

Environmental and Climate Change Strategy

Norilsk Nickel

June 2021

Disclaimer

The information contained herein has been prepared using information available to PJSC MMC Norilsk Nickel (“Norilsk Nickel” or “Nornickel” or “NN”) at the time of preparation of the presentation. External or other factors may have impacted on the business of Norilsk Nickel and the content of this presentation, since its preparation. In addition all relevant information about Norilsk Nickel may not be included in this presentation. No representation or warranty, expressed or implied, is made as to the accuracy, completeness or reliability of the information.

Any forward looking information herein has been prepared on the basis of a number of assumptions which may prove to be incorrect. Forward looking statements, by the nature, involve risk and uncertainty and Norilsk Nickel cautions that actual results may differ materially from those expressed or implied in such statements. Reference should be made to the most recent Annual Report for a description of major risk factors. There may be other factors, both known and unknown to Norilsk Nickel, which may have an impact on its performance. This presentation should not be relied upon as a recommendation or forecast by Norilsk Nickel. Norilsk Nickel does not undertake an obligation to release any revision to the statements contained in this presentation.

The information contained in this presentation shall not be deemed to be any form of commitment on the part of Norilsk Nickel in relation to any matters contained, or referred to, in this presentation. Norilsk Nickel expressly disclaims any liability whatsoever for any loss howsoever arising from or in reliance upon the contents of this presentation.

Certain market share information and other statements in this presentation regarding the industry in which Norilsk Nickel operates and the position of Norilsk Nickel relative to its competitors are based upon information made publicly available by other metals and mining companies or obtained from trade and business organizations and associations. Such information and statements have not been verified by any independent sources, and measures of the financial or operating performance of Norilsk Nickel’s competitors used in evaluating comparative positions may have been calculated in a different manner to the corresponding measures employed by Norilsk Nickel.

This presentation does not constitute or form part of any advertisement of securities, any offer or invitation to sell or issue or any solicitation of any offer to purchase or subscribe for, any shares in Norilsk Nickel, nor shall it or any part of it nor the fact of its presentation or distribution form the basis of, or be relied on in connection with, any contract or investment decision.

Summary of the Environmental and Climate Change Strategy

- 1** **Benchmarking and as-is Analysis**

The strategy factors in the long-term requirements of key stakeholders (employees, local communities, customers, investors, NGOs and the government) and benchmarks the Company against peers and international standards

Potential improvements are identified and implemented: setting long-term environmental and climate change goals through 2030 in six dimensions (climate change, air, water, tailings and waste, land and biodiversity), drafting detailed action plans and increasing reporting transparency
- 2** **Environmental and Climate Change Strategy**

Nornickel set 21 strategic goals through 2030; by achieving them over this period, Nornickel will gain leadership among global metals companies across climate change, water and land dimensions, and align its operations with best practices in air, tailings, waste and biodiversity management

In 2021, Company will design environmental and climate change strategies at the division level and adjust a number of strategic metrics

The strategy defines relevant programmes in need of a detailed review (waste balance and disposal and gypsum use options)
- 3** **Governance Model, Organisation and KPIs**

Nornickel set up new environmental and climate change management processes in the Head Office and modified the supporting organisational structure, while also introducing incentives and KPIs to achieve strategic objectives (short-term targets and the Long-Term Incentive Programme for 2021–2023)

In 2021 Company will decompose strategic KPIs to various management levels
- 4** **Strategy Roadmap for 2021**

In 2021, Nornickel will develop a long-term strategy roadmap based on the list of strategic projects and initiatives

On top of that, the roadmap will provide for new management and reporting processes, membership in associations and changes in accordance with ICMM and IRMA requirements as well as TCFD and GHG Protocol reporting standards

Nornickel Embarks on an Environmental Journey: Clear Focus on Achievable and Measurable Results with Maximum Impact on Environment

2020

Short-term:
2021-2024

Medium-term:
2025-2030

Long-term:
2030-...



Deep understanding of stakeholders' expectations
Org changes to strengthen sustainability function and risk-management processes
Environmental and climate change strategy was developed
Recent environmental incidents mitigation



Fix the Basics & Regain Trust

Continue Sulphur program, initiate and complete clean-up and rehabilitation programs
Implement initiatives to comply with key global standards (e.g., IRMA, ICMM, TCFD)
Hardwire organizational changes (e.g. link environmental KPIs to incentives)
Enhance environmental risk-management
Ensure environmental transparency based on thorough internal and external audits
Kick-start cultural changes in company
Initiate research, partnerships (e.g. on permafrost)



Reach Global Standards

Comply with all key global standards (e.g., IRMA, ICMM, TCFD, Global Tailings Standard)
Continue implementation of Sulphur program, strategic environmental initiatives
Implementation of projects related to water, wastes, land rehabilitation and biodiversity
Build worldwide leading capabilities in permafrost research, establish global network of scientific and industrial partners



