



UPDATE OF THE CORPORATE ENVIRONMENTAL AND CLIMATE CHANGE STRATEGY

2024



2020

Environmental and Climate Change Strategy drafted



2021

Environmental and Climate Change Strategy approved by the Board of Directors



2023

Updated Environmental and Climate Change Strategy (divided into mandatory and voluntary parts) approved by the Board of Directors










2024

Annual strategy update carried out in line with the directive of the President of Nornickel (the "Company")

Mandatory part of the Strategy

(compliance with environmental laws, regulatory requirements, and Company obligations)

Element	Proposed updated targets	Updated values		
		Baseline 2020	Actual 2023	Targets 2031
 Emergencies	Number of interregional and federal emergencies affecting the environment in the regions of operation	1	0	0
 Air	SO ₂ emissions, kt	1,911 ⁴	1,671	213
	Reduction of SO ₂ emissions, % ³	0%	7%	90%
 Water	Compliance with the Russian standards as regards pollutant concentration in discharges	–	59%	100%
	Compliance with fresh water withdrawal limits ⁷ , %	100%	100%	100%
 Tailings and waste	Compliance of waste disposal facilities with Russian regulations	95%	90%	100%
 Land	Rehabilitation of disturbed territories in 2022–2031 (reclamation ¹ , reforestation ² , sanitation, landscaping, ha)	0	247	3,996
 Biodiversity	Achievement of net zero biodiversity losses as a result of the Company's operations (Δ Integral Indicator of Ecosystem Health (IIEH)) ⁵	0.89	0 ⁶	≥ 0
 Stock exchange requirements	Compliance of Nor Nickel Harjavalta's suppliers with stock exchange requirements (London Metal Exchange, Shanghai Futures Exchange, etc.)	–	–	100%

1. Activities to prevent land degradation and/or to restore its fertility by making it fit for its initial purpose and permitted use, including inter alia by rectifying the implications of soil pollution, restoring fertile soil layer, and protective forest planting.
2. Reforestation in Trans-Baikal Division only. 3. Against the 2015 base year. 4. Baseline (2015) 5. Calculated as $\Delta \text{IIEH} = \text{IIEH}_{\text{rep}} - \text{IIEH}_{\text{base}}$ i.e. the difference in IIEH of the reporting year relative to the baseline year of the survey. 6. Baseline indicator of IIEH_{base} of 2022. 7. Installation of metering devices as per the water use agreement.

Water

Compliance with the Russian standards as regards pollutant concentration in discharges



Construction completion and commissioning outcomes



7
*treatment facilities in
the Norilsk Industrial District
constructed and launched
since 2021*



Over 6.5
mln m³/year
*industrial wastewater
treated in Norilsk's
industrial zone*



RUB 3 bn
total cost of projects



46
*treatment facilities
scheduled for
reconstruction/repair and
commissioning by 2031*



Over 15
*wastewater treatment projects currently at
various stages of implementation (at Mayak,
Komsomolsky, Oktyabrsky, Anhydride,
Zapolyarny, Kayerkansky mines,
Monchegorsk and other sites)*



11
*effluent discharge points to
be eliminated by 2031*

Waste

Compliance of waste disposal facilities (WDF) with Russian regulations



5 compliance assessment criteria

- ☐ Waste management licence in place
- ☐ WDF design documentation developed and approved following state environmental expert review (for facilities commissioned after 2008)
- ☐ WDF registered in the state waste disposal facility registry
- ☐ Sanitary buffer zone established around the WDF
- ☐ No outstanding orders issued by environmental authorities



In 2024, a 5.8 ha industrial waste landfill with a capacity of 26.8 ktpa was commissioned in Monchegorsk



Industrial Waste Dump No. 3, Norilsk. In November 2024, the environmental certificate of compliance for a capital construction facility was obtained, certifying adherence to approved design documentation that has passed the state environmental expert review

