Executive summary

The Report provides information on the progress made by the Nornickel Group[1] in achieving its strategic climate-related goals, outlines how the Company is responding to climate changes in its regions of operation, and presents Nornickel's value proposition in the context of the global energy transition.

Nornickel produces metals that are critical to the energy transition, including nickel (16% of the global market), copper (2%), palladium (40%), platinum (11%), and cobalt. The Company's customer network comprises over 300 clients worldwide. Plans are in place to launch lithium production to capture the growing global demand for this green metal.

As part of the Company's Innovation and R&D Strategy, Nornickel's Palladium Centre aims to bring over 100 new palladium-containing materials to market, which are expected to generate at least 40–50 tonnes of new palladium demand by 2030. The Centre's portfolio comprises over 25 developments across several distinct application areas – greentech, high-tech materials, and traditional uses. In 2024, Nornickel also launched the Battery Technology Centre, which focuses on the development of nickel-containing cathode active materials (CAMs) – a key component in modern batteries. The first samples of cathode materials for NCM 811+ chemistry have already been developed.

Nornickel continues to implement its 2031 Environmental and Climate Change Strategy. In 2024, the strategy was updated and divided into two parts: a mandatory one, driven by the requirements of national legislation and stock exchanges, and voluntary commitments, reflecting the Company's extended responsibility to reduce greenhouse gas emissions and comply with international standards. The share of renewable electricity use in 2024 reached 54%, exceeding the target of 46%. The Company also remains committed to keeping the amount of absolute Scope 1 and 2 emissions at 10 mln t of CO_2 equivalent. This will ensure that the Company's metals maintain a competitive carbon footprint among the world's major metals and mining companies. For 2024, Scope 1 emissions amounted to 7.1[2] mln t of CO_2 equivalent, while Scope 2 emissions totalled 0.4 mln t of CO_2 equivalent.

In 2024, the Board of Directors approved the Key Focus Areas of Carbon Neutrality, a document that outlines the Company's forward-looking efforts to reduce greenhouse gas emissions. These efforts include the deployment of energy-efficient technologies, the implementation of climate projects, the use of low-carbon energy sources in power generation and transport, gangue mineralisation in tailings storage facilities, and other initiatives.

The Company uses TCFD[3] recommendations to assess climate-related risks and opportunities.

- To assess transition climate risks and opportunities, in 2024, Nornickel, in collaboration with the Institute for Economic Forecasting of the Russian Academy of Sciences, updated its three proprietary scenarios for global economic and climate development: Rapid Transition, Sustainable Palladium, and Global Growth, which correspond broadly to the IPCC SSP1-2.6, SSP2-4.5, and SSP5-8.5 scenarios, respectively. Based on these scenarios, Nornickel analysed its consolidated financial and economic model until 2040. The analysis showed that, under any scenario, Nornickel's basket of metals ensures the resilience of its financial position through to 2040.
- To assess physical climate risks, the Company, in partnership with the Obukhov Institute of Atmospheric Physics of the Russian Academy of Sciences, evaluated climate change trends since the 1960s and climate projections up to 2050 for the Norilsk, Kola, and Bystrinsky production sites. Key risk factors include permafrost degradation, precipitation anomalies, and more frequent thunderstorms. In 2024, the Company focused on developing an approach to climate vulnerability assessment based on the Energy Division's assets, as linear infrastructure and tanks at the Norilsk site are more likely to be exposed to climate impacts.

[1] For the purposes of this Report, the Nornickel Group shall refer to PJSC MMC Norilsk Nickel and its subsidiaries. Unless otherwise specified or required by the context, the terms "Company", "Group", "Nornickel", and "Nornickel Group" refer to the Norilsk Nickel Group.

[2] Including a GHG emissions provision for the Sulphur Project at Nadezhda Metallurgical Plant and excluding GHG emissions generated from heat and electricity supplies to the public.

[3] Task Force on Climate-related Financial Disclosures.

Key decarbonisation initiatives in 2024 included:

- Energy efficiency projects, which, combined, resulted in reductions of 79.2 kt of CO_2 equivalent in Scope 1 emissions and 180.5 kt of CO_2 equivalent in Scope 2 emissions
- The Company also gauged the natural GHG absorption capacity of gangue at its tailings storage facilities. In 2024, total absorption amounted to 375 kt of CO_2 equivalent and was verified by TÜV Austria

Further development of permafrost monitoring at the Norilsk site continued in 2024. The geotechnical monitoring system, which controls the technical condition of the foundations of buildings and structures was expanded to include a background permafrost monitoring system focused on the natural landscapes of the Norilsk Industrial District. The data collected within a unified information and diagnostic system will support more accurate modelling of permafrost temperatures in the region and help refine forecasts of permafrost degradation. The monitoring system is the Company's key climate change adaptation project, with a budget of approximately RUB 3 billion

Key climate change metrics for 2024

IFRS S2 29e

7.1 mln t of CO_2 equivalent[1]
Scope 1 GHG emissions

6.7 mln t of CO_2 equivalent
Total Scope 3 GHG emissions, including:

1.2 mln t
upstream Scope 3 emissions

5.5 mln t
downstream Scope 3 emissions

0.4 mln t of CO_2 equivalent
Scope 2 GHG emissions

54.4%
Share of renewable electricity across the Group

RUB 4.8 billion
Spending on climate action initiatives

Product carbon footprint[2]
(kg of CO_2 equivalent per g of metal):

Pd 24.6
Pt 24.7
Rh 36.9

(kg of CO_2 per kg of metal):

Metal **Ni** 8.9
Sulphate **Co** 2.6
Sulphate **Ni** 3.0
Cathodes **Cu** 3.8
Metal **Co** 39.0

[1] Including a GHG emissions provision for the Sulphur Project at Nadezhda Metallurgical Plant and excluding GHG emissions generated from heat and electricity supplies to the public.

[2] According to ISO 14044, a 100-year global warming potential (GWP) metric was applied. The calculation includes a GHG emissions provision for the Sulphur Project at Nadezhda Metallurgical Plant.