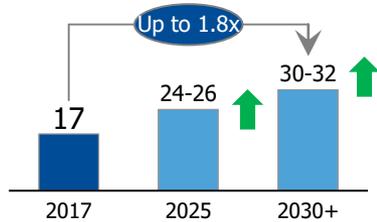
Become Recognized Eco Player ("Green Nornickel")

Implement Sulphur program and strategic environmental initiatives
Leading position among peers in climate change, water and land
Reach benchmark or higher levels on all dimensions of Environmental Strategy
Build green tech capabilities, incl. becoming external provider of green tech for companies worldwide

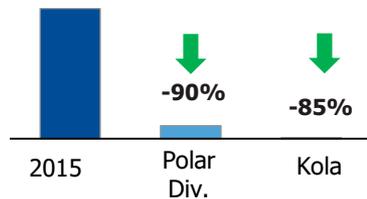
The Main Blocks of Nornickel's Environmental and Climate Change Strategy Concept

Nornickel Strategy

Ore mining in Norilsk, Mt/year



Sulphur 2.0 – reduce in SO₂ (vs. 2015) and capacity closure



Territory cleaning program

- Sanitary cleanup of the Polar Division territory
- Dismantling of Nickel Plant
- Dismantling of the Smelting Shop
- Dismantling of Metallurgical Shop
- Dismantling of power engineering assets being modernized



Nornickel's Environmental and Climate Change Strategy



Comments:

1. A separate project to clarify the approach to environmental risks is formed
2. It is planned to form roadmaps of future technologies on the key directions of the strategy concept in the field of ecology and climate change

18 Targets Have Been Defined as Part of the Implementation of the Nornickel's Environment and Climate Change Strategy (1/2)

Strategy Area	Target
 Climate Change	<ol style="list-style-type: none">1. Maintain absolute Scope 1 and 2 GHG emissions from operations at around 10 mt of CO₂ equivalent through 2030 despite growing production by 30–40% (Ni equivalent vs 2017)2. Keep Scope 1 and 2 GHG emissions per t of Ni-equivalent in the bottom quartile of global metals and mining industry GHG intensity curve
 Air	<ol style="list-style-type: none">3. Reduction of SO₂ emissions at the Kola Division by 85% in 2021, at the Polar Division — by 90% in 2025, compared to the values of 2015
 Water	<ol style="list-style-type: none">4. No emergencies on a regional and federal scale5. Reduction of the volume of pollutants discharged by 25% compared to 2019 and achieving the permissible discharge standards: 159 kt by 20316. Maintaining fresh water intake (except for underground mine water) for production below 120 M m³7. Keeping the level of water recycling and reuse above 80%8. Elimination of past pollution, related to the accident at HPP-3 — cleaning the water bodies to the standard values by the end of 2022

18 Targets Have Been Defined as Part of the Implementation of the Nornickel's Environment and Climate Change Strategy (2/2)

Strategy Area	Target
 Tailings Storage Facilities and Waste	<p>9. Disposing of 100% of waste from new projects to environmentally safe facilities, provided with best-in-class technology, starting at 2025</p> <hr/> <p>10. Disposal (collection and recycling) of 100% of accumulated waste by 2030</p> <hr/> <p>11. Increasing / keeping the share of mineral waste utilization above 30%</p> <hr/> <p>12. Increasing / keeping the share of non-mineral waste utilization (except the gypsum waste)</p> <hr/> <p>13. Increasing the gypsum waste utilization</p>
 Land	<p>14. Rehabilitation of 117 ha/year of disturbed land and land clean-up in towns and cities and near production sites</p>
 Biodiversity	<p>15. Reducing a negative impact on biodiversity, including forest conservation near production sites</p>
 Expectations of Stakeholders, Their Involvement, Communication	<p>16. Compliance with the TCFD principles</p> <hr/> <p>17. Join ICMM</p> <hr/> <p>18. Join IRMA</p>

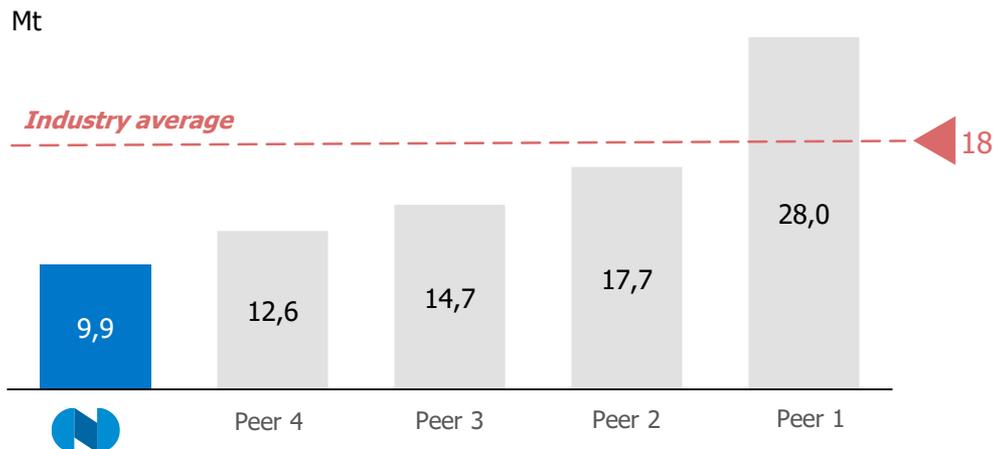
Nornickel's Position Statement on Climate Change

We will...

