



# Norilsk Nickel ESG Presentation

June 2022

# 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

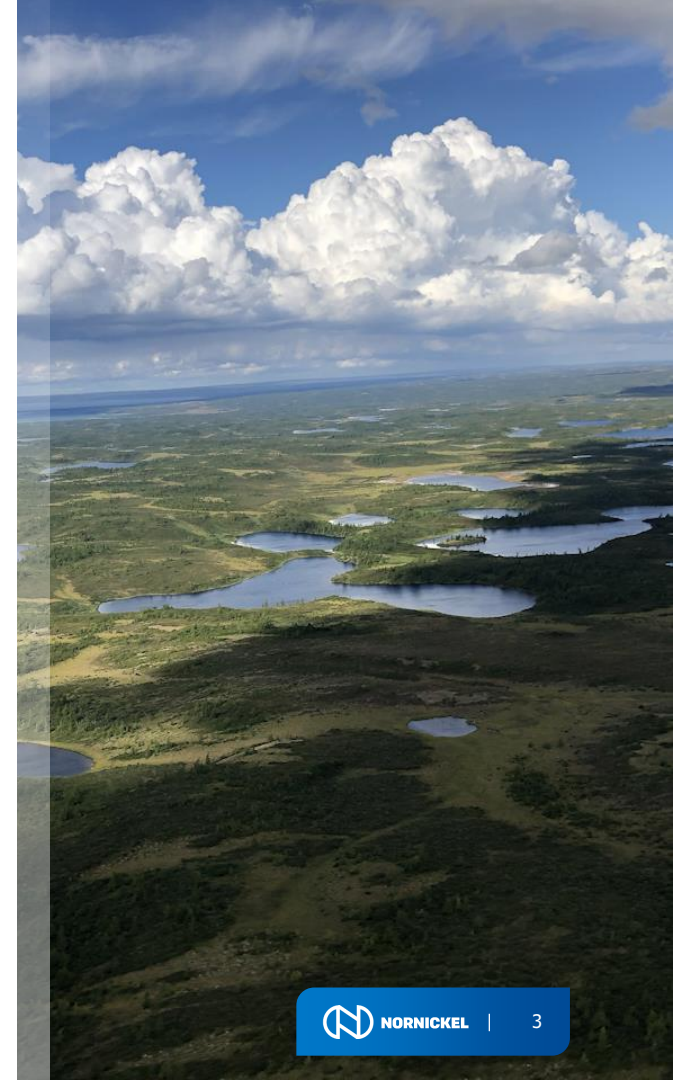
The information contained in this presentation shall not be deemed to be any form of commitment on the part of Norilsk Nickel in relation to any matters contained, or referred to, in this presentation. Norilsk Nickel expressly disclaims any liability whatsoever for any loss howsoever arising from or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

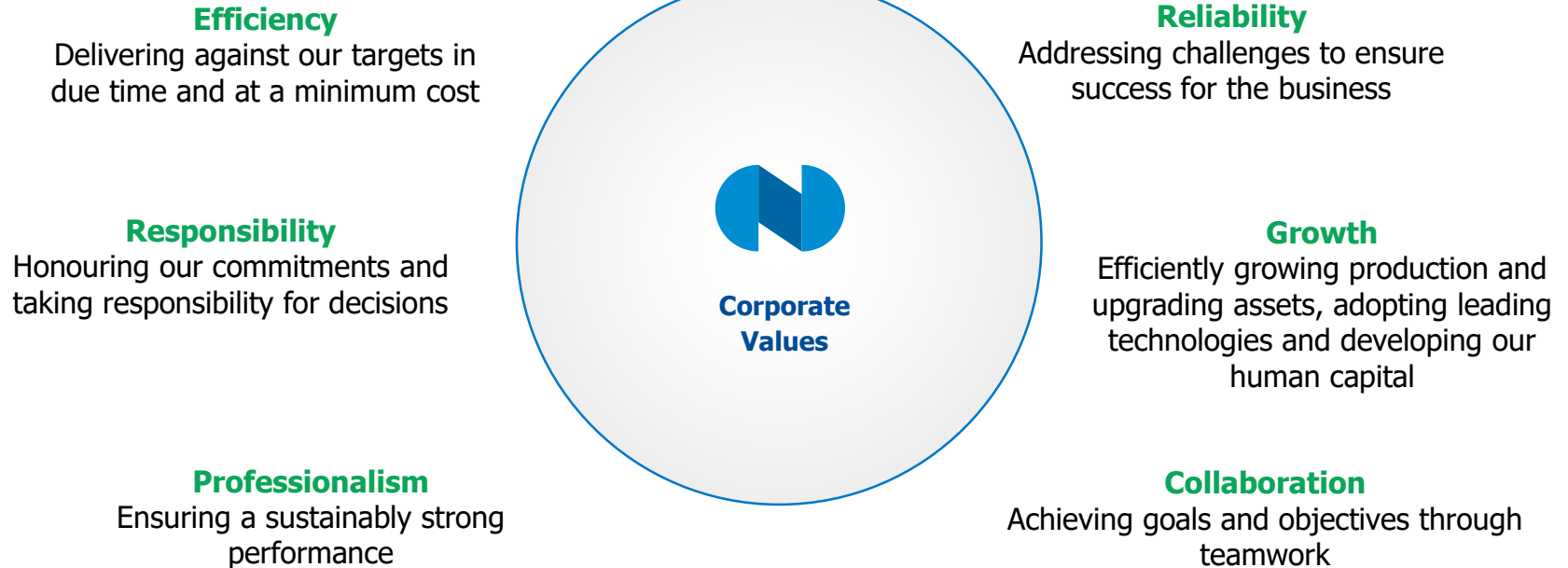
This presentation does not constitute or form part of any advertisement of securities, any offer or invitation to sell or issue or any solicitation of any offer to purchase or subscribe for, any shares in Norilsk Nickel, nor shall it or any part of it nor the fact of its presentation or distribution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

# List of Contents

<b>01</b>	Sustainable Development Highlights	4
<b>02</b>	Health and Safety	11
<b>03</b>	Environment	16
<b>04</b>	Climate Change	29
<b>05</b>	HPP-3 Incident: Full Environmental Remediation	39
<b>06</b>	Social Strategy	47
<b>07</b>	Corporate Governance	62
<b>08</b>	Independent Assessment of ESG Performance	65



# Norilsk Nickel's Principles of Sustainable Development



# Norilsk Nickel Contribution to UN Sustainable Agenda



Participant of the UN  
Global Compact since 2016

\$ **3.0 bn** (1)

Total spending in 2021 to attain sustainable development goals  
(16,8% of consolidated IFRS revenue)

## Key SDG-linked projects in 2021

### S Social

- Occupational safety programs
- Rollout of corporate medicine program
- Designing and rolling out COVID-2019 response measures
- Maintaining health improvement and wellness programmes for employees and their families
- Support of indigenous peoples
- Support of regional communities, social and healthcare infrastructure
- Support of various charity, sports and education programmes

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

### E Environment

- Reduction of environmental footprint in Kola
- Active construction of "Sulfur program 2.0" in Norilsk
- Protection and rational use of water
- Launch of legacy waste collection in Norilsk
- Clean-up and remediation of an environmental incident
- Improving efficiency, industrial safety and reliability of energy infrastructure
- Supporting various scientific expeditions

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

### G Governance

- Improving internal corporate governance structure to ensure better oversight of environmental risks and climate change
- Cooperation with federal legislative and executive authorities, civil society institutions, and the business community
- Digitalization projects
- Support of various nature reserves
- Anti-corruption initiatives
- Joined RMI, RSBN

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

15 LIFE ON LAND

17 PARTNERSHIPS FOR THE GOALS

Source: Company data  
Note: 1. Equivalent to RUB221.5 bn

# Sustainable Development Performance Highlights

## E Environment & Climate Change

- Global nickel' industry lowest carbon footprint per tonne of Ni equivalent
- Global mining industry lowest Scope 1, 2 & 3 emissions
- New 2028 CO2 total Scope1&2 target announced of 25% cut + 37% reduction in carbon intensity
- Pioneering as a producer of carbon neutral nickel products

## S Social

- Proven track record of acting as a responsible corporate citizen
- Comprehensive support of regions of operations and national projects
- Strong legacy of supporting indigenous populations, pioneering free prior informed consent in the Russian mining industry

## G Corporate Governance

- Revamped corporate governance structure and improved risk management
- Amended short-term and long-term KPIs to include sustainable development targets
- Balanced and efficient Board of Directors (pre recent resignations of foreign independent directors)

# Sustainable Development Strategic Focus

## E Environment & Climate Change

- Cleaning up legacy pollution and environmental rehabilitation after incidents in Norilsk
- Reducing significantly SO<sub>2</sub> emissions at two largest operating sites in Norilsk
- Reducing carbon footprint from already low base
- Managing physical risks, foremost, in Norilsk Division
- Reducing negative impact on biodiversity

## S Social

- Achieving zero fatalities
- Reducing impact from operations on local communities
- Revamp of residential and social infrastructure of Norilsk

## G Corporate Governance

- Embedding new sustainable development culture within the organization
- Compliance with major international sustainable development initiatives

# Responding to Sustainable Development Challenges: Overview of Key Initiatives in 2021

## Environment

- Environmental and Climate Change Strategy approved by the Board, setting 18 targets until 2030
- RUB40 bn <sup>(1)</sup> [clean-up program](#) of the city of Norilsk launched: demolition of obsolete buildings, scrap and debris collection, land rehabilitation
- [Full environmental remediation](#) of the 2020 diesel spill incident at HPP-3 in progress
- SO<sub>2</sub> emissions at Kola Division 90% cut from 2015 ahead of target delivered, cross-border pollution has been ceased completely
- SO<sub>2</sub> emissions at Norilsk Division: construction of Sulphur Programme at Nadezhda smelter (ETC 2023) and Copper plant (ETC 2025) on track

## Climate Change Mitigation & Adaptation

- New 2028 CO<sub>2</sub> total Scope1&2 target announced of 25% cut + 37% reduction in carbon intensity
- Reduction of CO<sub>2</sub> emissions in '19-20, production of carbon neutral Ni
- Upgrade of fuel storage facilities and energy infrastructure in progress
- Pilot real-time monitoring of the foundations of emergency fuel storage facilities launched
- First results of satellite monitoring received and analyzed
- Technical inspections of buildings and constructions in progress
- Upgrade of emergency fuel leak liquidation plans and upgrade of emergency response teams and technical resources

## Social & Corporate Governance

- Preparation of Norilsk renovation and corporate healthcare projects launched
- A new ESG-focused corporate governance structure introduced
- Annual and long-term KPIs amended
- A new program to tackle fatalities is rolled out
- [Air quality monitoring launched in Norilsk](#)
- A dedicated department at Norilsk Division and Indigenous Communities Coordination Council have been created
- Pioneered consultations of receiving free and prior informed consent from indigenous peoples
- Improved climate change and ESG disclosure

# Advancing Sustainable Development Agenda (1/2)

	Status	Completion date
<b>Environment &amp; Climate Change</b>		
Execution of Sulphur Programme 2.0 at Kola Division (90% reduction in SO2)	Completed	2021
Execution of Sulphur Programme 2.0 at Norilsk Division (45% reduction in SO2)	In progress	2023
Introduce an air quality monitoring system (Norilsk Division)	In progress	2022+
Develop decarbonisation strategy (25% in absolute Scope 1&2, 37% in carbon intensity)	In progress	2028
Clean-up and collection of legacy waste in Norilsk Area	In progress	2030
Land reclamation programme (Norilsk and Kola Division)	In progress	2030
Landscaping and reforestation at Kola and Trans-Baikal Division	In progress	2030
Full rehabilitation of the impacted environment following the diesel spill incident	In progress	2022-2023
Rollout of permafrost-based foundations monitoring system in Norilsk (launched in 2021)	In progress	2028
Independent verification of the methodology for calculation of the carbon footprint	Completed	2021
Prepare climate change scenarios and run scenario analysis under TCFD methodology	In progress	2022
Publish climate change TCFD compliant report	In progress	2023

# Advancing Sustainable Development Agenda (2/2)

	Status	Completion date
<b>Social Strategy</b>		
Improvement of local healthcare: rollout of a corporate healthcare project (first center in Norilsk launched in 2021)	In progress	2025
Major housing and social infrastructure renovation of Norilsk	In progress	2035
Development of a social strategy	In progress	2022+
Prepare stakeholder engagement plan	In progress	2022
Conduct a human rights impact assessment	In progress	2022+
Support of indigenous people	In progress	2022+
<b>Corporate Governance/Disclosure</b>		
Roll-out of ad-hoc sustainable development strategies at the divisional level	In progress	2022
Development of new annual sustainable development-linked KPIs for the management	Completed	2021
Development of long-term sustainable development-linked KPIs for the management	Completed	2022
Review and reassessment of social and human resources-related risks	In progress	2021+
Internal improvements in line with ICMM, IRMA and EITI standards <sup>(1)</sup>	In progress	2021+
Global Industry Standard on Tailings Management	In progress	2025
Responsible Minerals Initiative (Co, Ni, ESG)	In progress	2023

Note: 1. Subject to geopolitical situation



# Health and Safety Management



# Management of Health & Safety and Remuneration

## HSE Strategic Targets (1):

- **Continuous reduction in injury rates** - decrease in lost time injuries to the level of 2013
- **Zero fatalities** - zero-tolerance policy on work-related fatalities
- **The health and safety of our people** as well as mitigation of ore mining and processing risks is a top priority in Nornickel's operations

