GREENHOUSE GAS EMISSIONS AND CARBON FOOTPRINT OF PRODUCTS

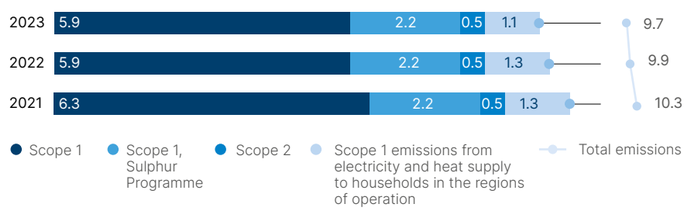
GRI 305-1, 305-2, 305-4/ SASB EM-MM-110a.1

Nornickel uses the GHG Protocol methodology to calculate its GHG emissions (Scope 1 and 2), taking into account carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4) emissions, with no or insignificant emissions of other greenhouse gases. The quantitative assessment of Scope 1 GHG emissions also includes the Company's estimated prospective GHG emissions associated with the implementation of the Sulphur Programme.

In 2023, direct and indirect GHG emissions (Scope 1 and 2) decreased by 0.2 mt of CO_2 equivalent y-o-y to a total of 9.7 mt of CO_2 equivalent, including the GHG provision for the Sulphur Project and the supply of heat and electricity to retail customers. The Company's direct GHG emissions amounted to 9.2 mt of CO_2 equivalent[1] and indirect energy emissions, to 0.5 mt of CO_2 equivalent. Indirect energy emissions were calculated using the location-based method, taking into account regional coefficients.

Trans-Baikal Division entered into a bilateral agreement for the purchase and sale of 212.1 million kWh of electricity (up 20% y-o-y) generated by third-party hydroelectric power plants. This initiative led to a reduction of Scope 2 GHG emissions in 2023 by more than 200 kt of CO_2 equivalent.

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



The reduction in the Company's GHG emissions (Scope 1 and 2) was driven by the following factors:

- lower unit fuel consumption associated with electricity generation resulting from optimised equipment operation at heat and power plants;
- increased reliance on hydro power plants as part of overall energy system optimisation;
- reduction in the volume of diesel fuel used up by heat and power plants in 2023 compared to 2022.

The intensity of GHG emissions (Scope 1 and 2) was 6.1 t of CO_2 equivalent per RUB 1 mln of consolidated IFRS revenue.

In 2023, Nornickel submitted a report on GHG emissions to the Ministry of Economic Development of Russia for inclusion of relevant data into the registry of GHG emissions[3].

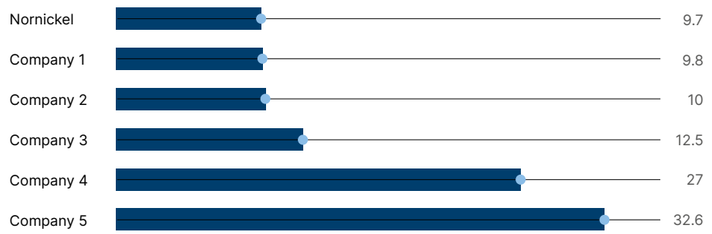
Emissions data verification by an independent auditor

In 2023, TÜV Austria verified GHG emission sources and gross CO_2 emissions (Scope 1 and 2) across all divisions of Nornickel Group and issued a generalised verification statement.

Only direct GHG emissions are included in the quantitative assessment of emissions. GHG emissions are calculated in accordance with Order No. 371 On Approving Methods for Quantitative Assessment of Greenhouse Gas Emissions and Absorption dated 27 May 2022.

Comparison with global metals and mining peers

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



Source: the Company's analysis based on the most up-to-date available data (2023 financial year) Peers include leading global diversified metals and mining companies: BHP Billiton, Rio Tinto, Vale, Glencore, and Anglo American.

GHG emissions (downstream and upstream Scope 3)

GRI 305-3

The Company conducts an annual quantitative assessment of Scope 3 emissions that arise outside of Nornickel Group's operations and are beyond its control. These emissions are categorised as upstream and downstream emissions.

Their quantitative assessment follows the recommendations of the GHG Protocol and IPCC Guidelines for National Greenhouse Gas Inventories.

[1] Including a GHG emissions provision for the Sulphur Project and GHG emissions generated from heat and electricity supply to households.
[2] GHG emissions are calculated in line with the GHG Protocol methodology. The Group's GHG emissions include the following greenhouse gases: direct carbon dioxide (CO_2) emissions of 9.5 mt, nitrogen oxide (N_2O) emissions of 51 t, methane (CH_4) emissions of 5.2 kt (mainly generated by gas transportation units), including the Sulphur Programme and the heat and electricity supply to households. The calculation includes potential GHG emissions after the completion of the Sulphur Programme. Group data, including foreign companies of Kola Division.
[3] In accordance with Federal Law No. 296-FZ On Limiting Greenhouse Gas Emissions dated 2 July 2021.