-  1 Provide world with clean products, which help reduce CO₂ footprint of global economy: production growth of Ni by 20-30%, Cu by 20-30%, Pt+Pd by 40-50% by 2030 vs 2017
-  2 Keep our Scope 1+2 GHG emissions per t Ni-eq in the first quartile of global M&M industry GHG intensity curve
-  3 Continue to maintain absolute Scope 1+2 GHG emissions from operations at ~10 Mt CO₂e by 2030
-  4 Manage climate-related risks by building resilience strategies
-  5 Drive GHG emissions reduction in the long-term across value chain by working both with customers and suppliers
-  6 Strive to increase low-carbon energy usage
-  7 Encourage shift to low carbon paradigm by using R&D to help find and expand new solutions and by engaging into intra- and cross-industry climate dialogue
-  8 Make a commitment to comply with globally recognized Standards of disclosure related to climate change (where required)

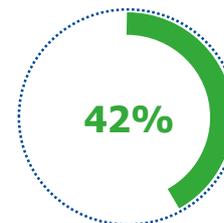
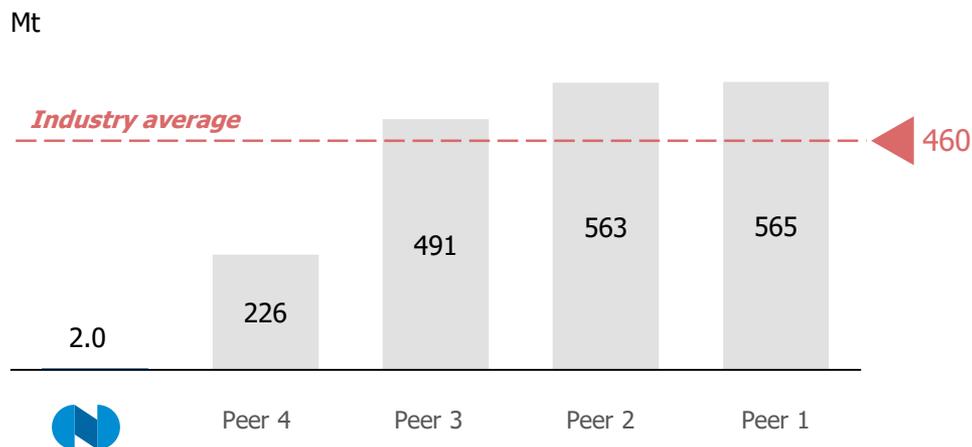
Competitive Position of NN in Terms of Greenhouse Gas Emissions: Significantly Lower Than Global Competitors

Greenhouse Gas Emissions Scope 1&2 (CO₂e) ⁽¹⁾



2017-2019 average share of renewables in total electricity consumption in the Norilsk Region

Greenhouse Gas Emissions Scope 3 (CO₂e) ⁽¹⁾



2017-2019 average share of renewables in total electricity consumption for the Group as a whole