## HSE KPIs (1):

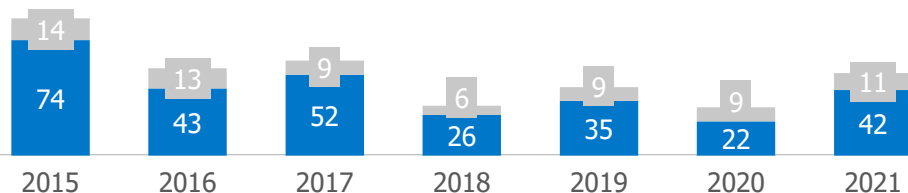
- 20% of the Group's KPIs are linked to TRI (total recordable injuries)
- 12% to 28% of individual KPIs in scorecards of heads of production units
- A failure to prevent a fatality blocks heads of production units from receiving a performance bonus

# Health and Safety Update

## Number of Accidents Increased

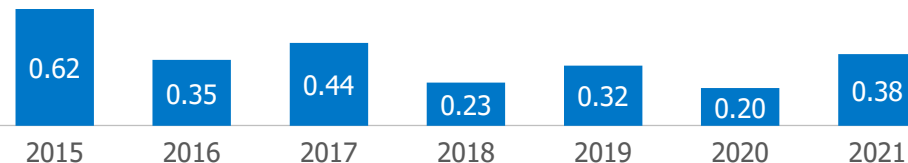
[Employees]

■ Lost time injury ■ Fatal



## LTIFR Increased due to Improved Transparency

LTIFR (1\*10<sup>-6</sup>)



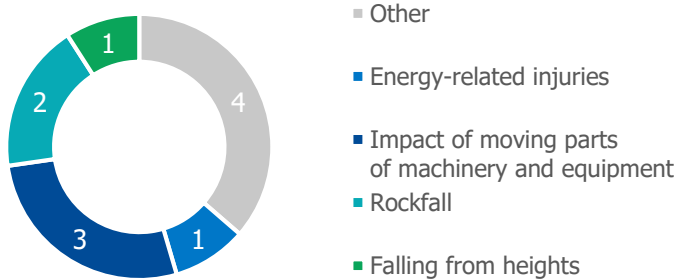
- Regrettably, there were 11 fatal accidents in 2021, including the group accident at Norilsk Concentrator with 3 casualties
- All accidents have been thoroughly investigated and reported to the Board, action plans to tackle causes of each incident prepared
- The lost time injury frequency rate (LTIFR) increased from 0.2 to 0.38 in 2021 and was mainly driven by a stricter methodology applied to reporting injuries

- A comprehensive review of industrial safety requirements and standards is scheduled for 2022
- Zero fatal accidents in 1Q 2022 (!)

# The Most Common Causes of Accidents

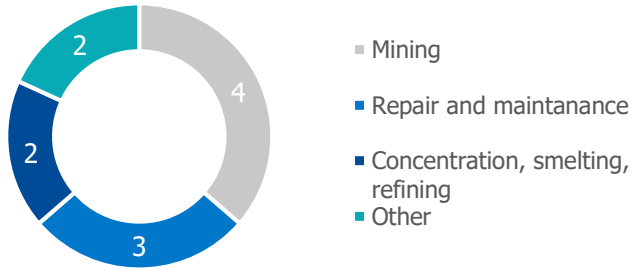
## Fatal Accidents Structure by Type in 2021

[number of fatal accidents]



## Fatal Accidents Structure by Work Type in 2021

[number of fatal accidents]



## Over 90% of major and fatal accidents occurred:

### While performing the following types of work...

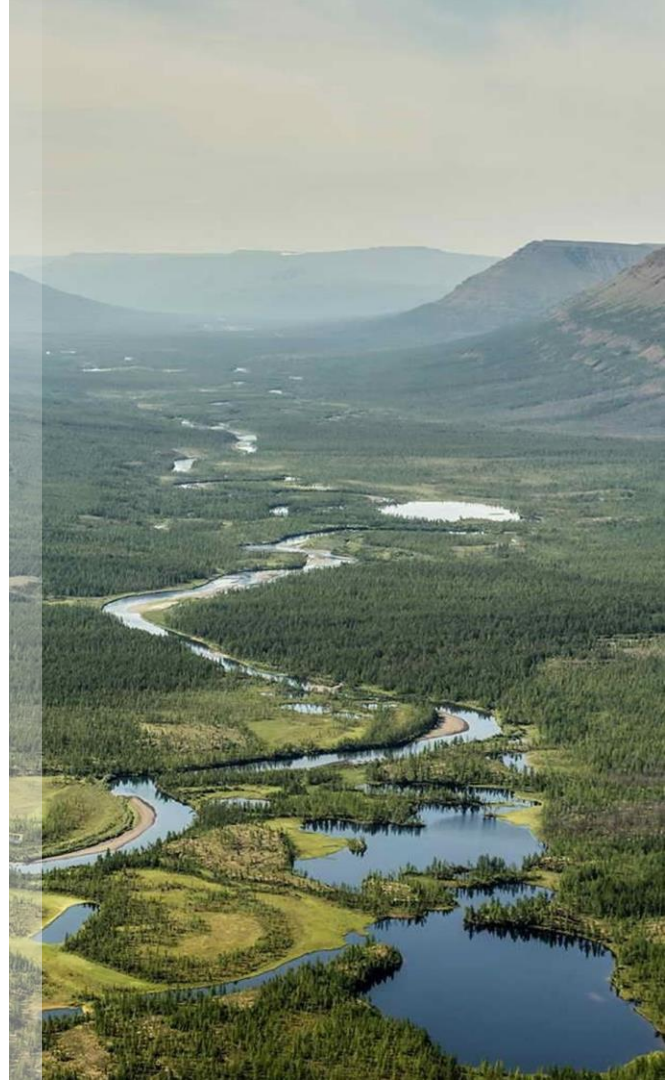
- Mining operations and were caused by a fall of rock or collision with a mine transport
- Maintenance and repairs, when working at height or with electrical equipment/infrastructure without proper isolation, doing hoisting operations or operating moving/rotating equipment

### ...or because of unsatisfactory technical condition of:

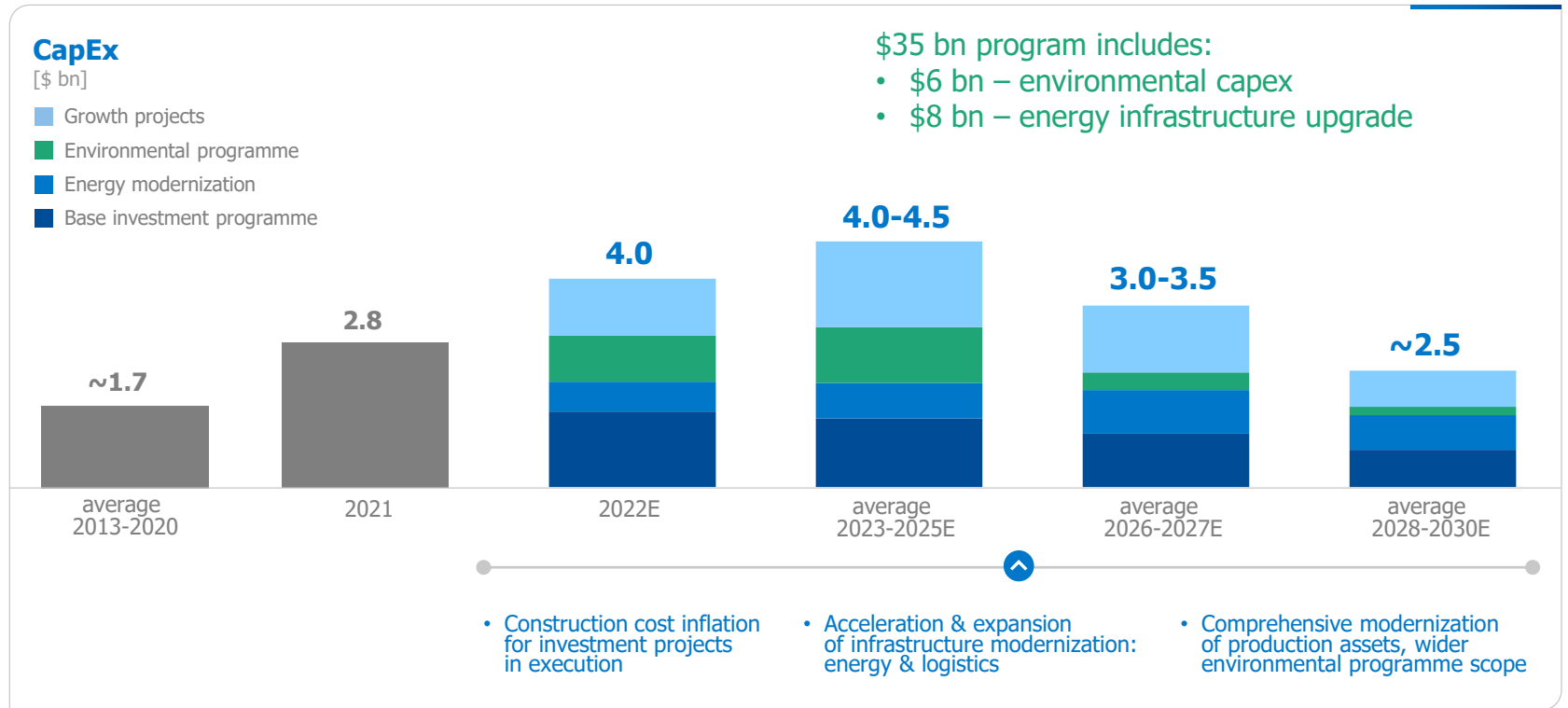
- Buildings and structures, overpasses and service areas



# Environment



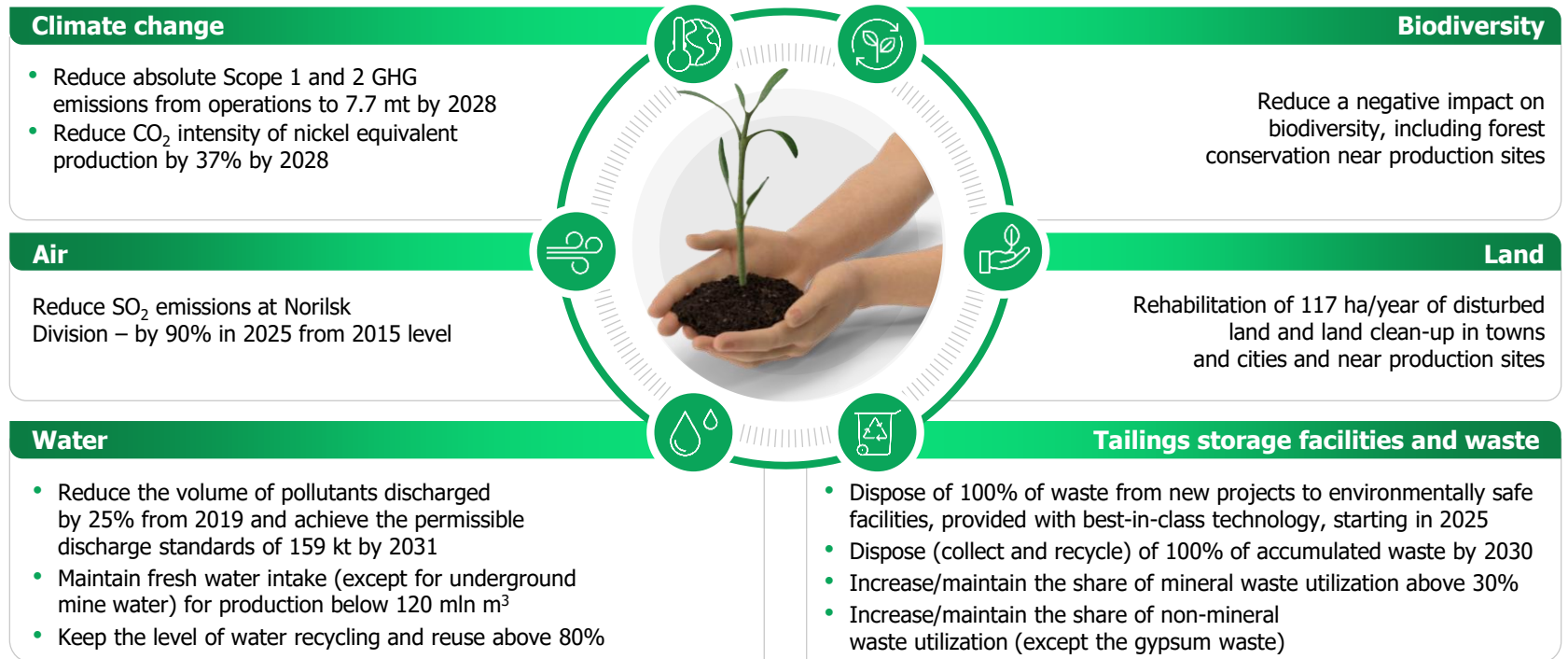
# Expanded Investment Cycle



Source: Company data. As of February 10, 2022

# Selected Environmental and Climate Change Targets (1)

## Total Environmental and Climate Change related CAPEX of USD14 bn in 2020-2030



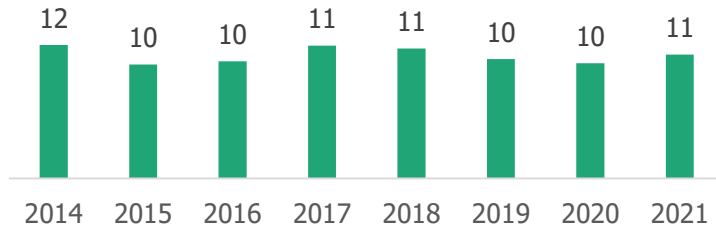
Source: Company data. Note: 1. Targets set for 2030 unless noted otherwise  
 For more details please read: [https://www.nornickel.com/upload/iblock/88b/Norilsk\\_Nickel\\_Environmental\\_Strategy\\_2021\\_en.pdf](https://www.nornickel.com/upload/iblock/88b/Norilsk_Nickel_Environmental_Strategy_2021_en.pdf)

