national development goals until 2030 and the goals of national projects.

It would be useful if the Company could add an analysis of the social impact to the section relating to its social programmes. It is recommended that the Company disclose data on the social progress, positive shifts in the social environment, improvements in the local labour market and living conditions of people resulting from these programmes. Given the significant volume of social investments and the variety of projects implemented by the Company, it is recommended that this area of activity be covered more extensively in the next report due to its relevance to different stakeholder groups.

Following the 2020 fuel spill, the Company published a White Paper that outlined specific plans for improving safety and preventing similar accidents in the future. Going forward, it would be reasonable to expand the disclosure of information on the activities carried out, as well as the implementation of publicly announced plans and commitments related to the accident response and associated risks mitigation, taking into account the high-profile nature of such events.

The Report includes targets for reducing GHG emissions. It is recommended to provide information on the programmes and efforts enabling the Company to achieve these targets.

It is also recommended that future reports cover more extensively the ESG matters considered and subsequently decided upon by the Board of Directors to provide a more complete picture of the integration of sustainability management into the Company's corporate governance framework.

It is important to consider the context in which the reported information will be perceived by stakeholders if, at the time of the reporting, any events have occurred outside the reporting period which could lead to a significant increase in risks that the Company, region or country might face in the near future. In order to meet stakeholder expectations, it could prove useful to highlight the Company's permanent overriding priorities, as well as those that emerge because of new challenges.

It is also recommended that the next report focus on the risks that stakeholders may potentially face in the forthcoming reporting period in connection with the Company's activities and that the Company can mitigate.

The RSPC Council on Non-Financial Reporting 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 2021 Sustainability Report has passed the public assurance procedure.



RSPC Council on Non-Financial Reporting

Independent auditor's report¹

GRI 102-56

FBK

INDEPENDENT PRACTITIONER'S LIMITED ASSURANCE REPORT [TRANSLATION FROM RUSSIAN ORIGINAL]

To the management of Public Joint Stock Company "Mining and Metallurgical Company "Norilsk Nickel"

We have undertaken a limited assurance engagement of Public Joint Stock Company "Mining and Metallurgical Company "Norilsk Nickel" (hereinafter referred to as MMC Norilsk Nickel) stakeholder engagement in the course of sustainability activities implementation as well as of the accompanying Norinickel Sustainability Report 2021 (hereinafter referred to as the Report).

Responsibility of MMC Norilsk Nickel

MMC Norilsk Nickel is responsible for its compliance with the principles of the AA1000 Accountability Principles 2018 (hereinafter referred to as AA1000 AP 2018) in stakeholder engagement in the course of sustainability activities implementation as well as for preparation of the Report in compliance with the requirements of GRI Sustainability Reporting Standards for the report prepared in accordance with the Comprehensive option, as well as in compliance with recommendations of the document "Recommendations of the Task Force on Climate-related Financial Disclosures" (hereinafter referred to as TCFD recommendations). This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of the Report that is free from material misstatement, whether due to fraud or error.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Rules of Independence of the Auditors and Audit Organizations and The Code of Professional Ethics of the Auditors, which are in accordance with International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

The firm applies International Standard on Quality Control 1, Quality Control for Firm that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express limited assurance conclusions:

- on MMC Norilsk Nickel stakeholder engagement in the course of sustainability activities implementation compliance with the principles of AA1000 AP 2018
- on fairness of the following statement made in the Report "The Report provides information on all disclosures specified in the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), with the relevant references made in the TCFD Disclosures appendix" (hereinafter referred to as the Statement)
- on the Report compliance with the requirements of GRI Sustainability Reporting Standards for the report prepared in accordance with the Comprehensive option

based on the procedures we have performed and the evidence we have obtained.

We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information, as well as in accordance with AA1000 Assurance Standard v3 (type 2, as defined by AA1000AS v3). These standards require that we plan and perform this engagement to obtain limited (moderate as defined by AA1000AS v3) assurance about whether MMC Norilsk Nickel stakeholder

¹ The report discloses the results of the activities of MMC Norilsk Nickel and its Russian subsidiaries. The report also discloses information on the total number of employees and revenue (within consolidated revenue) of abroad subsidiaries as well as information on some sustainability impacts of Norilsk Nickel Harjavalta.

TRANSLATION NOTE: Our report has been prepared in Russian and in English. In all matters of interpretation of information, views or opinions, the Russian version of our report takes precedence over the English version.

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engagement in the course of sustainability activities implementation complies with the principles of AA1000 AP 2018 and whether the Report is free from material misstatement.

A limited assurance engagement undertaken in accordance with these standards involves assessing the following criteria (hereinafter referred to as Criteria):

- MMC Norilsk Nickel stakeholder engagement in the course of sustainability activities implementation – the principles of AA1000 AP 2018: Inclusivity, Materiality, Responsiveness and Impact.
- Reliability of the Statement – TCFD recommendations
- Compliance of the Report with the requirements of GRI Sustainability Reporting Standards for the report prepared in accordance with the Comprehensive option – GRI Sustainability Reporting Standards requirements.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and included inquiries, inspections of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we have undertaken the following activities:

- Study and selective testing of systems and processes implemented by MMC Norilsk Nickel to ensure and analyze the compliance of the activities with AA1000 AP 2018 principles; collection of evidence confirming practical implementation of these principles.
- Interviewing the management and employees of MMC Norilsk Nickel and obtaining documentary evidence.
- Study of information available on the websites of Norinickel Group companies related to their activities in the context of sustainable development.
- Study of public statements of third parties concerning economic, environmental and social aspects of Norinickel Group companies activities, in order to check the validity of the declarations made in the Report.
- Attending the online dialogue with stakeholders.
- Analysis of non-financial reports of companies working in the similar market segment for benchmarking purposes.
- Selective review of documents and data on the efficiency of the management systems of economic, environmental and social aspects of sustainable development in MMC Norilsk Nickel.
- Study of the existing processes of collection, processing, documenting, verification, analysis and selection of data to be included into the Report.
- Analysis of information in the Report for compliance with the requirements of Criteria.