Biodiversity

Goal: no negative changes in ecosystem health relative to the baseline year, tracked through Δ IIEH

Goal 2031: Δ IIEH ≥ 0

Key projects:

Conducting three-year scientific studies to establish baselines and identify and assess biodiversity impacts

Transitioning from centralised Head Office-led research to continuous divisional-level monitoring

Evaluating ecosystem services at sites of Polar and Energy Divisions

Implementing divisional biodiversity conservation initiatives

Ongoing support for specially protected natural areas across the regions of operation

Maintaining biodiversity indicators at current levels

Biodiversity conservation and monitoring in 2022–2031:









Annual monitoring assesses positive/negative changes via the delta (Δ) of the Integral Indicator of Ecosystem Health (IIEH)

Division	Initiative	2022 Actual	2023	2024	2025	2026	2027	2028	2029	2030	2031 Goal
Norilsk Division	Biodiversity monitoring	$IIEH_{base} = 0.826$	$\Delta=0$	$\Delta=0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta=+0.001$	$\Delta=+0.005$	$\Delta=+0.01$
Kola MMC	Biodiversity monitoring	$IIEH_{base} = 0.93$	$\Delta=0$	$\Delta=0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta=+0.001$	$\Delta=+0.005$	$\Delta=+0.01$
GRK Bystrinskoye	Biodiversity monitoring	$IIEH_{base} = 0.913$	$\Delta=0$	$\Delta=0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$
Energy Division	Biodiversity monitoring	$IIEH_{base} = 1$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$	$\Delta \geq 0$

The baseline value is set as $IIEH_{base}$ for 2022. Each reporting year's actual value is calculated using the formula: $\Delta IIEH = IIEH_{rep} - IIEH_{base}$ i.e. the difference between the reporting year's IIEH and the baseline year's IIEH. An increase in biodiversity is anticipated due to the implementation of the Sulphur Project in Norilsk and the decommissioning of the smelter shop in Nickel. This recovery is expected as ecosystems self-restore following the elimination of the stress factor.

Mandatory part of the Strategy




204 measures, with a total indicative budget of RUB 248 bn for 2025–2031¹

		Mandatory part of the Environmental and Climate Change Strategy				
		9 goals	7 goals	9 goals	7 goals	7 goals
Division's programme		Polar Division (Norilsk)	Energy Division	Polar Division (Kola MMC)	Trans-Baikal Division	Logistic Division
		80 measures	37 measures	43 measures	7 measures	37 measures
				Division-level measures		
	Water	36 measures	24 measures	8 measures	2 measures	18 measures
	Air	11 measures	1 measures	8 measures	3 measures	5 measures
	Tailings and waste	9 measures	4 measures	9 measures	-	-
	Land (reclamation, reforestation, and sanitation)	11 measures	7 measures	15 measures	1 measures	3 measures
	Emergencies, permafrost	5 measures	-	-	-	9 measures
	Biodiversity	8 initiatives	1 measures	3 measures	1 measure	2 measures
Indicative budget OPEX/CAPEX		RUB 23 bn / RUB 192 bn	RUB 1 bn / RUB 10 bn	RUB 5.8 bn / RUB 8.7 bn	RUB 0.5 bn / RUB 0.7 bn	RUB 6.6 bn

1. Including the Sulphur Programme in Polar Division (Norilsk) and IT projects across the divisions.

Voluntary part of the Strategy

(compliance with international standards, public image events, climate change)

Element		Proposed updated targets	Updated values		
			Baseline 2020	Actual 2023	Targets 2031
	Climate change	Volume of GHG emissions (Scopes 1 and 2), mt of CO ₂ -eq.	8.5 ¹	8.3 ¹	TBD ⁵
		Specific GHG emissions (of facilities involved in the manufacturing of finished metal products) per tonne of Ni-eq., tonnes of CO ₂ -eq.	4.06	4.26	
		Share of renewable energy use	46% ²	55% ²	
	Tailings and waste	Share of non-mineral waste recycling, %	16%	6% ⁶	TBD ⁵
		Share of mineral waste (other than gypsum waste) recycling, %	20%	20%	
		Share of gypsum waste recycling ⁴ , %	-	-	
	Standards	Compliance with sustainability standards	Implementation of the Roadmap for Ensuring the Company's Compliance with International Sustainability Standards and the Roadmap for Climate Change Adaptation		

