

Strategic vision

GRI 2-23, 2-24

Our mission

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

Our values

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



Reliability

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



Responsibility

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



Efficiency

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



Development

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



Professional excellence

The ability to achieve results in any conditions or environment



Teamwork

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

Strategy of sustainable growth

GRI 2-6

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

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

Our approved strategic priorities through 2030 include a dramatic environmental uplift in the regions of operation, capacity upgrade,

construction of new capacities to build up production of key metals, and maintaining financial strength.

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

Strategic plans to increase ore mining and metals production by 2030

Ore mining in the NID (mtpa)



Metals production (mtpa of Ni equivalent)



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



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

Sulphur Programme roadmap

KOLA DIVISION

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

NORILSK DIVISION

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

71%
Cross-border SO₂ emissions down in 2020¹

90%
Total SO₂ emissions at Kola MMC down¹

Implementation 2023

Redesign and implementation 2027

Optimisation of smelting operations to cut SO₂ emissions in the Russia-Norway border zone

[Shutdown of the obsolete smelting shop in Nickel in December 2020](#)

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

[Metallurgical shop shut down on 20 March 2021](#)

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

Launch of Sulphur Programme 2.0 at Copper Plant to recover furnace and converter gases²



Reduction of SO₂ emissions in Nickel and Zapolyarny



reduction of total SO₂ emissions at the Kola Division



reduction of SO₂ emissions from the ramp-up to design capacity. Ramp-up to design capacity in 2024



reduction of SO₂ emissions at the Norilsk Division after the ramp-up to design capacity

-50%¹ → 2x

-90%¹ → 7x

-45%¹ → ~2x

up to 90%¹ → ~10x

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

¹ Vs the baseline year (2015).

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

Power infrastructure modernisation through 2030

Programme objective:

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

Gas and gas condensate upstream and transportation

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

Water and heat supply networks

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

Contribution to energy efficiency:

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

Heat and power plants

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

Hydropower plants

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

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

Geography



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



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

GRI 2-6

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

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

Copper is critical for transitioning to the low-carbon economy as it is used in high-tech equipment, including that for making

RES-based hardware. Over 70% of refined copper produced globally are used for manufacturing various cables and wires. By 2040, additional 10 mtpa of copper will be needed to meet the demand¹.

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

PGM are catalysts for the production of key chemicals. Platinum and iridium are part of catalysts used for green hydrogen production. Palladium enables transportation of hydrogen at long distances and its purification. Palladium, platinum

and rhodium are used in manufacturing HEVs. Catalytic converters mainly for gasoline engines are the biggest palladium consumers (over 80%) in the mid term. This metal is used in catalytic converters to detoxify exhaust fumes. In most countries, such converters are legally required to be installed on all cars. Palladium is also used in electronics, dentistry, jewellery, chemicals and pharmaceuticals.

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

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

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

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

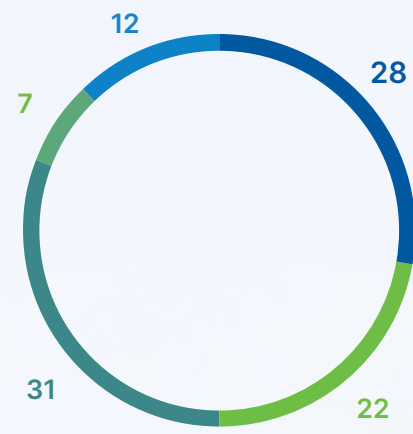
In 2022, Nornickel forecast changes in key metal demand based on three scenarios for the global economy and climate change¹: "Rapid Transformation", "Sustainable Palladium" and "Global Growth". According to our estimates of prospective demand and supply, we can say that demand for our metals will grow and our strategy is resilient to changes in climate risk factors. The key expected risks are related to demand for palladium.



¹ Vs 2022.

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

Potential revenue breakdown in 2030, %



- Ni
- Cu
- Pd
- Pt
- Other

Ni

Current

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

Cu

Current

Global infrastructure development programmes, mainly in the US and China

Expected

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

Pd

Current

Higher number of vehicles across the world and growing real income of the population
Hybridisation of vehicles and a shrinking share of diesel cars
Introduction of palladium-based solutions for H₂ storage, transportation and purification, and hydrogen system safety

Pt

Expected

Hydrogen energy and fuel cell cars

Other

Current

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

Long-term outlook for the metals market