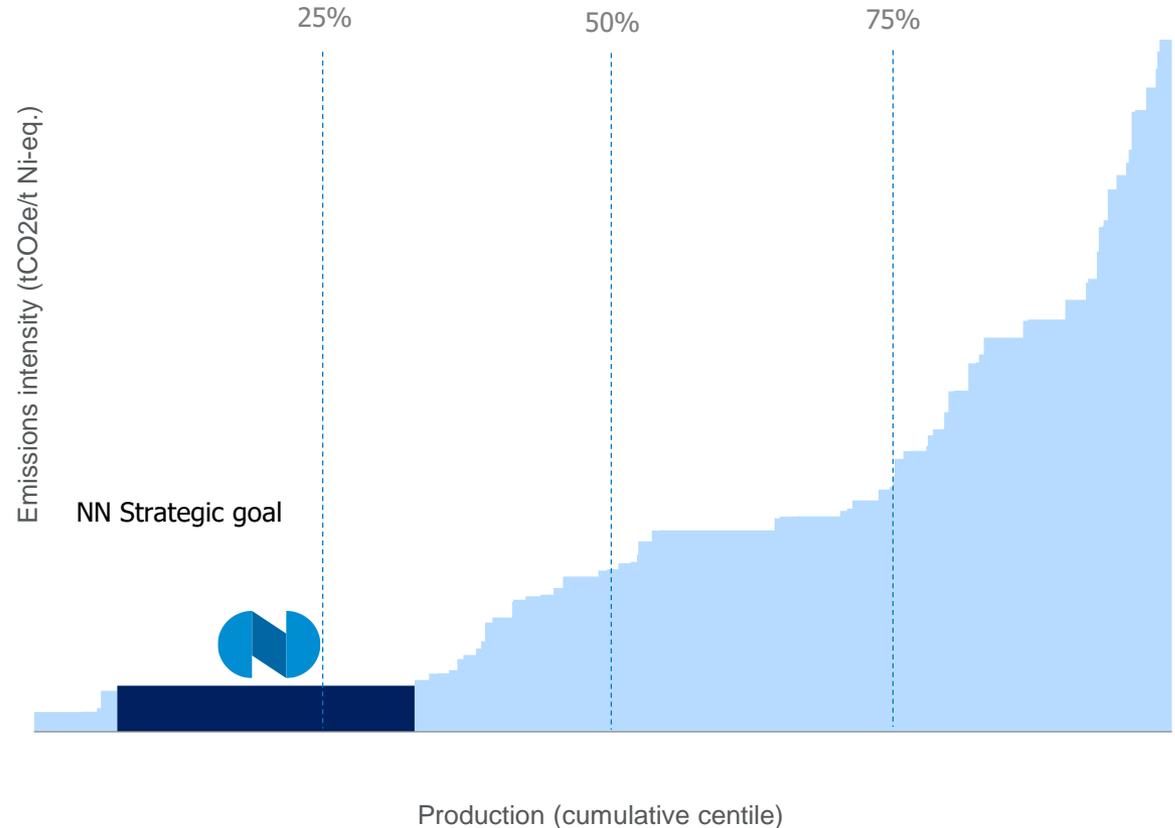
Source: public statements of competitor/diversified mining companies (BHP, Vale, AngloAmerican, Freeport and RioTinto)
 1. 2019 estimates in accordance with GHG Protocol Corporate Accounting and Reporting Standards. GHG emissions include emissions from the power supply of the regions of operations by NTEC and the reserve of CO₂ emissions from the implementation of the Sulfur Program 2.0

The Lowest Quartile of the Emission Intensity of Base Metals. The Strategic Goal Is to Maintain the Industry's Leading Position in the 1st Quartile

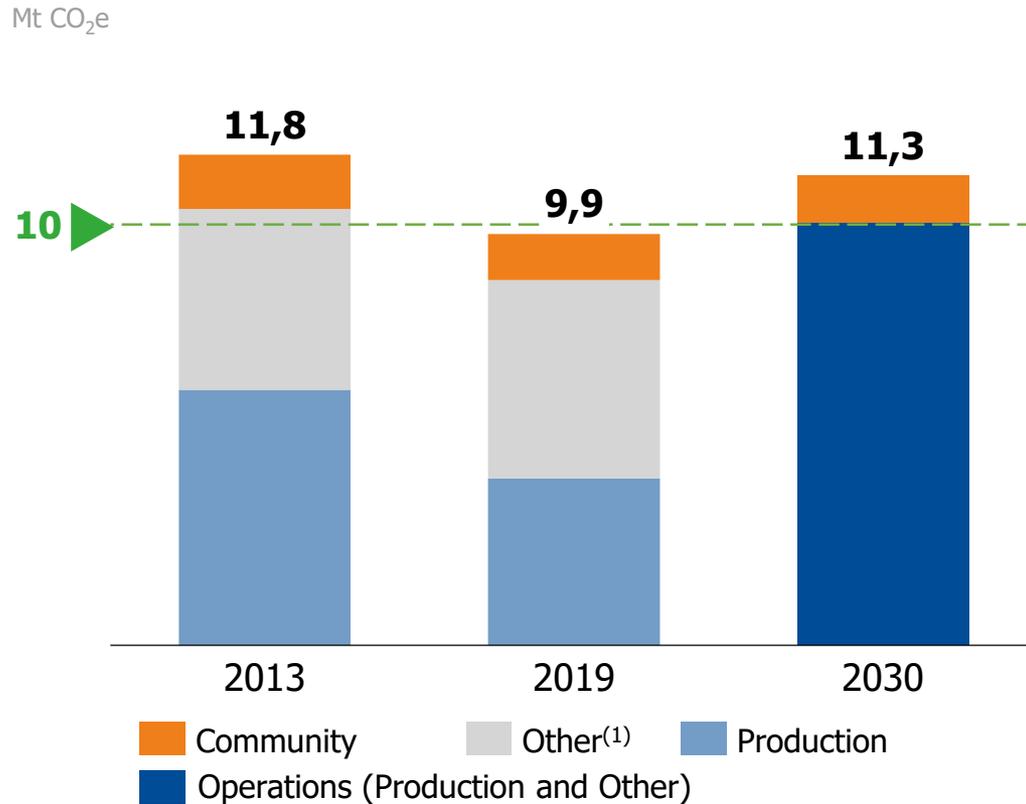
Nornickel's comprehensive leadership on both the cost curve and the CO₂e intensity curve will provide a unique competitive advantage in tomorrow's economy

Long-term goal is to maintain the industry's leading position in the 1st quartile of the CO₂ emissions intensity curve

Nornickel Position (tCO₂e/t Ni-eq.) on Nickel



Climate Change Goal 2030 Is to Keep Scope 1&2's Production Greenhouse Gas Emissions No Higher Than 10 Million Tons of CO₂e



Goal 2030 is to keep Scope 1&2 production emissions no higher than 10 million tons of CO₂e ...