# Norilsk Nickel Air Quality Performance

Nornickel is performing well on several air quality metrics such as NOx and solids emissions relative to peers

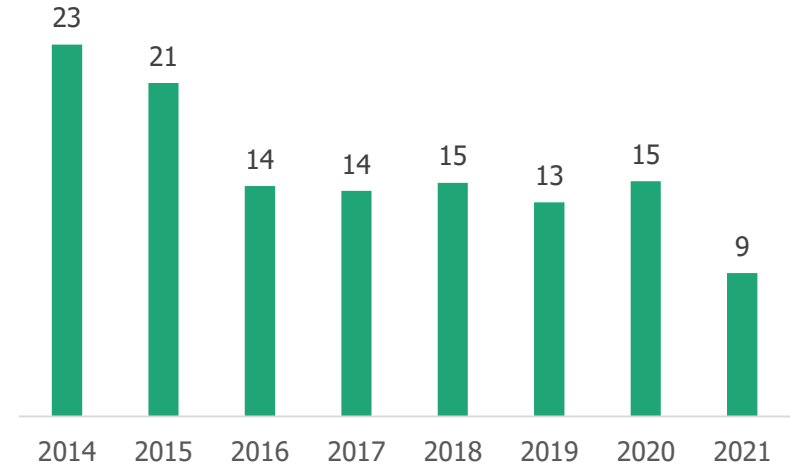
## NOx Emissions: 11kt vs. vs. 27kt Peers' Average <sup>(1)</sup>

[NOx emissions, kt]



## Solid Dust Emissions: 9kt vs. 18kt Peers' Average <sup>(1)</sup>

[kt]

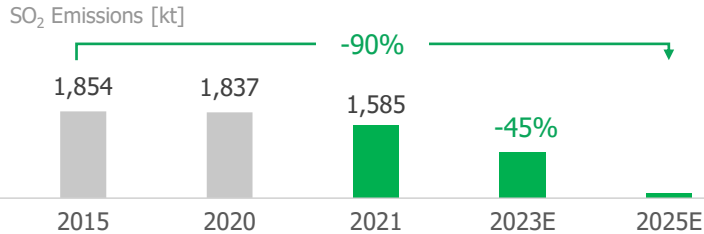


Source: Company data

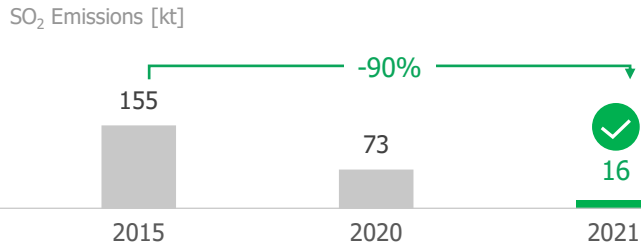
Note: 1. Company's analysis, peer group include leading Russian metals and mining companies, leading diversified and base metals peers. Most recent available data (2020-2021)

# Environmental Program: Reduction of SO<sub>2</sub> Emissions on Track

## Norilsk Division: SO<sub>2</sub> Emissions Decreased 14% in 2021, Sulphur Program is on Track



## Kola Division: SO<sub>2</sub> Emissions Reduced 78% y-o-y in 2021 and 90% from 2015 Ahead of Targets



## Strategic target: achieve industry-leading SO<sub>2</sub> utilization rates

### Norilsk Division:

- In 2021, a 14% decrease in SO<sub>2</sub> emissions was mostly driven by temporary suspension of mining and concentration operations
- Since the closure of Nickel Plant in 2016, SO<sub>2</sub> emissions within the boundaries of the city of Norilsk have been down 30-35%
- Phase-1 of the Sulphur Program in Norilsk: construction of sulphur capture and neutralization line at Nadezhda smelter is in progress, due for completion by the end of 2022

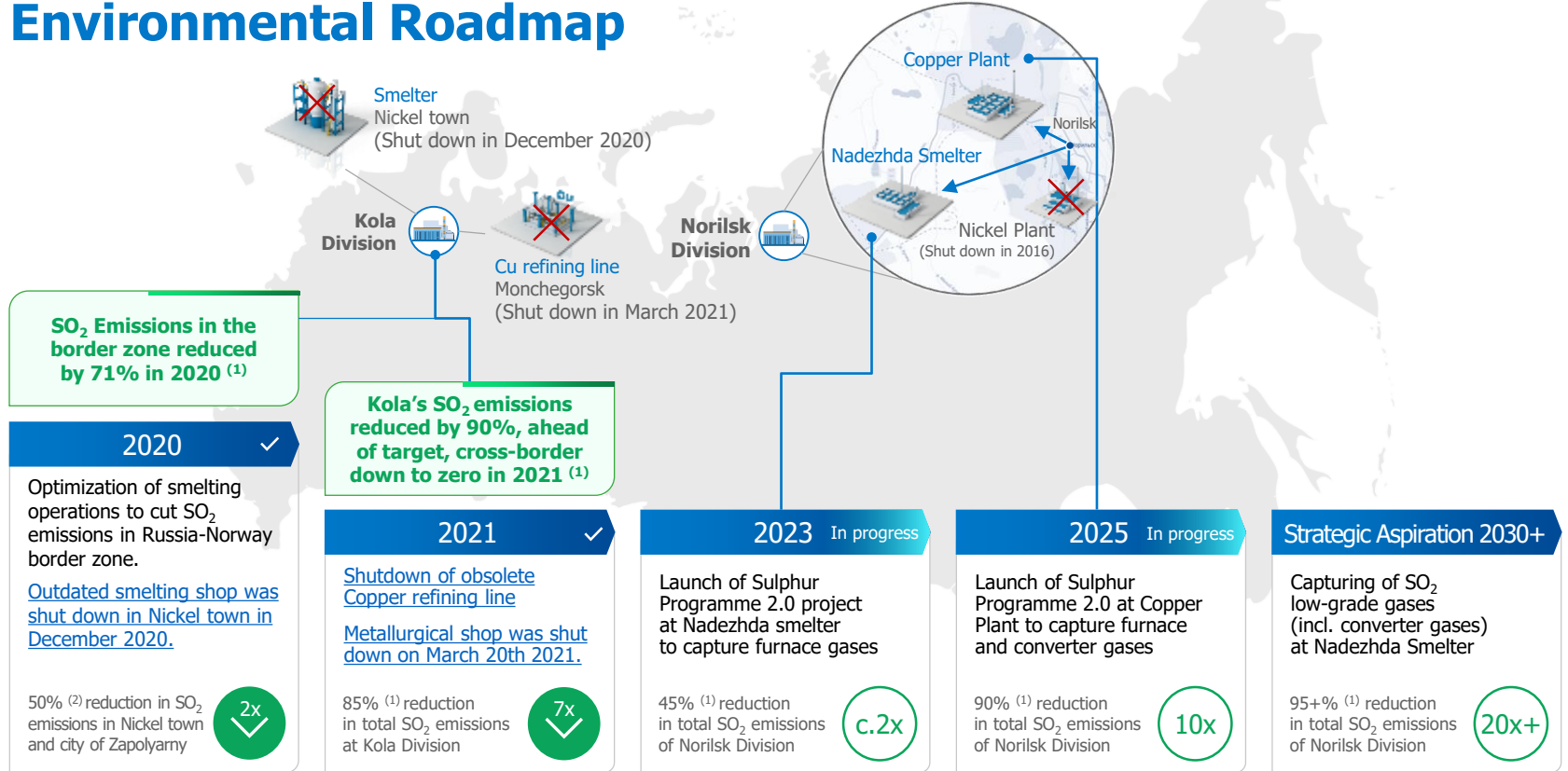
### Kola Division:

- In 2021, SO<sub>2</sub> emissions decreased by 78% y-o-y as all smelting and refining facilities have been shut down as scheduled
- Hazardous emissions into the atmosphere at the Russia's Norwegian border have been completely eliminated
- The captive heat and power plant is scheduled for an upgrade, which should result in a further reduction of SO<sub>2</sub> emissions after 2024

Source: Company data

Note: <https://www.nornickel.com/sustainability/environment/air/>

# Sulphur Programme 2.0: Environmental Roadmap



Notes: 1. 2020 vs 2015; 2. As compared to "base" year (2015)

# Monitoring of the Air Quality in Norilsk



## Installation of air quality sensors in the residential areas

- **Target:** provide real-time air pollution information for the local residents (via mobile apps and other)
- **Roll-out:** In 2021, a test trial of 16 sensors located in the city of Norilsk, and neighboring settlements of Oganer, Talnakh and Kayerkan was launched
- **Time-line:** In 2022, the data will be made available for the residents of the Norilsk Industrial District

## Installation of air quality sensors on the industrial sites

- **Target:** air quality control as part of the national Ecology project
- **Roll-out:** Norilsk Division plants are participating in a pilot program; a design of an automated monitoring system for the corporate industrial sites was launched in 2021
- **Time-line:** Completion of the pilot program at Nadezhda Metallurgical Plant is scheduled by the year-end 2022

Source: Company data

Note: <https://www.nornickel.com/sustainability/environment/air/>

# Norilsk Nickel Water Management (1/2)

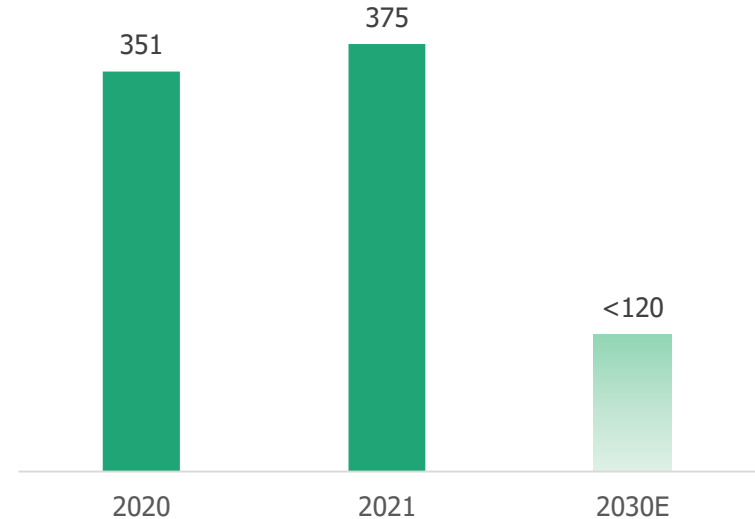
The Company is focused on sustainable use of water resources and pollution reduction while continuing to provide clean drinking water to local communities

**0**  
*as of 2021*

**No emergencies on a regional and federal scale**

## Fresh Water Intake for Production <sup>(1)</sup> : Maintaining Below 120 M m3

[M m3]



Source: Company data

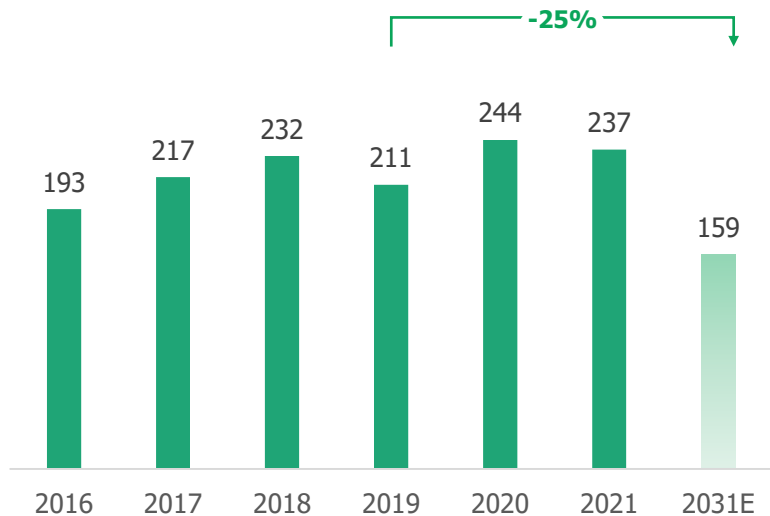
Note: 1. Except for underground mine water

# Norilsk Nickel Water Management (2/2)

The Company is committed to sustainable use of water resources and prevention of water body pollution

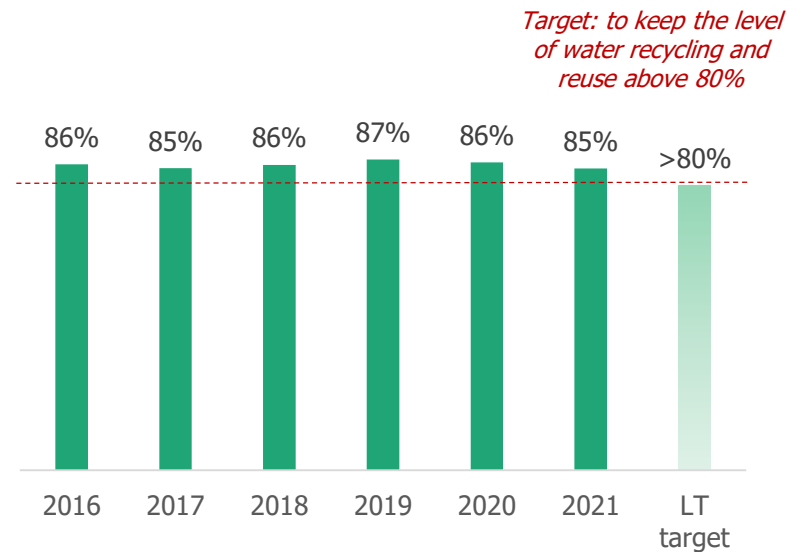
## Total Effluents and Pollutants Discharged: 2030 Target of 25% Reduction of Pollutants Volume