The procedures were performed only in relation to data for the year ended 31 December 2021.

The evaluation of reliability of the information on performance in the Report was conducted in relation to compliance with the requirements of GRI Sustainability Reporting Standards for the report prepared in accordance with the Comprehensive option and information referred to in the section of the Report "GRI Content Index". With respect to this information assessment of its conformity to external and internal reporting documents provided to us was performed.

The procedures were not performed in relation to forward-looking statements; statements expressing the opinions, beliefs and intentions of MMC Norilsk Nickel as the parent company of Norinickel Group to take any action related to the future; as well as statements based on expert opinion.

The procedures were performed in relation to the version of the Report subject to be approved by the Board of Directors of MMC Norilsk Nickel and to undergo the procedure of public assurance by the Council on Non-Financial Reporting of the Russian Union of Industrialists and Entrepreneurs (RSPP), as well as to be sent to Global Reporting Initiative in order to notify it of the use of the GRI Sustainability Reporting Standards in the Report preparation.

We had no chance to verify that the annual report of MMC Norilsk Nickel for 2021 which is referred to in the Report, is published due to the fact that the date of signing this Assurance Report preceded the planned date of this activity completion.

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¹ The auditor of the Sustainability Report was approved by the Head of Norinickel's Sustainable Development Department.

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The procedures were performed in relation to the Russian version of the Report, which includes information to be published in a hard-copy form as well as in digital form on the MMC Norilsk Nickel website.

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 we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about compliance, in all material respects, with the requirements of the Criteria.

Limited Assurance Conclusion on MMC Norilsk Nickel stakeholder engagement in the course of sustainability activities implementation compliance with the principles of AA1000 AP 2018

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that MMC Norilsk Nickel stakeholder engagement in the course of sustainability activities implementation has not complied, in all material aspects, with the criteria of AA1000 AP 2018 in respect to compliance with the principles (Inclusivity, Materiality, Responsiveness and Impact).

Limited Assurance Conclusion on Compliance of reliability of the Statement made in the Report

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Statement made in the Report that the Report provides information on all disclosures specified in the TCFD recommendations, is not, in all material respects, fairly stated.

Basis for Limited Assurance Qualified Conclusion on Compliance of the Report with the GRI Sustainability Reporting Standards (Comprehensive option)

GRI 305: Emissions 2016 requires to report actual direct (Scope 1) GHG emissions in the disclosure 305-1. Disclosure 305-1 in the Report includes not only actual direct (Scope 1) GHG emissions but also estimated prospective GHG emissions associated with the implementation of Sulphur Programme 2.0.

Limited Assurance Qualified Conclusion on Compliance of the Report with the GRI Sustainability Reporting Standards (Comprehensive option)

Based on the procedures performed and evidence obtained, except for the effect on the matter described in the 'Basis for Limited Assurance Qualified Conclusion on Compliance of the Report with the GRI Sustainability Reporting Standards (Comprehensive option)' section of our report, nothing has come to our attention that causes us to believe that the Report has not complied, in all material aspects, with the requirements of GRI Sustainability Reporting Standards for the report prepared in accordance with the Comprehensive option.

Recommendations

Based on the results of the limited assurance engagement we recommend:

- It is reasonable to disclose GRI indicators in relation to target values and plans for the future.
- Increase the extent of disclosure of indicators in relation to which requirements of GRI Sustainability Reporting Standards are not fully taken into account (disclosures with omissions).

The recommendations are not intended to detract from the practitioner's conclusions. Our conclusions are not modified in respect of the matters referred to in the recommendations.



FBK, LLC

Practitioner
Partner

acting under Power of Attorney No. 76/18 of December 17, 2018

The Russian Federation, Moscow
April 25, 2022


V.Y. Skobarev

TRANSLATION NOTE: Our report has been prepared in Russian and in English. In all matters of interpretation of information, views or opinions, the Russian version of our report takes precedence over the English version.

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Disclaimer

The information 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, its operating and financial results, and the report content may have been affected by external or other factors, including the escalation of the geopolitical conflict in Ukraine, sanctions imposed by the United States of America, the European Union, the United Kingdom and other nations against the Russian Federation, Russian individuals and legal entities, Russian Federation's response to sanctions, economic and other measures introduced to maintain the economic and financial stability of the Russian Federation, 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 Norilsk Nickel'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 forwardlooking statements contained in this annual 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 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 is 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. Any and all logos and trademarks used in this Sustainability report are the property of their immediate owners, and use thereof in this Sustainability report should not be construed as a promotion or advertisement for those owners' goods or services.

● GRI 102-3, 102-53

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instagram.com/nornickel_official
feeds.feedburner.com/nornik/AIDB

Norilsk through the eyes of its residents

www.norilskfilm.com

Corporate website

<https://www.nornickel.com/>