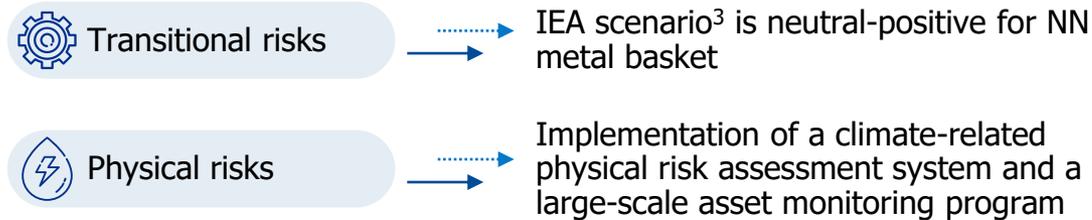
...despite the production growth and implementation of the Sulfur 2.0 program

Climate Change Strategy

Strategic Objectives 2030

- 1 Keep** production absolute greenhouse gas emissions Scope 1&2¹ no higher than **10 million tons CO2e**
- 2 Maintain** the greenhouse gas emission intensity of Scope 1&2 per ton of Ni-equivalent in the **first quartile** of global industry producers²

Climate Risk Assessment and Management



Key Initiatives of the Climate Change Strategy



Key Initiatives 2021+

- Development and implementation of a system of geotechnical monitoring of foundations of buildings and structures of industrial and municipal facilities located on permafrost soils in Norilsk (including a satellite system and GIS)
- Implementation and execution of the strategy at the division level:
 - Developing key initiatives to mitigate physical risks, improve energy efficiency, and reduce CO₂ emissions
 - Development of capital expenditure plans and project timeline
- Bringing climate change disclosure in line with TCFD requirements

Source: Company assessment

1. Production emissions do not include energy supply for regions of operation; 2. Based on Wood Mackenzie estimate of the emission intensity curve for global industry producers (CO₂e per tonne Ni eq.). 3. Sustainability Scenario of the International Energy Agency

3 Major Groups of Initiatives in Climate Change Identified

Further potential and budget assessment of physical risks mitigation, energy efficiency initiatives and CO2 emissions reduction needed

1 Examples of Physical Risks Mitigation Initiatives

- Reconstruction of diesel emergency plant at TPP-1, TPP-2 and TPP-3
- Reconstruction of power transmission lines
- Creation of a geotechnical monitoring system for buildings and structures, including hydraulic structures, other

Preliminary assessment

Capital expenditures to be adjusted

2 Examples of Energy Efficiency Initiatives

- Reconstruction (replacement) of power units' equipment in NTEK
- Reduction in power consumption for compressor air production
- Etc.

Preliminary assessment

Energy efficiency potential

Capital expenditures to be adjusted

>230 TJ

3 Examples of CO₂ Abatement Initiatives

- Construction of LNG plant in Bear Creek
- Liquefied carbon dioxide production at TPP-2
- Etc.

Preliminary assessment

CO₂ abatement potential¹

Capital expenditures to be adjusted

>0.3 Mt CO₂

Source: company's analysis

Note 1. Including effect from energy efficiency initiatives

Note: based on existing and assessed projects

Nornickel Position Statements on Air

We will ...



1

Reduce Polar division SO₂ emissions by 90% in 2025 and by 95% in 2030+ (vs. 2015)



2

Reduce Kola division SO₂ emissions by 85% in 2021 (vs. 2015)



3

Keep other air emissions (NO_x, solids, etc.) at one of the lowest levels in industry



4

Introduce air quality monitoring system to assess and act upon ambient air quality and dust associated with mining



5

Commit and comply with global standards in air pollution related disclosure (where applicable)

Nornickel Position Statement on Water

We will ...