[kt]



## A Global Industry Leader in Terms of Water Recycling and Re-use Ratios

[%]

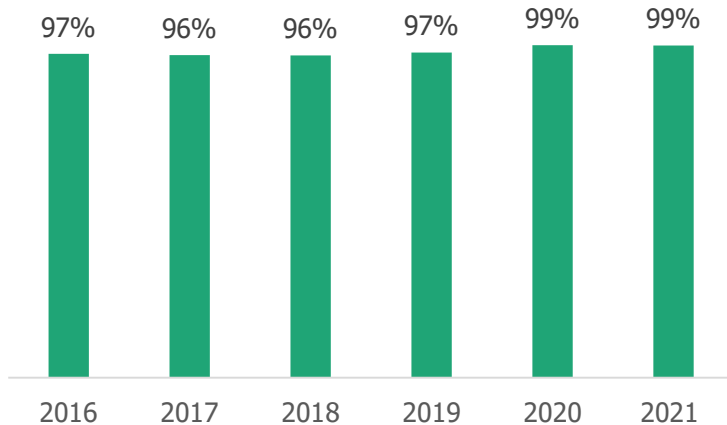


# Norilsk Nickel Waste and Hazard Materials Management

Norilsk Nickel’s priorities are to minimize the environmental impact of waste from our operations, to ensure efficient waste management practices, to find alternative uses for the remaining waste

## Almost Entire Company’s Production Waste (99%) is Classified as Non-hazardous (Hazard Class-5)...

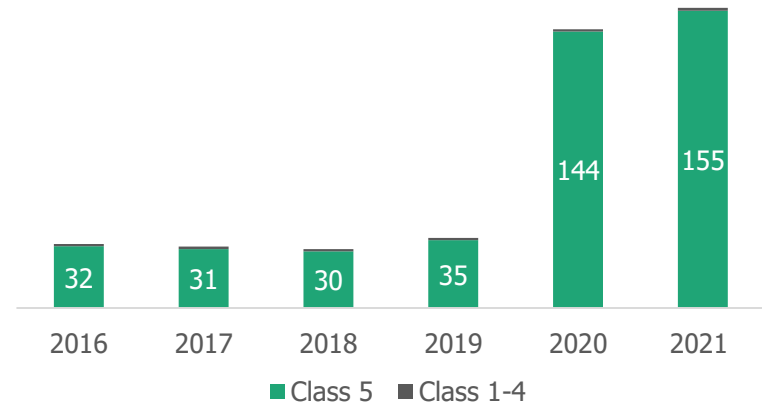
[%]



## ...Class-5 Waste Includes Rock and Overburden, Tailings, and Metallurgical Slags

[Total waste, mt]

«The increase in waste generation in 2020-2021 was attributed to the launch of stripping works at South Cluster»



# Biodiversity: Reducing a Negative Impact

## Research initiatives, monitoring and protection of animal species:

- In 2020 and 2021 - the Great Norilsk Expedition, comprising experts from the Russian Academy of Sciences, carried out a comprehensive study (including field work) of Norilsk area and of the Company's environmental impact
- Support of Russia's largest natural reserves, studies and protection of rare and endangered species listed in the Red Book of the Russian Federation
- A long-standing corporate project of breeding and releasing valuable fish species into Siberian rivers to replenish their populations

## 2022 Activities:

- [Launch of a large-scale scientific biodiversity study](#) to determine the areas of the Company's environmental impact and assess the current biodiversity status within their ecosystems. Carried out by the Siberian Branch of the Russian Academy of Science, the study will cover the exploration, mining, production, transport, logistics and energy facilities of Nornickel's Norilsk, Kola and Trans-Baikal divisions
- Continuation of the comprehensive monitoring studies by the Russian Academy of Sciences (monitoring and research)
- [Launch of an aerial survey of polar bears in Arctic region](#)
- Continuation of reproduction of aquatic bio-resources programme in Norilsk Division

**Nornickel recognizes the importance of biodiversity conservation as vital for supporting life on Earth**



Source: Company data

Note: Please refer to our web page for more details <https://www.nornickel.com/sustainability/environment/biodiversity/>

# Land: Rehabilitation of Disturbed Territories

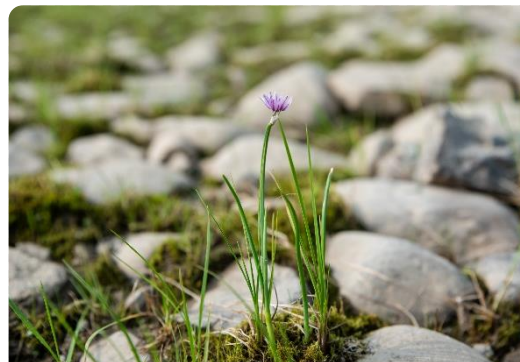
## Programme on landscaping of territories and support for environmental projects:

- Reclamation programme to clean up and improve public spaces and areas around motorways, protect water bodies and water reserves, and revamp tourist camping sites
- In 2021, land rehabilitation (reclamation) plans and road-map have been developed for each operational division
- In 2021, Nornickel and the Norilsk Development Agency supported Clean Ayan, an [environmental project launched by Taimyr Nature Reserves](#)

## 2022 Activities:

- **Norilsk Division:** technical and biological land rehabilitation at the territories of Norilsk, Dudinka, track Messoyakha – Norilsk and Tukhard settlement, reclamation of disturbed territories/land as a result of fuel-spill at NTEC's HHP-3
- **Kola Division:** technical and biological land rehabilitation at the territories of [Smelter Shop](#) (Nickel town), [Metallurgical Shop](#) (in Monchegorsk), dump at Severonickel
- Landscaping and reforestation of territories at Kola Division and Trans-Baikal Division

**Nornickel focuses on the rehabilitation of all land affected by construction, mining and emissions caused by its operations and carries out regular audits of plant and mine closure plans**



Source: Company data

Note: Read more on land reclamation <https://www.nornickel.com/sustainability/environment/land/>

# Clean-up and Collection of Legacy Waste in Norilsk Area

## Clean-up and removal of legacy waste in Norilsk area

### 2020 Launch:

- A dedicated Work with Territories and Landscaping Department was created within Norilsk Division: 890 employees and 121 units of specialized machinery and equipment
- Target: demolition of old abandoned buildings and structures, pipelines, utility lines and networks, and the removal of scrap metal accumulated around industrial sites within the city of Norilsk and its neighboring area

### 2021 Results:

- **Land area cleaned up of waste and old equipment:** 1 m m<sup>2</sup>
- **Waste collected:** 304 kt of waste and 39 kt of metal scrap
- **Obsolete buildings and structures dismantled:** 108 units

### 2022 Targets:

- **Land area cleaned up of waste and old equipment:** 3.8 m m<sup>2</sup>
- **Waste collected:** 340 kt of waste and 65 kt of metal scrap
- **Obsolete buildings and structures dismantled:** 154 units

**₽40 bn** expected spending  
over 2021-2030 <sup>(1)</sup>



Source: Company data

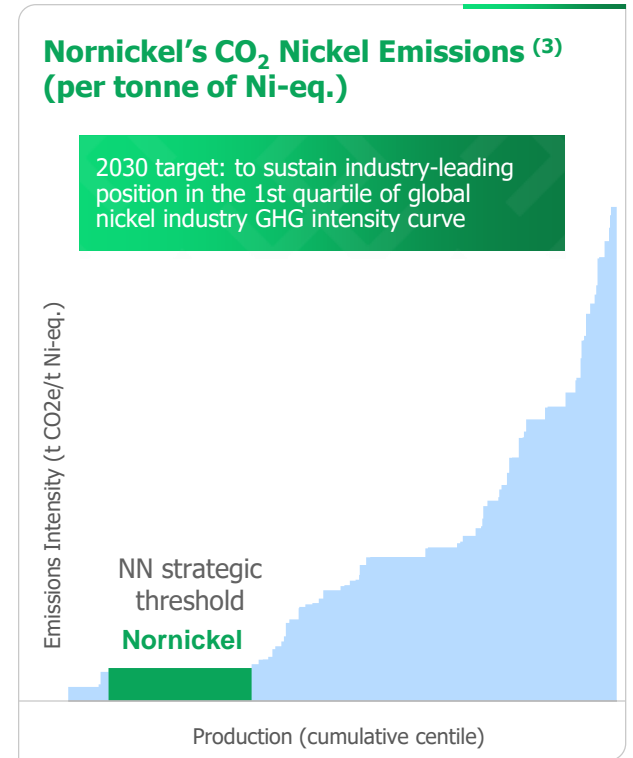
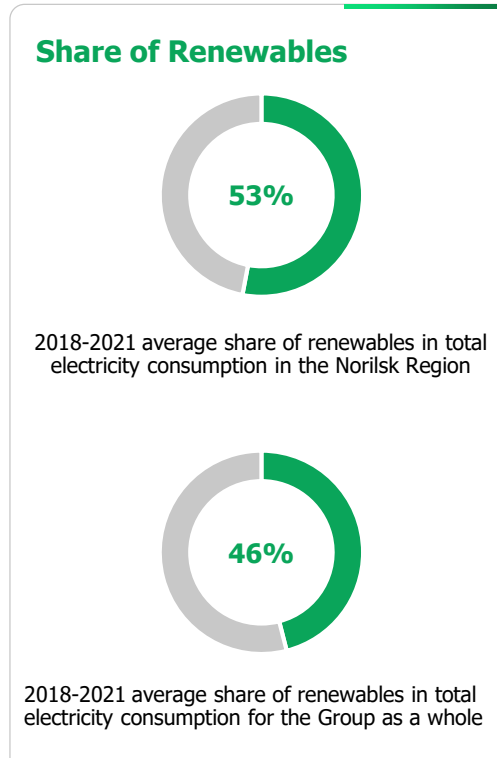
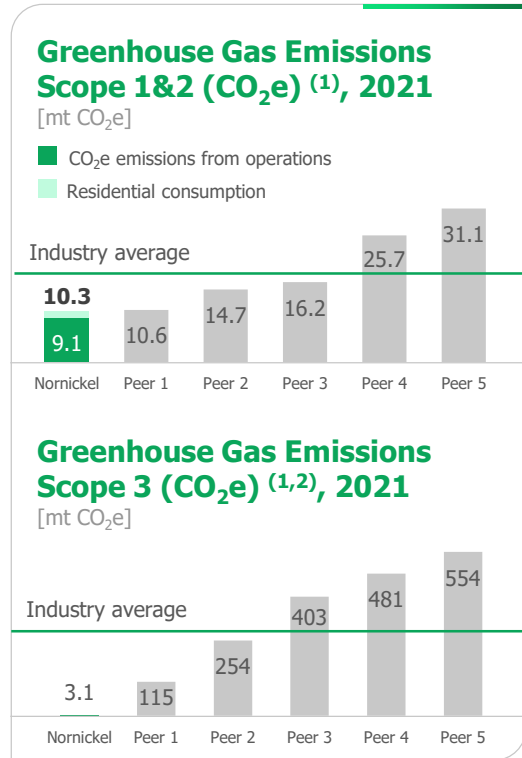
Note: 1. Equivalent to USD0.6 bn as of December 2021

Please read more: <https://www.nornickel.com/news-and-media/press-releases-and-news/nornickel-implements-rub-40-bn-programme-to-clean-up-norilsk/type=news>

# Climate Change

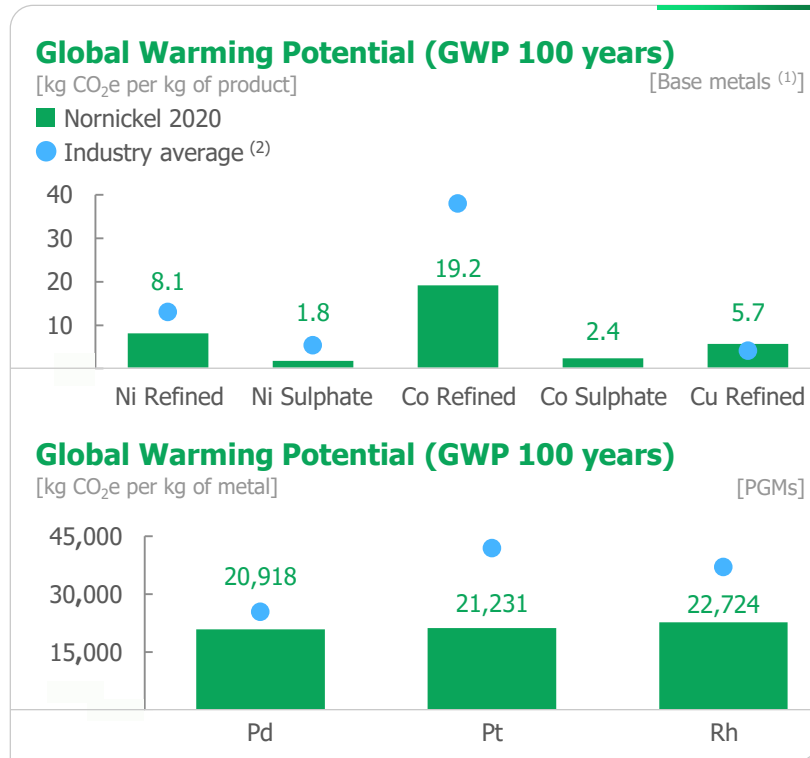


# Climate Change: Industry's Lowest Carbon Footprint in Terms of Scope 1,2&3 Emissions and per Tonne of Ni Equivalent



Source: Wood Mackenzie, Company's estimates, Company's analysis, peer group include leading diversified peers BHP Billiton, Rio Tinto, Vale, Glencore, Anglo American. Most recent available data (2020-2021). Notes: 1. Assessment under GHG Protocol Corporate Accounting and Reporting Standards. Nornickel GHG emissions include amount of emissions that come from providing Norilsk with electricity by NTEK, and reserve for CO<sub>2</sub> emissions from Sulphur Programme 2.0 execution, 2. For Nornickel incl. only downstream part of the supply chain, for peers including downstream and upstream, 3. Nornickel figure includes reserve for CO<sub>2</sub> emissions from Sulphur Programme 2.0 execution