1. Baseline 2021, net of GHG emissions from supplying local communities and other electricity and heat consumers, including the Sulphur Programme and logistics. 2. The Company's ESG report. 3. London Metal Exchange. 4. The use of gypsum is being researched. The targets will be defined once the work streams and technologies have been identified. 5. The targets will be updated in 2024–2025. 6. The decrease in recycling rate is due to the inclusion of Energy Division in the Strategy and the fact that Norilsk Division is carrying out sanitation generating large amounts of construction waste that is being landfilled rather than recycled.

Climate change

Key initiatives

- ❑ Copper Plant reconfiguration
- ❑ Natural mineralisation of waste rock at tailing dumps
- ❑ Energy efficiency activities
- ❑ Climate-related projects
- ❑ Higher share of renewable energy use
- ❑ Potential construction of a nuclear power plant in the Norilsk Industrial District

CAPEX = RUB 72 bn OPEX = RUB 28 bn
Annual effect = 1.8 mt of CO₂-eq.

Nornickel reaffirms its commitment to reducing GHG emissions in its regions of operation and contributes to achieving the national goals of Russia's climate agenda

- + **The target year for the Company's carbon neutrality is 2060** (in line with Russia's Carbon Neutrality Strategy)
- + The goal is to maintain GHG emissions at no more than 10 mt of CO₂-eq. by 2031 (Environmental and Climate Change Strategy)
- + Nornickel's GHG emissions report is submitted annually to the Russian Ministry of Economic Development with a view to adding relevant data to the national GHG emissions registry
- + GHG emissions data for Nornickel Group and the product carbon footprint are verified annually by an international verifying organisation
- + The progress of implementing key decarbonisation measures is reviewed by the Corporate Risk and Investment Committee

Russian laws and regulations: Federal Law No. 296-FZ On Limiting Greenhouse Gas Emissions dated 2 July 2021; annual reporting to the Ministry of Economic Development of Russia; Russia's Strategy for Socio-Economic Development with Low Greenhouse Gas Emissions until 2050; the Climate Doctrine of the Russian Federation



Risks

Financial risks

- Additional costs associated with national and cross-border carbon regulation
- Reduced revenue due to the impact of energy transition on palladium demand/prices
- Reduced revenue due to decreased liquidity (non-compliance with exchange requirements)
- Limited access to green financing

Investment risks

- Credit rating downgrades
- Reduced capitalisation

Physical risks

Losses from accidents and operational disruptions caused by long-term environmental changes

Goal 2031: XX%

10

Standards

Compliance with sustainability standards



Prerequisites for goal achievement

Relevance



2021

- **Requirements** of existing investors
- **Attracting** new investors
- **Requirements** of clients from the USA and EU
- **LME requirements**¹

2024

- **Retaining** existing clients
- **Requirements** of clients from Asia and Western countries
- **LME requirements**¹
- **Development** of Russian regulations aligned with international standards

	ICMM	IRMA	TCFD/S2	GRI	OECD
Customers		✓	✓	✓	✓
Competitors	✓	✓	✓	✓	✓
ESG rating agencies			✓	✓	✓
Asia-Pacific countries			✓	✓	✓

Source: Company data
Note: 1. London Metal Exchange



Outcomes

1

Approve targets for the mandatory part of the Strategy and its updated version

2

Consider extending the Strategy's horizon to 2035

3

Return to setting targets for the voluntary part of the Strategy during the 2025 update

THANK YOU