-   1 Reduce water pollution levels to Russian sanitary standards (where required)
-  2 Maintain efficient water management and keep recycled and reused water levels at 80% or higher
-  3 Keep absolute fresh water intake volumes (except mine waters) for production purposes below 120 million m³
-  4 Develop water balances for all production assets and start implementing automated online monitoring of all water intakes and discharges, including pollutant release, in 2022
-   5 Implement scientific recommendations by the Big Norilsk Expedition on the bioremediation of water bodies
-  6 Continue to provide quality drinking water for municipalities
-  7 Implement leading sustainability standards, that NN decided to comply with
-  8 Improve the risk management system to prevent regional and federal level emergencies

Strategic Initiatives Outline Goals Along 7 Areas (1/2)

Goals	Current State	Proposed Objective
01 Reduce pollutant discharges	210.6 Kt in 2019	25% reduction from 2019 and achieve permissible release standards: 159 Kt
Incl. Comprehensive measures to eliminate the consequences of the accident at HPP-3 ¹	34,451 m3 of water-fuel mixture has been collected ²	Cleanup to allowable values
02 Keep high water recycling and reuse levels	87%	Keep at 80% of higher
03 Reduce absolute fresh water intake (excl. mine water) for production purposes	117M m3	Keep below 120M m3

Note 1. https://www.nornickel.ru/upload/iblock/391/Norilsk-Nicke_HPP3-accident-update-as-of-October-7th-RUS.pdf
 2. As of September 28, 2020

Strategic Initiatives Outline Goals Along 7 Areas (2/2)

Goals	Current State	Proposed Objective
04 Collect information on all discharges	Started collecting information on all discharges	Have full picture of all discharges by February 2021
Incl. Implement of automated monitoring systems for water accounting and create water balances	Offline monitoring, water balance for Polar Division	Automated online monitoring for internal use and water balance for all assets
05 Implementation GNE recommendations ¹	GNE ¹ is in the exploration stage	Set and attain targets
06 Provide drinking water to people	Provide drinking and public water supply	Revamp water supply systems By 2026, bring the quality of drinking water supply in line with sanitary regulations and standards
07 Start monitoring the substances required by IRMA according to EU requirements	Low concentration of substances in question, but no monitoring	Perform diagnostics to identify presence of substances, start monitoring of substances

Nornickel's Position on Tailings and Waste

We will ...

-  1 Ensure high waste recycle and reuse rates: maintain the mineral waste recycle and reuse proportion at at least 30%
-  2 Develop a strategy for handling non-mineral waste, including gypsum
-  3 Perform a sanitary cleanup of production unit areas
-  4 Place 100% of waste under new projects using technology solutions that minimize the environmental impact, starting from 2025
-   5 Implement the principles of the Global Industry Standard for Tailings Management, including the prioritization of control and minimizing the physical risks associated with hydraulic facilities, including tailings storage facilities
-   6 Perform an independent audit and publish the results

Strategic Tailings and Waste Initiatives Outline Goals Across 8 Areas (1/2)

Goals

Current State

Proposed Objective

<p>01 Maintain the mineral waste recycle and reuse ratio</p>	<p>NN is 62.5% overall (SD Report), 37% (data from divisions with the increased proportion of ZAB taken into account) NOR: 65% KOL: 52% ZAB: 18-20%</p>	<p>Maintain the recycle and reuse ratio at at least 30%, including With the growing generation volume Develop a waste mass balance planning model</p>
<p>02 Increase /maintain non-mineral waste recycle and reuse ratio (except gypsum)</p>	<p>Generation of 795 Kt with the planned growth of up to 1,500 Kt per year in 2022</p>	<p>Strategic target quantified until '30</p>
<p>03 Increase/ maintain gypsum waste recycle and reuse ratio</p>	<p>Generation of gypsum waste is expected to increase to 8.9 Mt per year with a recycle and reuse ratio of 45%</p>	<p>Strategic target quantified until '30</p>
<p>04 Sanitary cleanup of production facility sites</p>	<p>A waste collection and recycling unit is being set up</p>	<p>100% of accumulated waste collected and recycled by 2030</p>

Strategic Tailings and Waste Initiatives Outline Goals Across 8 Areas (2/2)

Goals	Current State	Proposed Objective
05 Place waste at environmentally safe facilities using technology solutions minimizing environmental impact	Started introduction of new technologies in tailings dam construction	100% of waste will be placed at environmentally safe facilities by 2025
06 Implement the Global Standard on Tailings Storage Facility Management	Low level of compliance (e.g., NN meets 3 of 13 disclosure requirements)	Implement the standard
07 Conduct a comprehensive examination of production sites and adjacent territories	Rosprirodnadzor issues orders for waste collection and disposal	Responsibilities have been assigned for waste removal in NN presence areas
08 Enhance monitoring of tailings facilities	NN's digital laboratory has been developing solutions for tailings facilities	Conduct pilots on application of new technologies, implement every year



Nornickel Position Statement on Land Rehabilitation and Assets Closure

We will ...



1

Develop closure plans for all existing facilities and disclose plans to stakeholders



2

Develop approach to assess current and legacy impact on lands by mining, construction and incidents

Strategic Initiatives on Land Rehabilitation Cover 3 Areas

Goals

Current Status

Proposed Objective

01 Implement Integrated Assets Closure	Plans to close mines and tailings facilities in the Norilsk and Kola divisions	Plans to close all assets across all divisions
02 Assess affected lands	16,600 ha have been affected by mining, waste landfills, and construction 330,000 ha have been damaged, according to external estimates	330,000 ha - to be refined based on BNE results
03 Rehabilitate lands disturbed	0.3% of all disturbed lands is annually reclaimed There are reclamation plans for 11% of the disturbed land	Minimum requirements: Rehabilitate 117 ha/year In 2021, develop a land reclamation plan for 100% of damaged land and a reclamation road map



We will ...