# Industry's Lowest Carbon Footprint of the Entire Commodities Basket



## Independent verification and confirmation

- In-house developed methodology for the assessment of carbon footprint of the metals' basket
- The methodology has been verified and confirmed by the international expert company Sphera GMBH (ISO 14040, ISO 14044)
- Actual carbon emissions per unit of finished products have been confirmed and certified by EY (Ernst&Young)

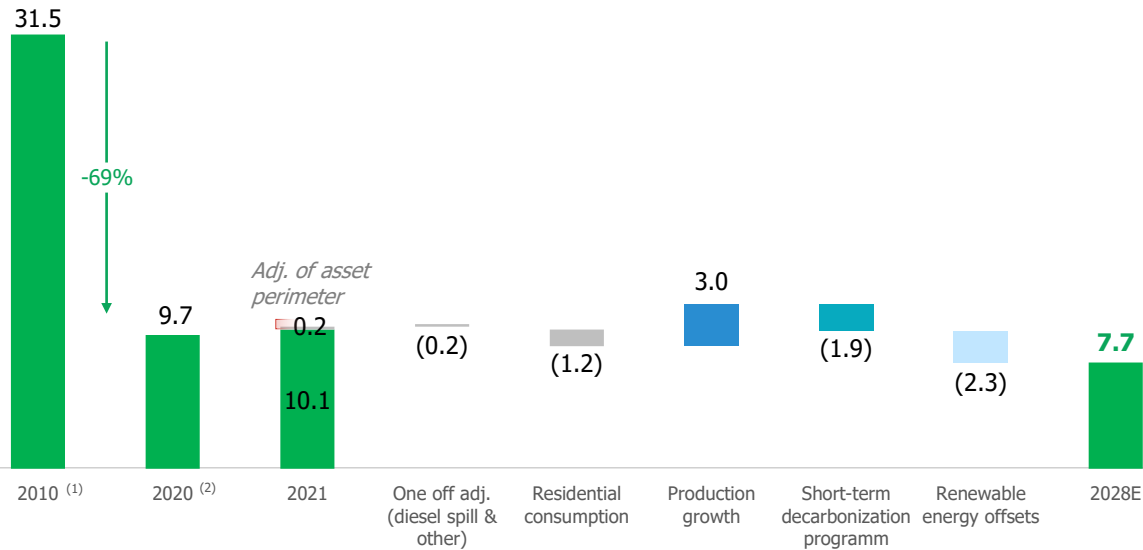
Sources: Ni - Nickel institute, Sphera GMBH, report "Life Cycle Assessment of Nickel Products, 2017", Co - Cobalt Institute, 2015 <https://www.cobaltinstitute.org/sustainability/life-cycle-assessment/>, Cu - The International Copper Association, "Copper Environmental Profile, 2018", PGM – IPA (International Platinum Group Metals Association) & Sphera GMBH "Life Cycle Assessment of Global Platinum Group Metals Production", 2017

Note: 1. Excluding Bystrinskoye Mining Company, 2. Industry average per kg of product (not applicable for direct comparison according to clause 6.2 of ISO 14044)

# Climate Change Strategy: Reducing Absolute Emissions and Carbon Intensity

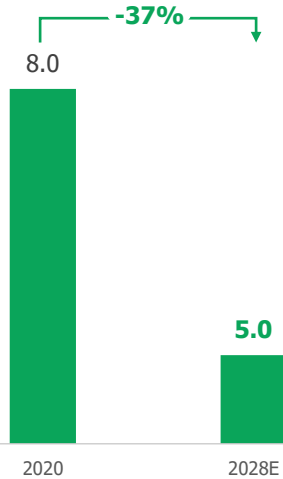
## GHG Emissions from Operations: 25% Reduction Target for 2028E, Scope 1&2

[mt CO<sub>2</sub>e]



## Reduction of Carbon Intensity per Ni Equivalent <sup>(3)</sup>

[per tonne of Ni equivalent]



Source: Company's analysis. Note: 1. Incl. OGC-3, 2. Incl. reserve for CO<sub>2</sub> emissions from Sulphur Programme 2.0 execution, 3. Ni equivalent volume has been calculated assuming 2020 average commodity prices, incl. reserve for CO<sub>2</sub> emissions from Sulphur Programme 2.0 execution, excluding residential consumption.

# Selected CO2 Reduction Initiatives (1.9mt Reduction Program)



## Reduction of Energy Losses

- Reconstruction of power transmission lines
- Upgrade of heat transmission pipes
- Large-scale upgrade of energy equipment



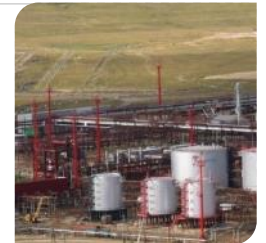
## Improvement of Energy Efficiency

- Replacement on turbines at hydro plants and power generating units at Heat and Power Stations in Norilsk Division
- Reduction in power consumption for compressor air production
- Rollout of energy management systems
- Replacement of a coal-fired unit with an electric boiler at Kola Division



## CO2 Abatement

- [Construction of a dual-fuel diesel-LNG icebreaker to escort ships carrying Nornickel's cargo along the Northern Sea Route](#)
- Upgrade of Chita project dump trucks to LNG fuel
- Other initiatives



# Production of Carbon Neutral Nickel Launched

- The first batch of carbon-neutral products **totals 5 kt of nickel cathodes** produced by the Group's Kola Division
- The carbon-neutral nickel has been tokenised on a Blockchain platform, with the tokens listed on the Vienna Stock Exchange
- Replacement of hydro turbines and thermal power generation units, upgrade of heating systems and power equipment as well as improvement of insulation allowed Nornickel **to reduce CO<sub>2</sub> emission by 48kt over 2019-2020**, which has been independently **verified by Ernst & Young (EY)**
- Further CO<sub>2</sub> emission reduction initiatives scheduled in 2021-2025 will make it possible to produce in total up to **8 kt of carbon-neutral nickel in 2021 and up to 35 kt per year in 2025**

**8.1** <sup>(1)</sup> t

of CO<sub>2</sub> per tonne of finished product – carbon footprint of nickel produced in accordance with international standards ISO 14040 and 14044

**48** kt

reduction of carbon dioxide emissions by Nornickel Group in 2019-2020, as confirmed by Ernst & Young (EY)

Note: 1. CO<sub>2</sub> has been calculated per tonne of the Company's refined nickel production assuming 2020 CO<sub>2</sub> emissions level



# Climate Change: Comprehensive Physical Risk Mitigation Programme – Energy Infrastructure



## Reassessment of Risks Related to Hazardous Facilities

- Ad-hoc audit of all industrial buildings and facilities, with a prime focus on fuel storage
- Inspection of technological fuel pipelines
- The emergency plans and the design of bunding perimeters of all fuel tanks have been recalculated based on the most aggressive spilling scenarios (assuming 100% of fuel)



## Immediate Upgrade of Fuel Storage Facilities

- Demolition of selected emergency fuel tanks posing a potential risk
- Upgrade of the remaining fuel tanks: anticorrosion treatment, upgrade of the bunding perimeters, fuel pumps, installation of new gas detectors and upgrade of automatic leakage control systems
- Repair of diesel fuel pipelines
- Amount of fuel held in emergency storage to halve in 2021 through optimization of available fuel reservoirs



## Long-term Initiatives in Energy Infrastructure

- A major \$8+ bn energy modernization and upgrade program until 2030 is in progress, including replacement of equipment at heat and hydro power stations, upgrade of power grid and gas pipeline systems and modernization of fuel tank storages
- Replacement of diesel fuel reservoirs as a source of emergency fuel for Norilsk heat and power plants (fed by natural gas as a primary source) with a second gas pipeline considered as a long-term strategic option



# Comprehensive Physical Risk Mitigation Programme

## Repair of Diesel Fuel Pipelines and Supports



## Inspection of Technological Pipelines



## Anticorrosive Treatment of Fuel Tanks



## Upgrade of the Bunding Perimeter of a Fuel Tank



# Physical Risks: Monitoring of Permafrost-Based Foundations in Norilsk



In 2020, satellite monitoring of permafrost-based structures launched in 4 priority areas: Norilsk, Dudinka, Snezhnogorsk and Svetlogorsk



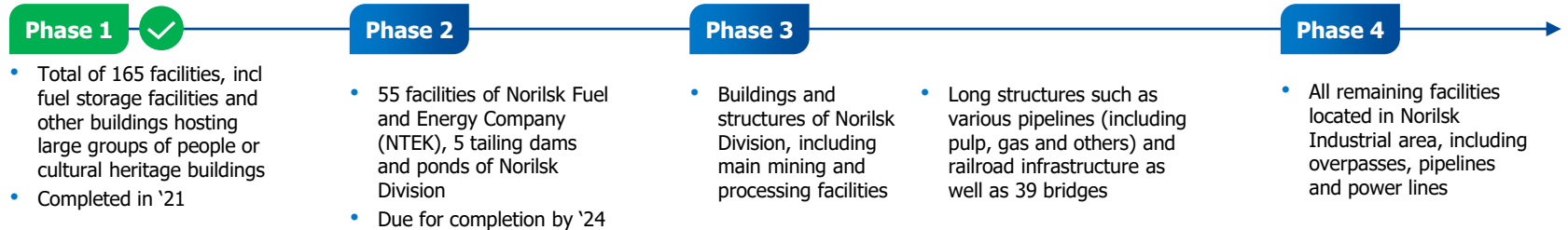
In 2021, a new permafrost-based foundations monitoring system was launched:

- Monitoring is carried out with the help of boreholes (with thermistor chains or water pressure sensors), incline detectors, humidity, ground temperature and water sensors as well as some others
- **Program target:** 1,500 of assets, including tanks, pipelines, production facilities and administrative buildings, to be equipped with real-time sensors, which will be plugged into the IDS system
- The Monitoring Center of Buildings and Structures of Norilsk Division, which carries out geotechnical monitoring and technical inspections, has been upgraded, staff expanded

## Monitoring center launched in December 2021



## Phased roll out of permafrost-based foundations monitoring system in Norilsk Industrial District



Source: Company data

Note: 1. IDS - Automated information-and-diagnostic system

# Physical Risks: Roll-Out of Online Permafrost-Based Foundations Monitoring in Norilsk in Progress

## Selected 2021 targets:

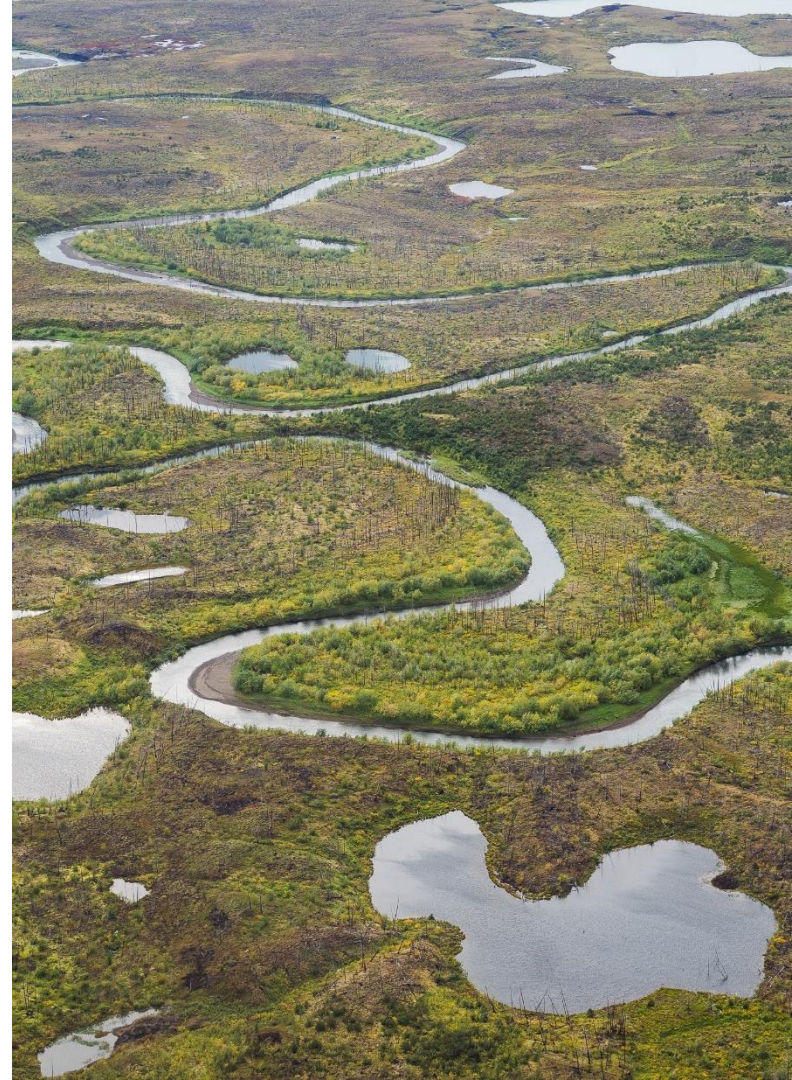
- Install over 1,200 sensors, including over 450 thermistor strings, over 700 inclinometers, over 60 humidity and temperature transmitters, at 39 fuel tanks and another 115 buildings and structures in Norilsk, with a real time data to be collected and analyzed by a central monitoring center
- Drill over 375 boreholes to install thermistor strings to monitor temperature distribution in the subsoil of building foundations
- A pilot monitoring project has been completed for 11 emergency fuel tanks
- Technical inspections of underfloor spaces (of circa 800+ objects vs almost 700 already inspected in 2020)
- Geodesic measurements of the deformations of buildings and structures (over 11k vs 6k in 2020)