GHG emissions (Scope 3),
mt of CO_2 equivalent[1]

Indicator	2021	2022	2023
Upstream, including	**1.4**	**1.4**	**1.3**
purchased goods and services	0.8	0.9	0.8
CAPEX	0.1	0.1	0.1
energy and fuel	0.4	0.3	0.3
other	0.1	0.1	0.1
Downstream, including	**4.0**	**3.9**	**5.1**
downstream transportation and distribution (category 9)	0.2	0.2	0.2
processing of sold products (category 10)	3.8	3.7	4.9
TOTAL SCOPE 3 EMISSIONS	**5.4**	**5.7**	**6.4**

In 2023, the Company continued to publicly disclose its quantitative estimates of upstream Scope 3 GHG emissions, covering all emission categories required by the GHG Protocol. The bulk of the emissions are related to the purchase of goods and equipment from third-party suppliers and to energy and fuel consumption (to the extent not included in Scope 1 and 2).

In 2023, total emissions (upstream Scope 3) amounted to 1.3 mt of CO_2 equivalent. The decrease in upstream Scope 3 emissions was primarily driven by the reduced reliance on diesel fuel for electricity generation in the Norilsk Industrial District, as well as the divestment of NordStar Airlines in 2022.

Downstream Scope 3 emissions are associated with the transportation of the Company's products from production assets to consumers and subsequent processing.

The assessment covers the following types of products: nickel, copper, cobalt, PGM, gold, copper and nickel semi-products, and iron ore concentrate. Among these, the bulk of emissions stem from the sale of semi-products to third parties beyond the Group.

The increase in downstream Scope 3 emissions was driven by changes in the Group's sales volumes, product mix and customer portfolio, as well as the geographical distribution of sales. The key driver behind higher downstream Scope 3 emissions in 2023 compared to 2022 was the rise in sales of semi-products, primarily iron ore concentrate produced by GRK Bystrinskoye

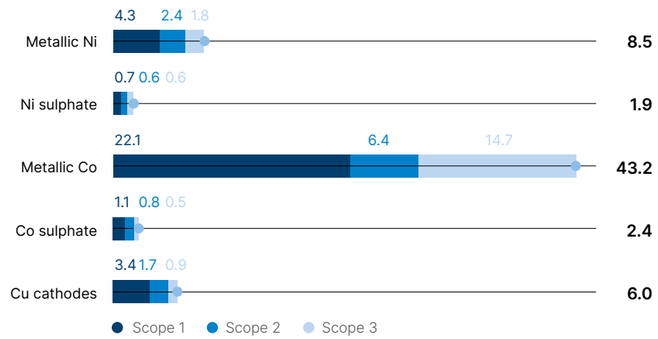
The Company continuously improves the methodology for quantifying downstream Scope 3 emissions by monitoring international guidelines like ISO and ICMM standards, taking part in drafting industry recommendations through the Nickel Institute and International Platinum Group Metals Association, and collaborating with the buyers of its products to gather data on emissions during product processing.

[1] In order to standardise the approach to identifying sources of GHG emissions, the calculation uncertainty of upstream Scope 3 emissions was reduced by excluding insignificant sources within the categories of Purchased Goods and Services, and CAPEX from the calculation boundaries. As a result, the emissions data for 2022 was recalculated using the new approach. In 2022, total recalculated emissions amounted to 1.4 mt of CO_2 equivalent.

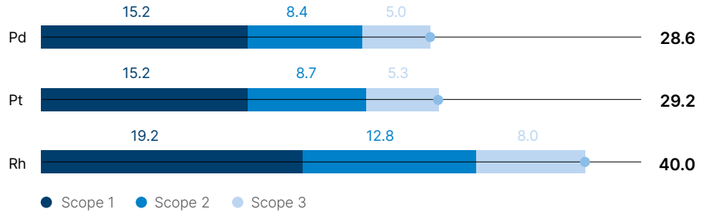
Carbon footprint of products

Assessment of products' carbon footprint in 2023[1]

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



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



Scope of products' carbon footprint calculation

End product manufacturers:

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

Manufacturers of raw materials / resources or services:

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

The carbon footprint of MMC Norilsk Nickel's products is calculated in accordance with:

- ISO 14067:2018, ISO 14040:2006, and ISO 14044:2006 standards;
- GHG Protocol Product Life Cycle Accounting and Reporting Standard methodology;
- LME passport guidance – Nickel Institute guidance for nickel producers to calculate their GHG emissions;
- the IPA's guidance: The Carbon Footprint of Platinum Group Metals: A Best Practice Guidance for the Calculation of GHG of Primary Produced PGMs.

In 2023, the Company made efforts to align its corporate methodology for calculating the carbon footprint pf products with the industry model.

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

[1] Including the Sulphur Programme provision. Group data, including foreign companies of Kola Division.