1

Sustainably manage and protect marine and coastal ecosystems, including biodiversity



2

Restore biodiversity of water bodies



3

Ensure the conservation, restoration and sustainable use of terrestrial ecosystems, including biodiversity



4

Take actions to reduce the degradation of natural habitats, halt the loss of biodiversity and, protect and prevent the extinction of threatened species

Results and Objectives of the Environmental and Climate Change Strategy

	<p> Strong Performance</p> <p>Absolute emissions, Scope 1+2, Mt CO₂e -38%</p> <p>Absolute emissions, Scope 3, Mt CO₂e⁽²⁾ -138x</p> <p>Renewable electricity share⁽³⁾, % 1.0x</p> <p>VS Peer avg.⁽¹⁾</p>	<p> Targets</p> <p>Minimize impact on climate change (reduce CO₂ intensity emissions) and mitigate physical climate-related risks</p> <p>Key next steps: Delivery on energy efficiency, CO₂ reduction and physical risks mitigation initiatives</p>	<p> CAPEX</p> <p>TBD 2021</p>
	<p> Strong Performance</p> <p>NOx emissions, Kt -80%</p> <p>Solids / Dust, t -65%</p>	<p> Targets</p> <p>Improve air quality (reduce SO₂ emissions) in the areas of operations (Norilsk industrial area and Kola Peninsula)</p> <p>Key next steps: Execute on Sulphur Programme 2.0 and other air emissions reduction projects</p>	<p> CAPEX</p> <p>US\$ 3.6bn</p>
	<p> Strong Performance</p> <p>Total water withdrawal, M m³ -51%</p> <p>Total water discharge, M m³ -14%</p> <p>Water recycled and reused ratio, % 1.5x</p>	<p> Targets</p> <p>Maintain recycled water ratio and reduce pollution; continue providing clear water to local communities</p> <p>Key next steps: Build and run new water treatment facilities, adopt new technical solutions, remediate pollution from environmental incidents in line with GNE⁽⁴⁾ recommendations</p>	<p> CAPEX</p> <p>TBD 2021</p>

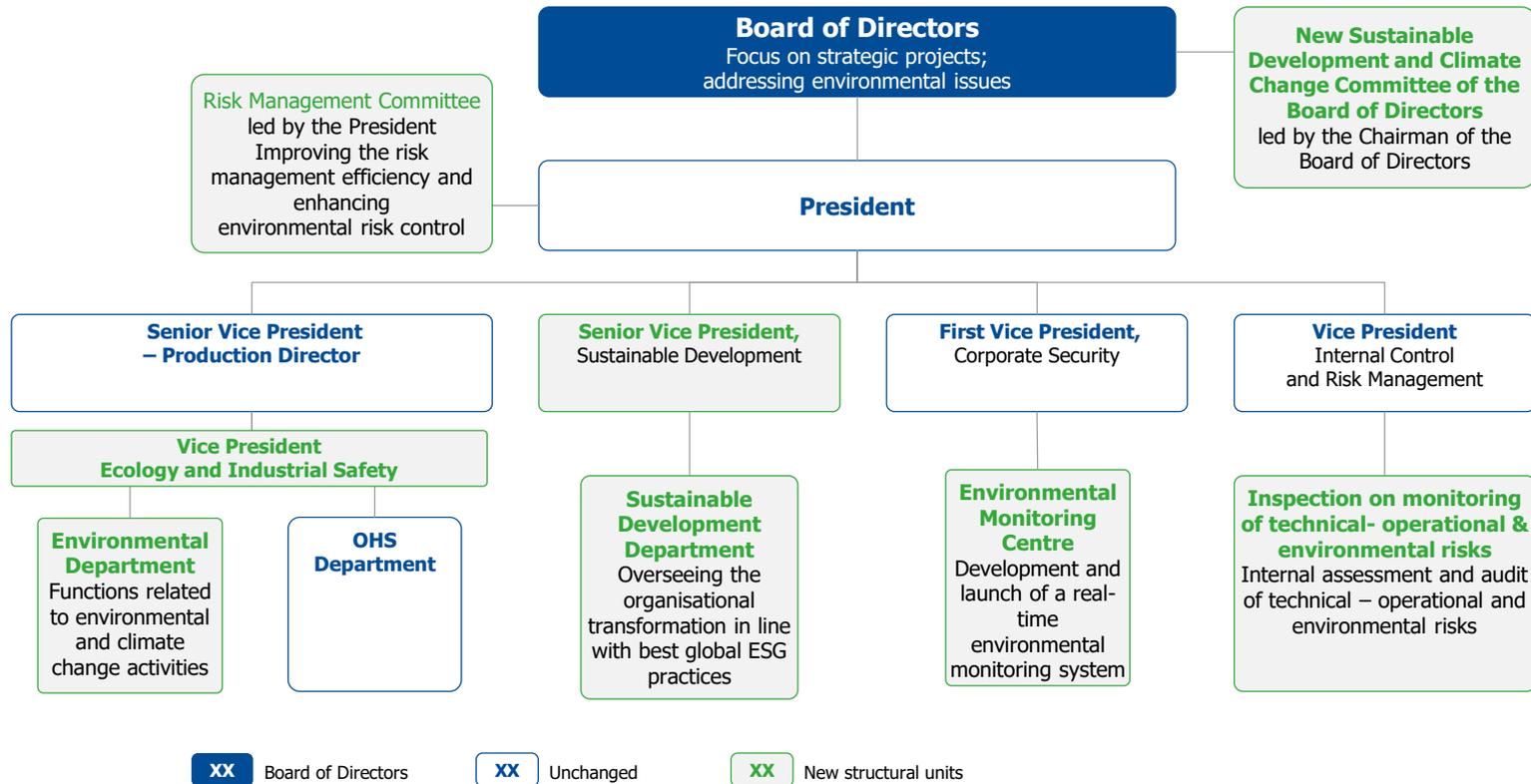
1. Peers include Anglo American, BHP Billiton, Vale, Rio Tinto, Freeport where public data is available;
 2. Incl. only downstream part of the supply chain;
 3. Of total electricity;
 4. Great Norilsk Expedition