**Nornickel is making a comprehensive, long-term effort in monitoring assets to assess the impact of permafrost thawing in the Norilsk region**





# HPP-3 Incident: Full Environmental Remediation



## HPP-3 Incident Overview



- On May 29, 2020, an incident occurred whereby the containment of the emergency fuel storage at Heat and Power Plant № 3 (HPP-3) in the Kayerkan neighborhood of Norilsk failed due to sudden sinking of support posts, resulting in the fuel leakage
- The fuel spill through Bezymianny stream via Dal'dykan river reached Ambarnya river, where boms prevented the contamination of Pyasino lake
- The city has not been impacted since the HPP-3 is located remotely from Norilsk
- Over a short period of time, 21.2kt of diesel fuel has leaked beyond the bunding perimeter. Upon completion of the bulk of the clean-up in September, according to the Company's current estimates, the fuel spill was split approximately 33%/67% between soil and water

Source: Company data

Note: Read more <https://www.nornickel.com/sustainability/cleanup/>

# Key Milestones of Clean-Up Program and Rehabilitation

<b>2020 Phase 1&amp;2: Clean Up</b> (May-June 2020)	<b>2020 Phase 3: Collection of the residues, transportation and utilization</b> (July-November 2020)	<b>Phase 4: Rehabilitation / Restoration</b> (December 2020-2023)
<ul style="list-style-type: none"><li>✓ Over 90% of leaked fuel was collected and contaminated soil removed (in July)</li><li>✓ Contaminated soil was placed into sealed-off hangars to prevent further risk to the environment</li><li>✓ Water-fuel mixture collected from Ambarnaya river and near HPP-3 placed into temporary tanks</li><li>✓ Almost 700 people and 300 equipment items were involved in the clean-up</li></ul>	<ul style="list-style-type: none"><li>✓ As at September-end, 35,000 m<sup>3</sup> of water and fuel mixture had been collected</li><li>✓ Remaining fuel was collected from the soil and water (using sorbent booms)</li><li>✓ River banks were treated with sorbents and washed</li><li>✓ The collected water and fuel mixture was transported to an industrial site at the Lebyazhye tailing dump for further separation</li><li>✓ All fuel was separated from the water</li></ul>	<p><b>2020-2021</b></p> <ul style="list-style-type: none"><li>• Development of a rehabilitation project</li></ul> <p><b>2021-2022</b></p> <ul style="list-style-type: none"><li>• Implementation of the rehabilitation project</li><li>• Development and implementation of a project to replenish wildlife and restore the environment (in partnership with Siberian Federal University)</li></ul> <p><b>2021-2023</b></p> <ul style="list-style-type: none"><li>• Disposal of contaminated soil</li></ul>

# ERM Assessment of the HPP-3 Incident: Causes and Mitigation

## ERM Assessment






- Failure in the 1981 design/1984 construction (piles were shorter and not installed into bed rock)
- Permafrost melting
- Insufficient specific monitoring: foundation and permafrost
- Insufficient bund and tertiary containment measures
- Compliance over risk management
- Inadequate risk assessment of the particular fuel tank
- Insufficient resources for immediate emergency response

## Nornickel response/initiatives





- Emergency inspection of fuel storage facilities. Facilities "at risk" phased out; alternative fuel storages considered
- Infrastructure repair program with a special focus on fuel and energy
- Upgrade of permafrost monitoring
- Design and launch of foundations monitoring system
- Upgrade of environmental risk assessment: oversight, procedures, maps
- Upgrade of bund walls
- Upgrade of emergency response plans and response teams

**"Underpinning all of this is the fact that if all piles had been installed as designed into the bedrock, this failure would not have happened"**





# Implementing ERM Recommendations: Primary Containment (Short & Medium Term)

ERM Recommendations	Company's Action	Timeline	Status
Inspect foundations of all tanks with the similar pile design as Tank No.5 (the damaged one)	<ul style="list-style-type: none"> <li>Comprehensive inspection of tanks with the similar pile design at HPP-3 and HPP-2 was conducted</li> <li>The fuel tanks #5 and #4 at HPP-3 and similar fuel tanks at HPP-2 were dismantled</li> </ul>	2020	
Extend assessment to all other tanks focused on review of tank foundation stability	<ul style="list-style-type: none"> <li>Comprehensive inspection of foundation structures of 9 fuel storage tanks at HPP-3 and HPP-2 was conducted</li> <li>The upgrade of fuel tanks was conducted (anticorrosion treatment, upgrade the bunding perimeter, installation of new gas detectors)</li> </ul>	2020-2021	
Reduce the amount of stored fuel in the tanks	<ul style="list-style-type: none"> <li>Diesel fuel inventories were reduced</li> </ul>	2021	
Design and instigate a permafrost monitoring system for all tankage	<ul style="list-style-type: none"> <li>A new permafrost-based foundations monitoring system was launched to monitor soils and foundations</li> <li>Evaluation of supporting posts deformation and soil temperature has been conducted by means of confirmative geological drilling</li> <li>Strain gauges and temperature sensors have been installed on all the tanks in use</li> </ul>	2021	
Develop a management system to improve the integrity of the primary containment	<ul style="list-style-type: none"> <li>A new permafrost-based foundations monitoring system was launched to monitor soils, piles and foundations, as well as vertical deviations of the tanks foundations</li> <li>Regular work is carried out to level the edge of the tanks bottoms</li> <li>Systems for automatic control and detection of leaks of oil products and their vapors have been installed</li> </ul>	2021	




# Implementing ERM Recommendations: Environmental Consequence

ERM Recommendations	Company's Action	Timeline	Status
Check the bund capacity/ design of all tanks	<ul style="list-style-type: none"> <li>The bunding perimeter for all tanks were upgraded (anticorrosion treatment, installation of new gas detectors and etc)</li> <li>The bund structures of all fuel storage tanks have been reviewed and recalculated based on most severe spill scenarios (100% of fuel volume)</li> </ul>	2020	
Undertake modelling to determine where to locate tertiary containment systems, inform emergency response planning and located spill response equipment	<ul style="list-style-type: none"> <li>Detailed action plan to improve industrial safety at the Company's facilities has been developed and presented to the government's technical supervision agency (Rostekhnadzor)</li> <li>The upgrade of HPP's fuel storage facilities included the installation of the secondary bunding, arranging additional ditches (trenches) and using special geomembrane as a barrier to prevent from emergency fuel spill</li> </ul>	2021	
Look to the provision of emergency response access routes and booming locations	<ul style="list-style-type: none"> <li>The comprehensive emergency training exercises were conducted to verify preparedness for emergency situations (fuel spill), including the installation of containment boms and check the emergency access routes</li> </ul>	2021	
Update the spill response plan and carry out emergency response exercises	<ul style="list-style-type: none"> <li>Accident response plan has been updated</li> <li>The comprehensive emergency training exercises were conducted to verify the preparedness for containing and eliminating emergency situations (fuel spill)</li> </ul>	2021	

# Implementing Recommendations of the Independent Great Norilsk Expedition

Great Norilsk Expedition-1 Recommendation	Company's Action	Timeline	Status
Use additional boms to prevent the spread of contamination	<ul style="list-style-type: none"> <li>• Installation of boms ahead of the flooding (snowmelt, ice melting, ice drift) at the Ambarnaya River</li> <li>• Washing of river shores and treating contamination residues on the land with sorbents (continued from 2020 if needed)</li> </ul>	2021–2022	
Conduct hydrological and hydrobiological tests	<ul style="list-style-type: none"> <li>• The Siberian Branch of the Russian Academy of Sciences (SB RAS) conducts hydrochemical and hydrological tests to monitor the environmental conditions and self-purification of the water bodies in the area adjacent to HPP-3</li> </ul>	2021–2022	
Deploy technology to monitor the stability of engineering infrastructure in the Norilsk Industrial District and develop statutory regulations for its application	<ul style="list-style-type: none"> <li>• A new permafrost-based foundations monitoring system was launched to monitor soils and foundations</li> </ul>	2021	
	<ul style="list-style-type: none"> <li>• Regularly monitoring the condition of foundations underneath buildings and structures built on permafrost, assessment of seasonal dynamics</li> <li>• Assessment of the state of technical structures and condition of individual piles foundation</li> </ul>	2022	

# Implementing Recommendations of the Independent Great Norilsk Expedition

Great Norilsk Expedition-2 Recommendation	Company's Action	Timeline	Status
Perform further monitoring of the spill area to develop follow-up land rehabilitation and revegetation activities. Monitor self-regeneration of vegetation in the deltas of tundra rivers	<ul style="list-style-type: none"> <li>The Siberian Branch of the Russian Academy of Sciences (SB RAS) conducts research in the following areas:                             <ul style="list-style-type: none"> <li>✓ Analysing the surface water quality changes</li> <li>✓ Monitoring the environmental condition of Lake Pyasino and waters flowing into it</li> <li>✓ Evaluating changes in the microbiology of soils and bottom sediments</li> <li>✓ Biological and zoological research</li> </ul> </li> </ul>	2022	
Conduct an efficiency assessment of rehabilitation measures	<ul style="list-style-type: none"> <li>Performing comprehensive monitoring studies by the Siberian Branch of the Russian Academy of Sciences (SB RAS) to assess the efficiency of the rehabilitation work carried out by NTEC in 2021</li> </ul>	2022	
Conduct fish population assessment	<ul style="list-style-type: none"> <li>The Siberian Branch of the Russian Academy of Sciences (SB RAS) conducts research in the following areas:                             <ul style="list-style-type: none"> <li>✓ A biological analysis of hydrobiont populations of Lake Pyasino, Pyasina River and water bodies</li> <li>✓ Finding ways to increase the food resources of fish before stocking the water bodies with fish</li> <li>✓ Finding ways to clean bottom sediments from accumulated pollution</li> </ul> </li> </ul>	2022	

# Social Strategy



# Strong Support of the Society and Local Communities

## Selected contribution of Nornickel to the national economy and the Russia's Arctic region <sup>(1)</sup>

**%1**

Nornickel's share  
in the national GDP

**%3.5**

Nornickel's share in Russia's  
industrial output

**%12.1**

Nornickel's share in Russia's  
metals production

**%3.3**

Nornickel's share  
in Russia's exports

**>59.000**

employees permanently residing and  
working beyond the Arctic Circle

**\$ 3.9 bn**

payment of taxes to budgets  
of various levels <sup>(2)</sup>

# Social: Investing into Local Communities and Charity in 2021

**>\$1 bn**

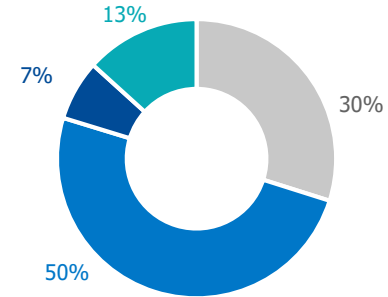
total social, charity and sponsorship spending, incl. \$0.5bn reserve for the renovation of Norilsk until 2035

**~ 6%** of revenue

the highest ratio of social expenses/revenue in the Russian industry

## Breakup of Social Expenditures in 2021

- Charity expenditures
- Four-party partnership agreement for Norilsk renovation programme
- Agreement with Krasnoyarsk Territory
- Other social expenditures



## Ayka Sports and Recreation Center Launched in Norilsk in 2020



Source: Company data

## Supporting Local Communities



# Social: Russian Industry Leadership in Social Investments



## Response to Coronavirus

- 0 production shutdowns due to COVID-19
- >70% share of vaccinated and employees at the main production divisions
- Support of regional healthcare infrastructure to fight COVID-19 continued
- Full support to employees
- №1 rated by Forbes Russia in terms of COVID-19 corporate spending

**>USD200 mln**

COVID-19 related spending in 2020-2021



## Supporting Local Communities

- Construction of a hospital and educational facilities
- Launch of the Corporate Healthcare Centre: first center was launched in Norilsk in December 2021
- Development of new tourist clusters in the regions of operations
- World of New Opportunities program supporting local non-profit organizations

**USD1 bn**

Total social spending, including charity



## Renovation Programme for the City of Norilsk

- RUB120bn until 2035 four-party agreement with the federal and regional governments on the renovation of the city of Norilsk housing and social infrastructure signed
- Social & economic development program for Norilsk city