Environmental Indicators and Objectives

 <p>Tailings & Waste</p>	<p> Strong Performance</p> <p>Non-mineral waste recycled and reused ratio, %</p> <p> VS Peer avg.⁽¹⁾</p> <p>-138x</p>	<p> Targets</p> <p>Maintain <i>safe operation</i> of tailings facilities and <i>minimize environmental impact</i> of mineral and non-mineral waste</p> <p>Key next steps : Create mass balance model for waste management and prepare for the self-assessment under Global Tailings Standard</p>	<p> CAPEX</p> <p>TBD 2021</p>
 <p>Land</p>	<p> Strong Performance</p> <p>Total land disturbed, K hectares</p> <p>-80%</p>	<p> Targets</p> <p>Rehabilitate <i>legacy damage</i> and upgrade <i>mine and plant closure</i> plans</p> <p>Key next steps : Review asset closure plans in all divisions; follow GNE⁽²⁾ recommendations in soil recovery; waste collection and land reclamation in Norilsk</p>	<p> CAPEX</p> <p>TBD 2021</p>
 <p>Biodiversity</p>	<p> Strong Performance</p> <p>Legacy focus:</p> <ul style="list-style-type: none"> Supporting of several nature reserves (Taimyrsky, Putoransky, Pasvik, Laplandsky and other Nature Reserves) Protection of rare animal species and support of the reproduction of aquatic bioresources 	<p> Targets</p> <p>Strengthen biodiversity program</p> <p>Key next steps : Biodiversity remediation following recent environmental incidents, launch regular monitoring of impacts on biodiversity and continue support of nature reserves</p>	<p> CAPEX</p> <p>TBD 2021</p>

1. Peers include Anglo American, BHP Billiton, Vale, Rio Tinto, Freeport where public data is available;
2. Great Norilsk Expedition

Organisational Changes Supporting the Environmental and Climate Change Strategy



Compliance with the ESG Best Practices



Progress 2020

- New Environmental and Climate Change Strategy in place
- Improved corporate governance systems and environmental risk management tools
- Strengthened Board oversight of ESG and strategy issues
- Self-assessment for IRMA and ICMM initiated
- Independent environmental impact assessment: ERM, Greater Norilsk Expedition, Ethnological Expedition
- Reduction of SO2 emissions at the Kola Division

Improved Disclosures

- Coverage 1&2 CO2 emissions under the GHG Protocol
- Methodology for calculating Scope 3 downstream emissions was developed
- Disclosure of air and water as required by CDP
- Tailings facilities management



Objectives 2021

- Implementing strategies at the division level and decomposing strategic KPIs to various management levels
- Drafting key initiatives and capex planning to implement the strategy
- Expansion and decomposition of KPIs linked to the Environmental and Climate Change Strategy to various management levels
- Continued implementation of Sulphur Programme 2.0
- Launch of the waste collection and land reclamation programme in Norilsk
- Continued full environmental remediation following the diesel spill incident
- Design and implementation of the monitoring solution for foundations built on permafrost soils in Norilsk
- Joining ICMM and IRMA
- Improving internal procedures in accordance with ICMM and IRMA principles
- Developing a TCFD compliance roadmap
- Reviewing gypsum use options
- Building an organisational model to manage environmental risks and achieve strategic targets