**RUB 81 bn**

Company's allocation towards the program by 2035



## Engagement with Indigenous People

- Support of indigenous people of Taymir Peninsula: first batch of 28 grants were awarded to tribal communities, NGOs and municipal and public institutions
- Support of indigenous people of the Murmansk region: a new agreement with Sami people signed

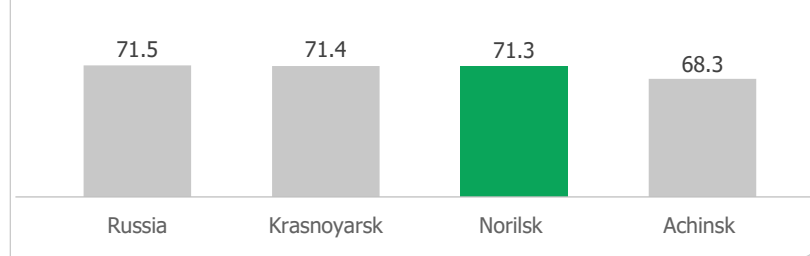
**RUB 2 bn**

5-year agreement (2020-2025)

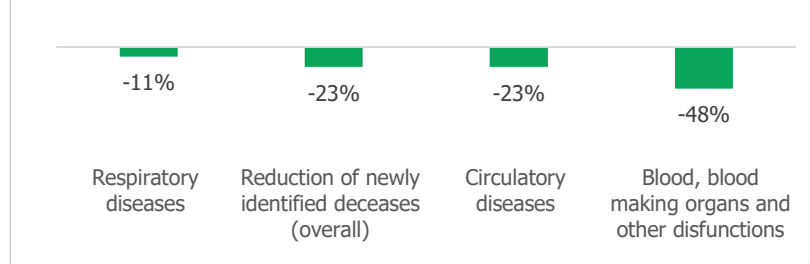
# Social: Impact on Local Communities

## Average Life Expectancy at Birth in 2020 <sup>(1)</sup>

years



## Reduction of Newly Identified Deceases per '000 in Norilsk since 2016



- Health impact on local communities is monitored on a regular basis by the government's agency in charge of monitoring health of the population, Rospotrebnadzor, as the healthcare system in the regions of operations is mainly state-owned
- Since the closure of the Nickel Plant in Norilsk in 2016, SO<sub>2</sub> emissions within city limits reduced by 30-35%
- Since the closure of the Nickel plant in 2016 Rospotrebnadzor registered by 2019 a material reduction in newly identified deceases

Sources: Rosstat, Rospotrebnadzor

Note: 1. Population of Russia – 146,7m, city of Norilsk – 183k, city of Krasnoyarsk – 1,1m, city of Achinsk – 106k

# Social: Reducing Negative Impact on Local Communities, Improving Local Healthcare



## Reducing Impact on Local Communities

- RUB10 bn (circa USD140m) until 2025 will be invested into Corporate Healthcare Project in two regions of operations: Norilsk Industrial District and Kola Peninsula
- The main goal is to provide high-quality and affordable medical care to employees and their families



## Launch of the Corporate Healthcare Centre

- Private healthcare to complement the state run healthcare system in the regions of operations



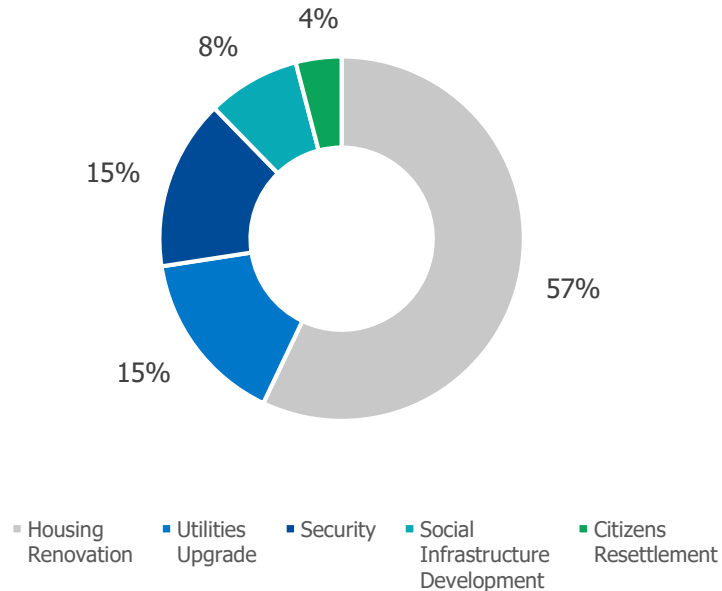
## Construction and Upgrade of Medical Infrastructure

- Phase 1 – modernisation and upgrade of existing 40 corporate healthcare facilities and 26 medical examination rooms located on sites of Norilsk Division and another 15 in Kola Division
- Phase 2 – construction of new healthcare centres in the regions of operations: 6 new facilities to be built in Norilsk, Dudinka and Monchegorsk by 2024
- [First centre in Norilsk was launched in Norilsk](#) in December, 2021



# The Renovation Programme for the City of Norilsk Residential and Social Infrastructure until 2035

## Breakup of Expenditures (\$1.1bn until 2035)



### Housing renovation:

- Dismantling of obsolete buildings, construction of multi- and low-rise residential buildings

### Utilities Upgrade:

- Thermal stabilization of soils under residential buildings and social facilities, reconstruction of the sewage system, heating mains

### Security:

- Developing digital technologies (Norilsk Smart City project), construction of fire station, creation of city video surveillance system

### Social Infrastructure Development:

- Construction and overhaul of social infrastructure facilities (clinics, kindergartens, a sports center, Arctic Museum of Modern Art, tourism infrastructure and etc.)
- Landscaping (urban redevelopment of public spaces, improvement of areas adjacent to city parks and recreation centers)

### Citizens Resettlement:

- Resettlement of families currently residing in Norilsk and Dudinka to other Russian regions with more favorable living conditions

# Social: Major Renovation Programme for the City of Norilsk until 2035



## Norilsk Social & Economic Development Program

- The consortium of architects has been approved to create an [architectural and space planning Concept for Norilsk renovation](#)
- RUB120 bn until 2035 four-party agreement with the federal and regional governments on the renovation of the city of Norilsk housing and social infrastructure signed, of which RUB81 bn will be contributed by Norinickel



## Social Infrastructure Development

- Construction and overhaul of social infrastructure facilities (clinics, kindergartens, a sports centre, Arctic Museum of Modern Art, tourism infrastructure and etc.)
- Landscaping (urban redevelopment of public spaces, improvement of areas adjacent to city parks and recreation centres)



## Infrastructure Upgrade

- Utilities upgrade (thermal stabilisation of soils under residential buildings and social facilities, reconstruction of the sewage system, heating mains)
- Revamping the city transport infrastructure
- Developing digital technologies (Norilsk Smart City project)



# Key Projects of the Renovation Programme for the City of Norilsk (1/2)



2024-2035

**Construction of residential buildings (at Norilsk and Oganer)**



2025

**Construction of a hospital (at Talnakh)**



2021-2033

**Dismantling of obsolete buildings (at Norilsk and Oganer)**



2025

**Construction of a new ice stadium**



2035

**Reconstruction of the sewage system**



2026

**Construction of a new swimming pool**

# Key Projects of the Renovation Programme for the City of Norilsk (2/2)



Construction of new kindergarden, school and lyceum

2025



Construction of a new museum of modern art (MOMA)

2025



Reconstruction of the Polar State university building

2025



Landscaping (urban redevelopment of public spaces)

2023-2030



Construction of a new water intake on the Norilskaya river

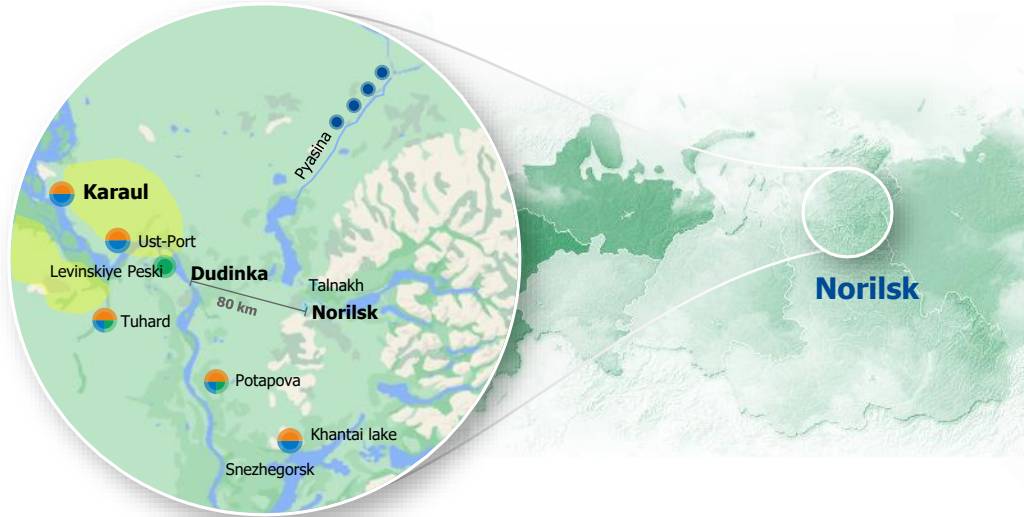
2027



Reconstruction of the concert hall

2026

# Habitat of Indigenous People in Taymir Peninsula: Far from Operating Sites



- There are approximately 20k of indigenous people living in the Taymir Peninsula comprised primarily by 5 nations: nents, ents, nganasans, evenks and dolgans
- No traditional activities of indigenous peoples are carried out in the proximity to Norilsk's mining or metallurgical operations
- The closest to Norilsk traditional fishing areas are located on the lake Pyasino, outside of Norilsk Industrial Area sanitary zone, whereas the nearest reindeer husbandry is located over 80km away
- Indigenous peoples/their traditional activities reside in the proximity of some of the Company's auxiliary operations, like gas infrastructure

## Traditional economic activities:

- Fishing
- Reindeer pastures areas
- Reindeer husbandry
- Locations of traditional activities

Source: Company data

# Social: Norilsk Nickel Historical Support of Indigenous People

## Norilsk Nickel has been historically supporting local indigenous communities

- Norilsk Nickel has historically supported local indigenous communities via various social programs, provided transportation services, materials and equipment, helped to preserve the unique cultural heritage and supported social enterprises:
  - ✓ **Social programs** – provision of medical and communication services, purchasing of mobile transports and their parts, and construction tools and materials (such as snowmobiles, motor boats, outboard motors, chainsaws and building materials)
  - ✓ **Transportation services** – transportation of indigenous people and their cargos to remote locations on the Taymir Peninsula using the Company's helicopters fleet
  - ✓ **Preservation of the unique cultural heritage** – organization of ethnic holidays and festivals in Taimyr, such as the Reindeer Farmer's Day, the Fisherman's Day, series of unique ethnic street festivities in Norilsk entitled 'Big Arghish'
  - ✓ **Support of social enterprise** – support and development of local communities through annual charity social programs
- Individual assistance in response to individual requests
- Indigenous Rights Policy adopted
- **In 2020, a new ₽2 bn (circa \$28 mln) 5-year program was announced** to protect the original habitat and support traditional activities of the indigenous peoples
- The program is entirely based on the proposals received from the Taimyr indigenous peoples and comprises over 40 initiatives, aiming to support the traditional activities of the indigenous peoples (fishing and reindeer breeding), production of ethnical clothes and souvenirs, develop infrastructure of local settlements, construction of new houses, community and healthcare centers, research of fishing potential and transfer of fishing quotas



# Social: 2021-2022 Activities to Support Indigenous People

## Progress in 2021:

- **Implementation of the 5-year program:** construction materials, transports and financial support to prepare for the hunting and fishing winter season was provided, exploration of pastures for the development of reindeer herding started
- **Organizational changes:** a dedicated department at Norilsk Division and Indigenous Communities Coordination Council affiliated with the Head of Norilsk Division have been created in order to coordinate the implementation of the 5-year program
- **Additional support:** Additional [support](#) for indigenous peoples of the Taimyr was provided, a new [grant program was launched](#)
- **Pioneering FPIC:** A free, prior and informed consent ([FPIC procedure](#)) for the indigenous peoples of the North was launched to discuss resettlement at the town of Tukhard
- **Cooperation with Sami people:** [an agreement on partnership and collaboration](#) have been signed between Norilsk Nickel and the Kola Saami Association
- In 2021, the Company spent a total of USD 5.7 mln <sup>(1)</sup> on the projects to support the indigenous northern minorities

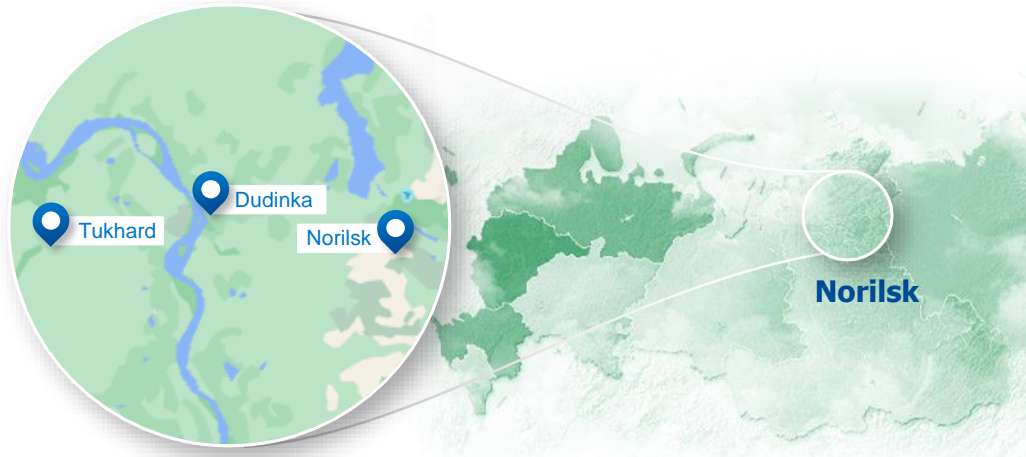
## 2022 Activities – the Company will continue regular program in support of indigenous people:

- **Norilsk Division:**
  - ✓ Improvement of the life quality: construction of residential buildings, social and medical infrastructure
  - ✓ Development of educational and cultural projects: advanced training of teachers at remote settlement schools, attraction of new specialists, publication of learning materials in native language)
  - ✓ Projects in support of traditional activities (building shop for processing fish, wild reindeer, organization of expert assessment of the fishery capacity, reindeer pastures and etc)
  - ✓ Development of tourist projects in the region
- **Kola Division:**
  - ✓ Support of Saami culture projects (organization of ethnic holidays, creation of open-air museum, publication of learning materials in native language) and health programs for Saami people
- **FPIC:** [In March, the Company has held a third round of consultations on the Tukhard relocation and development programme](#)

Source: Company data

Note: 1. Equivalent to RUB 421 mln

# Case Study: Obtaining a Free Prior Consent from Indigenous People for a Resettlement Project in Tukhard Settlement



- Tukhard settlement, located more than 150 km to the west of Norilsk was founded as a rotation camp in the 1970s for the construction workers of natural gas producer NorilskGazprom, a Nor Nickel subsidiary, next to a Nenets settlement
- The settlement was designed as a temporary accommodation
- Permanent residence in such settlements has afterwards been prohibited by the Russian legislation

- The free, prior and informed consent procedure is a UN-developed standard guaranteeing the right of indigenous peoples to determine their own political, social, economic and cultural priorities
- Resettlement of Tukhard is the first FPIC procedure in the Russian metals & mining industry offered to the indigenous peoples
- Several options have been proposed, including a relocation to new homes in New Tukhard, a new town just 1.5 km away from the old one, or to new homes in other Taimyr settlements and Dudinka; with a new location to be chosen by the local residents themselves
- An Advisory Council has been created by the Crossregional Public Organisation for Protection of Indigenous Peoples' Rights, KMNSOYUZ, which also includes UN experts and independent international consultants – leading experts in the protection of indigenous rights, to oversee the FPIC procedure
- The construction of the infrastructure, homes or purchase of new apartments is scheduled for completion by 2026

Source: Company data

Note: Please read more <https://www.nornickel.com/news-and-media/press-releases-and-news/nornickel-discussed-construction-of-new-homes-with-indigenous-residents-of-arctic-settlement/type=news>

# Respecting Human Rights

## Nornickel Respects Human Rights Fully in Line with the UN Guiding Principles

### Fundamental Principles of Nornickel's Operations

- Providing safe working conditions (the health and safety of employees is a Company's top priority)
- Support for freedom of association and collective bargaining (94% employee covered by collective bargaining agreements)
- Respect for the right to a minimum wage (providing competitive salaries and social benefits packages)
- Prohibition of discrimination on any grounds
- Prohibition of forced and child labor (legally forbidden in Russia)

### Selected Corporate Policies and Procedures

- Freedom of Association Policy
- Human Rights Policy
- Local Community Relations Policy
- Indigenous Rights Policy
- Stakeholder Engagement Policy

### 2021 Selected Developments

- New Responsible Sourcing Policy developed
- New Supplier Code of Conduct developed
- Update of existing Human rights policy to comply with ICMM and IRMA principles
- Training programs for personal

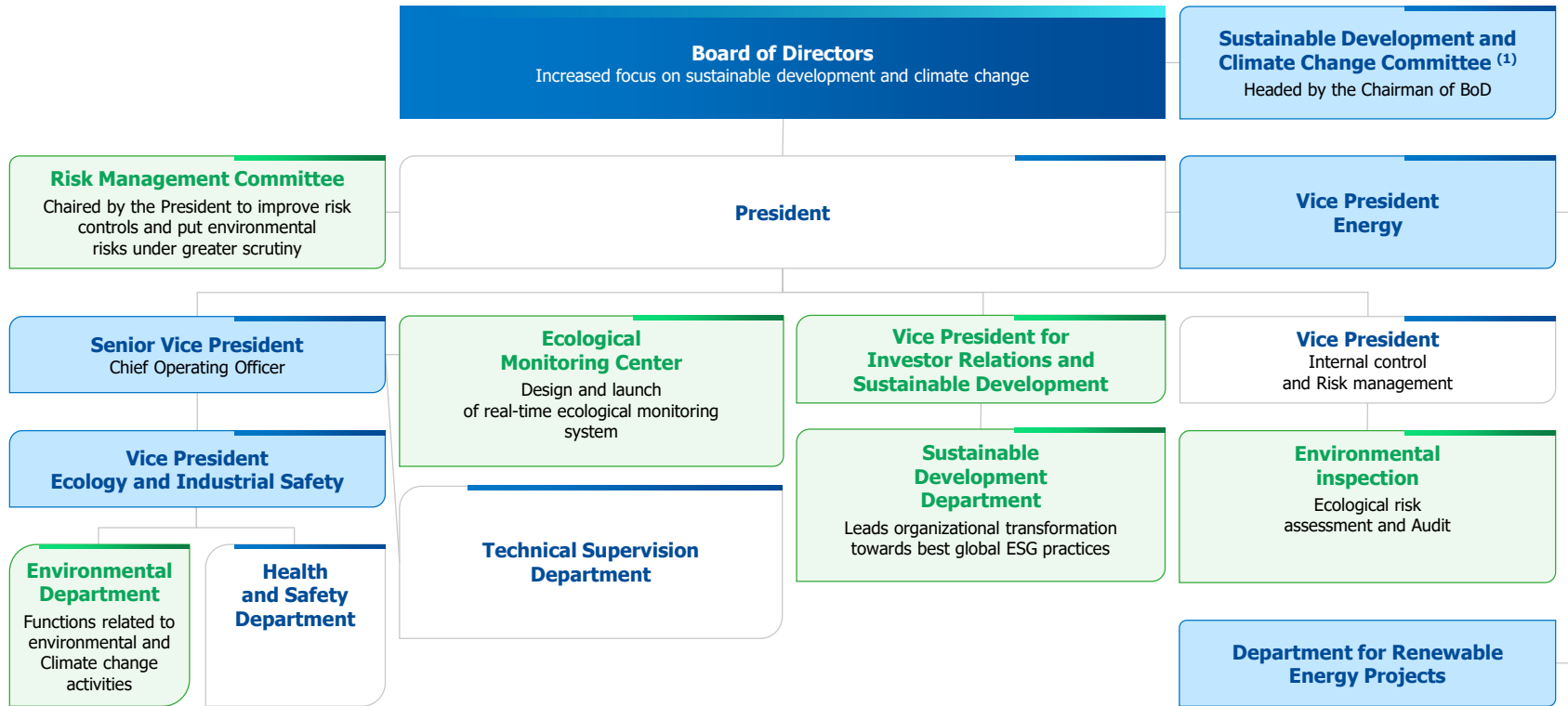
### 2022 Plans

- Develop stakeholder engagement plan (SEP)
- Conduct human rights impact assessment
- Conduct human rights due diligence
- Implement grievance mechanism procedure
- Implement free, prior and informed consent (FPIC) procedure
- Improve disclosure on human rights in the 2021 sustainable development report
- Develop a Social strategy

# Corporate Governance



# Corporate Governance: Adjusting Organizational Structure to Respond to New Challenges



Note: 1. Status shown before the voluntary resignation of foreign independent directors in March 2022

XX New ESG-related structure items

XX New structure items

# Adjusting Sustainable Development KPIs for the Management

# 40%

of team annual KPIs are linked to ESG performance from 2021 onwards



## Team Annual KPIs



## Long-term KPIs (pending approval <sup>(1)</sup>)

Area	Health and Safety	Environment	Environment & Climate Change
Weight	<p>20%</p>	<p>20%</p>	<p>30%</p>
Target	Reduction of TRI (total recordable injuries) by 20% vs the minimum of 2013-2020	Zero environmental incidents	Environmental strategy targets, including reduction of SO <sub>2</sub> emissions Absolute Scope 1+2 GHG emissions from operations to remain below 10 Mt CO <sub>2</sub> e

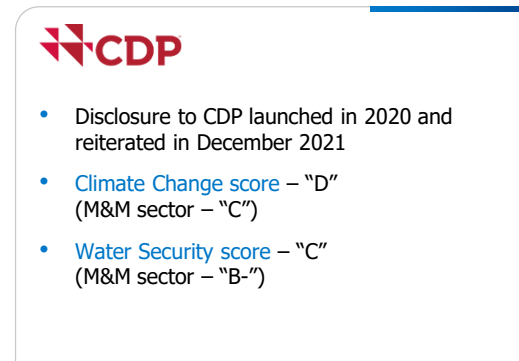
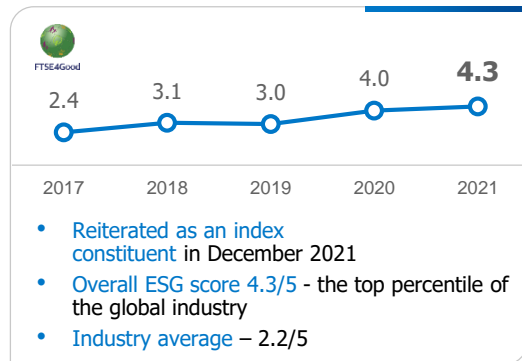
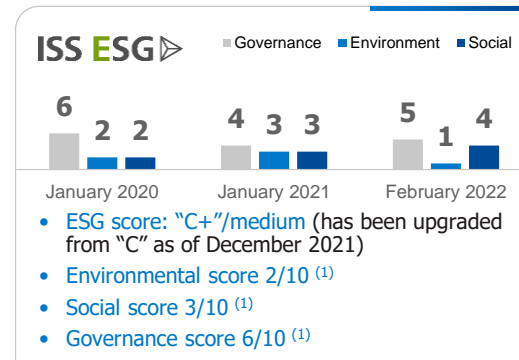
Source: Company data.

Note: 1. Long-term KPIs have been prepared by the management and are pending due corporate approvals

# Independent Assessment of ESG Performance



# ESG Ratings – on Par or Above Global Mining Averages: Before Rating Suspensions or Downgrades in March 2022



Source: Agencies' data, data as of 24 February 2022

Note: 1. Less is better. For more details on the Company ratings, please see <https://www.nornickel.com/sustainability/esg-highlights/assessment/>

# Selected International Sustainable Development Initiatives (March 2022)

## ecovadis Business Sustainability Ratings

- ESG rating 48/100 as of April'21 (vs.33/100 as of September'20)
- Industry average ESG score 41/100



- Compliance with GRI (global reporting initiatives) and RSPP public verification procedure
- First social responsibility report in 2003



- Signatory to UN Global Compact since 2016



- Joined the Initiative for Responsible Mining Assurance as a Pending member in March 2021



Re Source

- Joined Responsible sourcing block chain network in December 2020
- Joined Re|Source in August 2021



- Nickel institute – member since 2005
- International Platinum group metals association – member since 1999
- Global Battery Alliance – member since 2021

# TCFD Compliance Roadmap – Highlights

## Selected initiatives

- New Sustainable Development and Climate Change Board Committee was set up
- Environmental and Climate Change Strategy was approved by the Board, setting 18 targets until 2030
- TCFD compliance roadmap was approved

## Objectives

- Conduct a regular review of climate-related issues at the Board and management level
- Prepare a science-based scenario analysis of physical and transition risks
- Calculate science-based targets
- Prepare climate-related risks registry
- Prepare transition and adaptation plan
- Integration of long-term climate-related risks into corporate risk management system
- Prepare a set of TCFD-aligned metrics

## Objectives

- Improve climate-related disclosure in sustainability report
- Release a standalone Climate Change Report
- Improve climate-related risks disclosure in financial reporting



2020-2021











2022

2023

# Strengthening the Reputation as a Responsible Supplier

**Nornickel is Progressing Well with Global Responsibility Certifications and Standards.**  
**Carbon neutral nickel – certified low carbon product**  
**for stainless steel producers and EV industry (batteries)**

-  Completed
-  In-progress

Initiatives	Current Status
<b>Global Certification</b>	
ECOVADIS (ESG Rating)	
IRMA (Initiative for Responsible Mining Assurance): Self-assessment completed, audit suspended by IRMA	
TFS (Together for Sustainability)	
Responsible Sourcing Blockchain Network	
Responsible Minerals Initiative (NNH – Co, Kola – Co, Ni, ESG): Harjavalta included in global conformant list; Kola due in 2023	
<b>Proprietary Certification</b>	
Global certification of carbon savings (by EY auditors, independent assurance of methodology by Sphera Solutions GmbH)	
Carbon Neutral Nickel (used in stainless steel)	
<b>International Sustainability Standards</b>	
ICMM (The International Council on Mining and Metals): Suspended resubmission	
Extraction Industry Transparency Initiative – Suspended signup	
Global Industry Standard on Tailings Management	

Source: Company data

Note: 1. Responsible steel is the steel industry’s global multi-stakeholder standard and certification initiative for steelmakers, but not a special steel brand which can be traded



Thank you  
for your  
attention!

